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VIA ELECTRONIC SUBMISSION

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Re: Comments of the Cities of SeaTac, Burien, and Des Moines on the Draft SEPA Environmental Impact Statement for the Seattle-Tacoma International Airport Sustainable Airport Master Plan Near-Term Projects

Dear Mr. Rybolt:

Thank you for the opportunity to review and comment on the Draft Environmental Impact Statement ("DEIS") for the Port of Seattle's Sustainable Airport Master Plan Near-Term Projects ("SAMP NTPs" or "Proposed Action") at Seattle-Tacoma International Airport ("SEA"). On behalf of the Cities of Burien, SeaTac and Des Moines ("Cities"), we submit these collective comments on the DEIS and supporting technical memoranda. These comments are submitted for inclusion in the administrative record and are intended to inform the preparation of the Final EIS ("FEIS").

The Cities are directly affected jurisdictions whose residents, neighborhoods, schools, places of worship, and transportation infrastructure experience the full weight of SEA's operations. As of the DEIS baseline year (2022), 6,216 housing units and an estimated 14,061 people reside within the existing 65+ DNL noise contour in Burien, Des Moines, SeaTac, and unincorporated King County — including nine schools, 19 places of worship, three nursing homes, and two libraries. The majority of census tracts in the relevant study areas score 9 or 10 on the Washington Department of Health Environmental Health Disparities (EHD) Index, signaling high vulnerability to changes in environmental exposures and economic conditions. Port Equity Index scores in the General Study Area, noise study area, and air dispersion study areas are identified as low or very low.

Despite this documented burden, the DEIS systematically minimizes impacts to these communities across every major resource category. As set forth in detail below, the DEIS must be corrected to address material deficiencies that prevent it from providing the "reasonably thorough discussion" of environmental impacts that SEPA requires. *Residents Opposed to Kittitas Turbines v. State Energy Facility Site Evaluation Council*, 165 Wn.2d 275, 312, 197 P.3d 1153 (2008).

The Cities request that these deficiencies be corrected in the FEIS and that all requested analyses, documentation, and mitigation commitments be made available for public review before the SEPA process is concluded.

These comments incorporate technical review addressing land use, noise, transportation, hazardous materials, water and biological resources, air quality, and economic, fiscal, and socioeconomic conditions.

Legal and Regulatory Framework

The State Environmental Policy Act ("SEPA") is the State of Washington's core environmental policy statute. Its key dual purposes are: (1) to ensure that government decision-makers are fully apprised of the environmental consequences of their proposed actions and (2) to encourage public participation in the consideration of environmental impacts. *See Norway Hill Preservation and Prot. Ass'n v. King Co.*, 87 Wn.2d 267, 279, 552 P.2d 674 (1976). The purpose of an EIS is to ensure that SEPA's policies are an integral part of the actions of state and local government such that the EIS is used by, and informs the decision of, those government agencies. WAC 197-11-400; *see also Norway Hill Pres. & Prot. Ass'n v. King Cnty. Council*, 87 Wn.2d at 272 (1976) (SEPA disclosure is to "promote the policy of fully informed decision making by government bodies").

SEPA "sets forth a state policy of protection, restoration and enhancement of the environment." *Polygon Corp. v. City of Seattle*, 90 Wn.2d 59, 63, 578 P.2d 1309 (1978). In adopting SEPA, the Washington legislature declared the protection of the environment to be a core state priority. *See* RCW 43.21C.010. SEPA further clarifies that "[t]he legislature recognizes that each person has a fundamental and inalienable right to a healthful environment and that each person has a responsibility to contribute to the preservation and enhancement of the environment." RCW 43.21C.020(3). SEPA's recognition of a fundamental and inalienable right to a healthful environment long has been cited by Washington courts to support the conclusion that SEPA's statement of environmental policy is "far stronger" than NEPA's. *See, e.g.*, *Kucera v. State, Dep't of Transp.,* 140 Wn.2d 200, 227, 995 P.2d 63 (2000). Indeed, this policy statement "indicates in the strongest possible terms the basic importance of environmental concerns to the people of the state." *Leschi v. Highway Comm'n*, 84 Wn.2d 271, 279-80 (1974).

The evaluation of potential impacts through an EIS must be scientifically sound and as accurate as reasonably possible; it must disclose, discuss, and substantiate impacts with supporting data and opinion. *Klickitat Cnty. Citizens Against Imported Waste v. Klickitat Cnty.*, 122 Wn.2d 619, 644, 860 P.2d 390 (1993). The primary function of an EIS is to identify adverse impacts to enable decisionmakers to ascertain whether they require either mitigation or denial of a proposal. *Victoria Tower P'ship v. City of Seattle*, 59 Wn. App. 592, 601, 800 P.2d 380 (1990). An EIS must present decisionmakers with a "reasonably thorough discussion of the significant aspects of the probable environmental consequences of the agency's decision." *Klickitat Cnty.*, 122 Wn.2d at 633.

An agency must consider both the direct and indirect impacts of its decisions in an EIS. WAC 197-11-060(4)(d). Where information is lacking, the EIS should present, to the extent feasible, a worst-case analysis and the likelihood of occurrence. WAC 197-11-080. A lead agency must also "consider and act to mitigate adverse impacts." *Save Our Rural Env't v. Snohomish Cnty.*, 99 Wn.2d 363, 372 (1983). The SEPA mitigation mandate includes evaluation of extra-jurisdictional impacts when possible. *See King Cnty. v. Wash. State Boundary Rev. Bd.*, 122 Wn.2d 648, 663, 860 P.2d 1024 (1993) (decisions must be based on "complete disclosure of environmental consequences").

"An EIS shall provide impartial discussion of significant environmental impacts and shall inform decision makers and the public of reasonable alternatives, including mitigation measures, that would avoid or minimize adverse impacts or enhance environmental quality." WAC 197-11-400(2). An impact is significant when there is a "reasonable likelihood of more than a moderate adverse impact on environmental quality." WAC 197-11-794.

In short, SEPA (RCW 43.21C et seq.) and its implementing rules (WAC 197-11 et seq.) require agencies to take a "hard look" at the full range of environmental impacts of a proposed action, to evaluate a reasonable range of alternatives (including demand-side and impact-reduction alternatives), to disclose

all significant and moderate adverse impacts, and to adopt enforceable mitigation measures that avoid or minimize those impacts. A DEIS that relies on threshold-based significance tests, embeds unreasonable assumptions into the No Action baseline, withholds supporting technical data from public review, and defers mitigation to separate processes fails to meet these obligations. The Cities request that the Port fully consider and respond to the comments below. *See Klickitat Cnty*., 122 Wn.2d at 637; WAC 197-11-560; WAC 173-400-171(7).

General and Cross-Cutting Deficiencies

The DEIS and its appendices constitute a document of enormous volume and great technical complexity—the time afforded for comment was not sufficient and the Port's late decision to extend the comment deadline did not meaningfully aid the Cities' ability to comment on the DEIS.

The Cities are directly affected jurisdictions. Their residents, schools, places of worship, healthcare facilities, and transportation corridors experience the day-to-day consequences of SEA operations. The DEIS's own analysis documents that the majority of census tracts in every study area score 9 or 10 on the Washington State Department of Health Environmental Health Disparities Index and rank as low or very low on the Port's own Equity Index — placing the Cities among the most environmentally burdened communities in Washington State. For these communities, the DEIS is not an abstract regulatory document: it will determine the nature, extent, and enforceability of environmental protections that govern their quality of life for decades. They are entitled to a comment period adequate to permit genuine engagement with its content. The Port has deprived them of this.

The initial 60-day comment period was insufficient.

First, the DEIS presents issues of extraordinary technical complexity across multiple specialized disciplines that cannot all be meaningfully evaluated and commented on in 60 days. Second, the DEIS and its appendices together constitute a document of enormous volume, with core analytical content fragmented across interrelated chapters and technical appendices that must be read and cross-referenced in their entirety to understand the significance conclusions that are their product. Third, the Port failed to include in the publicly available DEIS record (or timely provide the Cities with) the underlying data, modeling inputs and outputs, key analytical documentation, and finalized regulatory determinations upon which many of the DEIS's conclusions depend — making complete review within 60 days structurally impossible.

On July 17, 2026, the Port announced a thirty-day extension to the original comment deadline of July 21, 2026. The extension was announced at a point in the review process at which the Cities had (out of necessity) virtually concluded their substantive technical review of the DEIS and its appendices, and coordinated internally to meet the original deadline. The extension did not restore the time already lost during earlier stages of the comment period when additional review capacity might have been deployed most productively.

The late notice of the extension did not, therefore, meaningfully expand the Cities' practical ability to comment on the DEIS. A comment period extension provides genuine benefit only where it is announced early enough to allow reviewing parties to re-allocate resources, commission additional technical analysis, or undertake further coordination with affected constituents. An extension announced just before the comment deadline, and after technical review was completed, provides the form of additional time without its substance. The Cities accordingly assert that the comment period, as structured and

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THE NO ACTION ALTERNATIVE IS IMPROPERLY FRAMED AND FUNCTIONALLY BIASED AGAINST MEANINGFUL COMPARATIVE ANALYSIS

The No Action Alternative Is Not a Stable Environmental Baseline

Appendix K of the DEIS acknowledges that the No Action Alternative "provides a baseline for comparison…even though it would not meet the Purpose and Need." Appendix K, Socioeconomics, Environmental Justice and Children's Health, also states the SEPA EJ analysis compares effects to No Action "rather than on SEA's pre-existing operations," which can understate the real-world incremental burden when existing operations already impose substantial impacts. The same is true for Appendix C, Air Quality & Greenhouse Gas Emissions.[1][2]

Using a high-growth, multi-project No Action as the comparison baseline — while simultaneously comparing only to that inflated baseline — prevents the public and decision-makers from understanding the total future environmental burden on surrounding communities under any scenario. It is not the existing environment; it is a construction-phase projection layered with multiple independent expansion projects.

The Cities request that the FEIS: Utilize a comparative analysis with a disclosure of total future environmental conditions (not merely incremental changes from No Action) for all major resource categories.

The No Action Alternative Embeds Substantial Committed Projects, Obscuring Incremental Impacts

Appendix B of the DEIS defines the No Action Alternative as excluding the federal actions or additional physical improvements of the Proposed Action, yet it simultaneously includes in the "future base case" a substantial list of major projects already constructed or to be constructed by 2032, including: North Satellite Redevelopment, International Arrivals Facility, Terminal Renovations, C Concourse Expansion, A Concourse Building Expansion, Widen Arrivals Drive, and Runway Renumbering. Appendix C similarly defines the No Action Alternative as including "no physical improvements" while also noting it "includes projects that have recently been constructed, or will be constructed by 2037," including those same programs, described as "independent" projects with separate environmental review.[3]

Including independently committed projects in the No Action Alternative may be permissible, but relying only on the incremental comparison to that future baseline compresses the apparent NTP increment and obscures the contribution of earlier airport-capacity projects to current and future community conditions. The FEIS should not treat projects placed in the baseline as environmentally neutral. It should separately disclose their cumulative contribution to noise, traffic, air quality, land use, public-service, and fiscal conditions.[4]

The Cities request that the FEIS: (1) separately identify and quantify the contribution of the future-base-case projects embedded in No Action; (2) present an existing-conditions, Future No Action, and Proposed Action comparison for each major resource area; (3) clarify whether any projects constitute connected or

[1] Sunpro Technical Memorandum, § 1.

[2] SAMP NTP Draft SEPA EIS, Appendix K, p. 113. SAMP NTP Draft SEPA EIS, Appendix K, p. 110.

[3] SAMP NTP Draft SEPA EIS, Appendix B, p. 32 of 198. SAMP NTP Draft SEPA EIS, Appendix C, pp. 14, 32 (n. 28).

[4] Leland Consulting Group, Technical Memorandum: Economic, Fiscal, and Socioeconomic Impacts, pp. 1-27.

administered, did not afford adequate opportunity for meaningful participation consistent with SEPA's important public involvement requirements.

The Port cannot lawfully adopt analyses from the FAA's Environmental Assessment prepared under NEPA for its SEPA EIS.

RCW 43.21C.150 provides that a NEPA EIS "may be utilized in lieu of a separately prepared statement under [SEPA]," but SEPA does not similarly authorize adoption of a NEPA Environmental Assessment ("EA") to be utilized in lieu of a SEPA EIS. The SEPA Rules only permit adoption of NEPA Environmental Assessments or documented categorical exclusions to "support a determination of nonsignificance instead of preparing an environmental checklist." WAC 197-11-610(2). Because the SAMP requires an EIS, the Port may not rely on the FAA's NEPA EA to meet its SEPA obligations.

Moreover, the FAA's EA has been judicially challenged. In the present matter, that is problematic because the SEPA Rules allow adoption of a NEPA EIS only if it has not been found inadequate. *See* WAC 197-11-610(3)(b). Thus, even if the Port could otherwise lawfully rely on a NEPA EA in this instance, the Ninth Circuit may determine the FAA's EA is inadequate, and the Port's extensive reliance on that document will undermine the adequacy of its SEPA analysis.

The DEIS should explicitly state that it is a project action EIS under SEPA.

The DEIS has been prepared in connection with thirty-one discrete near-term projects (NTP) proposed by the Port. Each NTP involves a specific physical undertaking with defined scope, location, and implementation timeline — including terminal expansions, taxiway modifications, ground transportation improvements, and related airfield infrastructure works. The DEIS addresses the direct, indirect, and cumulative environmental effects of these individually identified construction and development activities, each of which constitutes a concrete physical intervention at a defined site. This is not a policy adoption, program-level planning decision, or regulatory action of general applicability; it is, by its nature and content, a review of specific proposed works.

WAC 197-11-704 defines a "project action" as an action that approves, funds, or authorizes a specific project with a defined location, including construction and management of facilities. The thirty-one NTPs addressed in this DEIS squarely satisfy that definition: each project is site-specific, each involves physical construction or infrastructure modification, and each requires Port approval and, where applicable, federal authorization. The DEIS does not, however, expressly identify the overall action as a "project action" under WAC 197-11-704, nor does it distinguish this classification from a "non-project action" under WAC 197-11-704(2). That omission creates procedural ambiguity regarding the applicable SEPA framework, the appropriate scope of alternatives analysis, and the standards governing mitigation disclosure.

The Cities respectfully request that the Final EIS include an explicit statement, in the opening or procedural context sections of the document, confirming that this SEPA review constitutes a "project action" as defined by WAC 197-11-704. This clarification is a straightforward and necessary step to (1) ensure procedural transparency and (2) confirm that the document's alternatives analysis, mitigation commitments, and significance determinations are evaluated against the standards applicable to project-level review.

during constrained periods.[10] However, the DEIS does not analyze whether unmet demand is likely to manifest as operational peaking, rescheduling into nighttime hours, or increased ground congestion and idling — all of which heighten community impacts.

Appendix A also forecasts approximately 509,892 annual operations and 64.1 million passengers under the 2037 Action Alternatives, compared with 474,874 operations and 59.5 million passengers under No Action. The difference is approximately 35,000 annual operations and 4.6 million passengers that the Port's own constrained-growth analysis indicates would be accommodated by the NTPs rather than remaining unmet demand. This distinction provides the necessary causal bridge between the capacity decision and the additional operational effects evaluated throughout the EIS.[11]

A footnote in Chapter 4 indicates 56 MAP is a benchmark for "optimal level of service," yet higher passenger levels were nevertheless used "to evaluate impacts from operations," raising questions about consistency between planning assumptions and impact modeling inputs.[12]

The Cities request that the FEIS: Provide forecast sensitivity analyses assessing community outcomes (noise, air quality, transportation) under plausible higher-growth and operational-peaking scenarios as well as disclose how unmet demand may manifest as operational changes with environmental consequences.

The Hybrid Terminal Alternative Was Dismissed Without Modeling

Appendix A states the EA considered a "Hybrid Terminal" alternative but did not simulate it in TAAM, concluding it was "unlikely to result in meaningful differences in the air quality and noise analyses." That conclusion is not supported by comparative operational modeling in the record.[13]

The Cities request that the FEIS: Model the Hybrid Terminal alternative using TAAM with the 2023 Aviation Activity Forecast and 2023 COGS or an equivalent operational model or, at the very least, provide detailed technical substantiation (rather than a conclusory assertion) for dismissing it.

The Draft Environmental Impact Statement Fails To Use Best Available Science and Current Data In Contravention of Applicable Environmental Review Standards

SEPA requires that environmental impact statements be based on current, accurate, and complete information — and that where better information exists, it must be used rather than discarded for convenience or analytical continuity. *Klickitat Cnty. Citizens Against Imported Waste v. Klickitat Cnty.*, 122 Wn.2d 619, 644, 860 P.2d 390 (1993). The DEIS for the SAMP Near-Term Projects fails this standard in multiple material respects. Across aviation forecasting, air quality modeling, transportation analysis, noise health effects, biological resources, and greenhouse gas accounting, the Port has relied on outdated data sources, superseded model versions, stale calibration baselines, and older scientific references where demonstrably superior current alternatives were available. These are not minor technical footnotes. Each gap is capable of skewing significance conclusions in ways that systematically understate impacts on communities that already score 9 or 10 on Washington's Environmental Health Disparities Index.

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[10] SAMP NTP Draft SEPA EIS, Appendix A, pp. 43, 45-46.

[11] Leland Consulting Group, Technical Memorandum: Economic, Fiscal, and Socioeconomic Impacts, pp. 1-27.

[12] SAMP NTP Draft SEPA EIS, p. 4-2 (n. 2).

[13] SAMP NTP Draft SEPA EIS, Appendix A, p. 105.

Where an agency acknowledges that newer or superior data exists and chooses not to use it, the resulting analysis thwarts SEPA's goals and the significance conclusions that flow from it are unreliable. The Cities identify the following specific instances and request that the Final EIS correct each deficiency.

Aviation Operational Inputs: 2019 COGS TAAM Model Used in Place of Available 2023 COGS. The TAAM analysis supporting the DEIS's noise and air quality modeling relied on the 2019 Aviation Activity Forecast Update and Constrained Operating Growth Scenario (COGS) that was developed in 2019 and approved by FAA in 2020. The Port subsequently prepared a 2023 Aviation Activity Forecast Update and 2023 COGS, determining the opening year for the Near-Term Projects would be 2032. Despite this, the Port determined to continue using runway use, taxi times, and operations by time of day developed using the 2019 COGS for the 2023 COGS in the EA noise and air quality analysis. The justification — that inputs would remain "approximately the same" — is an assertion, not a demonstration. Future 2032 taxi times for the No Action and Proposed Action alternatives were derived using TAAM delay analysis dated June 2020, applied to an operational scenario updated in 2023. Because taxi time directly affects emissions calculated in AEDT, this substitution introduces unquantified error into every emissions and concentration estimate in the DEIS.

Airfield Calibration: A 2016 TAAM Calibration Is Treated as Current. LeighFisher calibrated prior TAAM models to 2016 airfield performance metrics at SEA, and those models were used as the basis for new TAAM models for the environmental effort. The effort assumed the 2016 calibration remained valid, and that changes in airfield operations between 2016 and 2019 were negligible. This assumption is never independently verified in the record. Seven years of operational change — including new terminal facilities, modified taxiway infrastructure, and post-COVID demand patterns — are subsumed into an unvalidated continuity assumption.

Wake Turbulence Standards: Superseded FAA Order Applied. The modeling's minimum wake turbulence separations were based on FAA Order JO 7110.65W. At the time of the Environmental Review Airside Modeling, the governing document at SEA was Order JO 7110.126A, which classifies aircraft into nine types instead of three. The separations were not updated because the prior calibration was assumed valid and changes were assumed to be included within modeled approximately five percent operational efficiency gains. Using a superseded FAA order to define aircraft separation in a modeling framework that drives noise and air quality significance conclusions is not consistent with best available science.

Mixing Height: A Pre-1976 EPA Publication Is the Controlling Reference. The report defines the LTO vertical boundary using a 3,084-feet-above-field-elevation mixing height and cites EPA's "Mixing Heights, Wind Speeds, and Potential for Urban Air Pollution Throughout the Contiguous United States," a publication indexed as prior to 1976. This figure is applied as a universal mixing height across all flight operations, all seasons, and all years modeled. The Puget Sound basin's documented nocturnal inversions — which can substantially suppress mixing heights below this average — are not reflected in the analysis. A 50-year-old national generalization is not best available science for a site-specific health risk analysis.

Transportation Capacity Analysis: HCM 2000 Used Where HCM Sixth Edition Is Available. Existing conditions intersection results are based on Highway Capacity Manual (HCM) 2000. Future conditions intersection results likewise rely on HCM 2000. The DEIS itself acknowledges the inadequacy of this choice: HCM Sixth Edition results operate at an acceptable LOS D, which is better than reported using HCM 2000 methodology, and an LOS F result may be a limitation in the HCM 2000 methodology, with HCM Sixth Edition methodology assuming zero seconds of delay for the same movement. Where the DEIS's own comparison shows that the methodology chosen produces worse results than the current methodology — and where significance conclusions rest on LOS findings — the use of HCM 2000 is not a

neutral technical choice. It is a choice that generates more adverse findings than current methods would yield, and that must be explained and corrected.

Noise Health Effects Literature: Decades-Old Studies Frame the Health Disclosure. The health effects of noise discussion relies on FICON (1992), FICAN (1997), USEPA (1974) for speech interference, ANSI S12.9-2008 for awakenings, a FICAN 2007 study on test scores, and a 2014 National Academies report on student learning. A substantial body of peer-reviewed literature published after 2014 — including WHO Environmental Noise Guidelines for the European Region (2018) and multiple large-cohort epidemiological studies linking aviation noise to cardiovascular disease, stroke, and metabolic disorders — is not referenced or engaged. For communities at the ceiling of environmental health burden, like the ones primarily impacted by the SAMP, the use of pre-2010 literature to frame aviation noise health significance is not consistent with best available science.

ESA Consultation: The Port's Biological Evaluation Was Found to Not Meet Regulatory and Scientific Standards. According to the materials incorporated from the NEPA Environmental Assessment, the NMFS states the Biological Evaluation's "not likely to adversely affect" conclusions for Southern Resident killer whales and critical habitat "do not meet our regulatory and scientific standards," and NMFS supplements the analysis and reaches a likely-to-adversely-affect determination consistent with NMFS current scientific research and policy. USFWS similarly finds the BE's repeated conclusions that effects "cannot be meaningfully quantified or evaluated" and that there is "not enough information" to conclude adverse effects are not consistent with the best available scientific information, which USFWS finds supports pollutant-driven degradation and adverse effects. For Puget Sound Chinook salmon, the BE describes the 2016 5-year review as "the most recent available," while NMFS's 2025 Biological Opinion references newer status review information including Ford (2022) and NMFS (2022) — documents that were available and in use by the consulting agencies but not incorporated into the BE. The federal agencies charged with applying best available science to ESA consultations expressly rejected the Port's analyses as inadequate. The DEIS cannot incorporate those rejected analyses by reference and represent the result as meeting applicable standards.

The Cities request that the Final EIS:

- Rerun the TAAM airside model using 2023 COGS inputs and current wake turbulence separation standards (FAA Order JO 7110.126A), and update all noise and air quality analyses accordingly;
- Validate the 2016 TAAM calibration against current airfield operational data or recalibrate to a post-COVID baseline;
- Replace the pre-1976 EPA mixing height reference with a validated, site-specific mixing height informed by contemporary upper-air data and sensitivity analysis;
- Reanalyze all study intersections using HCM Sixth Edition methodology, or provide a fully documented and justified rationale for retaining HCM 2000 that acknowledges the directional bias introduced;
- Update the noise health effects analysis to engage post-2014 epidemiological literature, including WHO (2018) Environmental Noise Guidelines and subsequent cardiovascular and metabolic studies; and
- Revise the Biological Evaluation to incorporate current NMFS and USFWS status reviews and to adopt effects conclusions consistent with the determinations reached by both consulting agencies under best available science.

If these corrections materially alter significance conclusions — as the evidence strongly suggests they would — the Final EIS must be recirculated for public comment before the SEPA process concludes.

CUMULATIVE IMPACTS: EXCLUSIONS PRODUCE CONCLUSORY "NO SIGNIFICANT IMPACT" FINDINGS

The cumulative impacts chapter of the DEIS identifies 58 past, present, and reasonably foreseeable future projects in the cumulative study area, including housing, airport/FAA projects, and transportation projects. Despite this, the cumulative chapter states that where the Proposed Action has "no identified environmental impacts," there is "no potential" for adverse cumulative impacts, and excludes cumulative discussion for multiple categories, including Recreation, Historic/Cultural, Land and Shoreline Use, and Public Services/Utilities. The chapter also declines additional cumulative EJ analysis on the rationale that EJ indicators "capture the cumulative effect" of other projects.[14]

The chapter further excludes projects after 2032 as "speculative." The chapter also excludes the SAMP Long-Term Vision and "any potential future airspace changes" from the list of reasonably foreseeable future actions. Across air quality, GHG/climate, noise, transportation, water resources, and overall conclusions, the DEIS repeatedly concludes no significant cumulative impacts.[15]

These conclusions are particularly difficult to sustain given that the DEIS proposes no mitigation for operational air quality, no mitigation for GHG/climate, and no mitigation for operational noise — meaning that even modest project contributions accumulate against communities without any countervailing commitments.

The Cities request that the FEIS: (1) Re-evaluate whether the exclusion of multiple categories from cumulative analysis is justified when the Proposed Action contributes to them; (2) include a meaningful analysis of whether individually sub-threshold increments across air quality, noise, and traffic create meaningfully adverse cumulative conditions in communities identified as highly burdened; and (3) evaluate the SAMP Long-Term Vision and foreseeable airspace changes as reasonably foreseeable future actions.

ALTERNATIVES ANALYSIS: DEMAND-MANAGEMENT AND COMMUNITY-IMPACT-REDUCTION STRATEGIES ARE PREMATURELY SCREENED OUT

Appendix B acknowledges that the identification and evaluation of alternatives is the "heart" of the NEPA/SEPA process and must be conducted through a "thorough and objective assessment" of the Proposed Action, No Action Alternative, and reasonable alternatives.[16]

Appendix B reports that "limited or reduced growth" suggestions were eliminated, citing airline deregulation and FAA grant assurances and asserting limited authority to restrict access. Appendix B eliminates reliance on other airports (BFI/PAE) as unreasonable and infeasible within the timeframe. Appendix B eliminates "other modes of transportation" as not feasible, asserting that most top markets exceed distances where rail competes.[17]

Employee Parking Option 1 — transit incentives to reduce employee vehicle parking demand — was eliminated as "not feasible" to fully accommodate needs; the Port states it will continue exploring incentivized transit options but did not carry that option forward for analysis.[18]

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[14] SAMP NTP Draft SEPA EIS, ch. 5, p. 5-1. SAMP NTP Draft SEPA EIS, p. 5-17.

[15] SAMP NTP Draft SEPA EIS, p. 5-2. SAMP NTP Draft SEPA EIS, p. 5-3.

[16] SAMP NTP Draft SEPA EIS, Appendix B, p. 26 of 198.

[17] SAMP NTP Draft SEPA EIS, Appendix B, p. 28 of 198. SAMP NTP Draft SEPA EIS, Appendix B, pp. 28-29 (of 198).

[18] SAMP NTP Draft SEPA EIS, Appendix B, pp. 28-29 (of 198).

First-level screening criteria for passenger processing alternatives are defined almost entirely by facility square footage, gate counts, parking stalls, and curb lengths required to achieve LOS — not by comparative environmental effects on surrounding communities. Appendix B expressly states that passenger parking and curb elements "do not have a separate alternatives analysis," eliminating evaluation of different landside access approaches that are a primary pathway for community traffic, idling, and air quality impacts.[19]

The Cities request that the FEIS: (1) Include a reasonable range of alternatives that meaningfully reduce community impacts, including phasing strategies, demand-side measures within Port authority, and multimodal access enhancements; (2) Add community-impact metrics (noise, air quality, traffic burden, EJ exposure) to the alternatives screening criteria; and (3) Conduct a separate alternatives analysis for landside access, parking, and curb strategies.

MITIGATION APPENDIX: BLANKET "NO MITIGATION" CONCLUSIONS ARE UNSUPPORTED AND DEFERRED COMMITMENTS ARE INADEQUATE

Appendix P states: "No impacts to SEPA elements of the environment warranting mitigation were identified during the preparation of the Draft EIS, therefore no additional mitigation measures are proposed."[20]

This blanket conclusion is flatly inconsistent with the DEIS's own documentation of, inter alia: (1) quantified increases in emissions of air pollutants; (2) thousands of additional people exposed to 65+ DNL noise; (3) large ramp terminal delays; (4) unmitigated WSDOT-controlled intersection impacts; (5) further impacts to already impacted receiving waters; and (6) highly burdened EJ communities. The statement that no SEPA impacts "warrant mitigation" cannot be squared with objective facts or the DEIS record.

Appendix P lists "Recreation" with "No measures proposed." Appendix P lists "Land and Shoreline Use" with "No measures proposed." Appendix P lists "Emergency Services," "Water Utility," and "Sewer Utility" each with "No measures are proposed." Appendix P states compensatory mitigation planning for permanent wetland impacts would occur "during the Wetlands and Waters of the U.S. permitting phase, after environmental review is complete."

The Cities request that the FEIS: (1) replace the blanket no-mitigation conclusion with specific, resource-by-resource findings grounded in a corrected SEPA record; (2) identify enforceable mitigation commitments, including concrete commitments to undertake or refrain from specified actions, property acquisition or long-term lease measures where warranted, and financial support tied to documented local governmental or community impacts; (3) state responsible parties, funding, performance standards, implementation schedules, monitoring, reporting, and adaptive-management triggers; and (4) circulate any materially revised analysis and mitigation package for public review before completing the SEPA process.

[19] SAMP NTP Draft SEPA EIS, Appendix B, p. 50 of 198. SAMP NTP Draft SEPA EIS, Appendix B, p. 33 of 198.

[20] SAMP NTP Draft SEPA EIS, Appendix P, p. 6 of 16.

Land Use

Land Use Compatibility Cannot Be Reduced to Plan Consistency

The DEIS concludes that the Action Alternatives would not result in significant land use impacts primarily because the projects are consistent with adopted plans, would not significantly alter general land use patterns, and are allowable within the applicable land use framework. That conclusion does not fully address the land use question presented by the NTPs. A use may be legally permissible and consistent with an adopted plan while still creating environmental conditions that materially affect the suitability, use, or development potential of adjoining land. The relevant inquiry therefore extends beyond plan consistency to whether the environmental effects of the NTPs are compatible with surrounding residential neighborhoods, parks, open spaces, and other sensitive land uses. SeaTac's own development regulations reflect this distinction. SMC 15.445.005 identifies compatibility between different land uses as an express purpose of the City's landscaping standards and calls for visual and physical barriers between dissimilar adjoining uses. SMC 15.460.020 contains local noise performance standards, including an express distinction for normal airport-related aircraft noise, while SMC 15.460.030 regulates glare at property and street interfaces. These provisions do not themselves establish SEPA significance, and their applicability to particular Port properties may depend on the ILA, but they demonstrate that regulatory allowability and land use compatibility are not the same inquiry.

Appendix H does not provide a land use-focused analysis that connects the findings in the noise, transportation, socioeconomic and environmental justice, air-quality, and other technical analyses to the land use significance determination. Perteet's SEPA Review of Sustainable Airport Master Plan (SAMP) Near Term Projects (NTPs) - Land Use Planning Technical Report Review identifies Appendix J (Noise and Noise-Compatible Land Use), Appendix L (Surface Transportation), and Appendix K (Socioeconomics, Environmental Justice, and Children's Health) as analyses that bear directly on land use compatibility. The Cities' noise technical review further addresses modeled community exposure, localized ground-noise and run-up effects, sub-65 DNL changes, cumulative noise burden, and mitigation. Leland Consulting Group's Technical Memorandum: Economic, Fiscal, and Socioeconomic Impacts addresses housing and planned growth, property values, fiscal effects, schools, environmental justice, and the cumulative baseline. The Cities' transportation review addresses freight movement, queuing and spillback, access and safety, analysis periods, and mitigation. Appendix H does not synthesize these findings to explain how noise, lighting, construction disturbance, traffic exposure, access conditions, buffer performance, or other operational effects were evaluated as pathways through which land use compatibility could be affected.[21]

The FEIS should provide a land use compatibility analysis that identifies the affected receptors and the environmental pathways relevant to those receptors. It should include a reader-facing crosswalk to the specific findings in Appendix J, Appendix L, Appendix K, Appendix C and other relevant technical analyses, and to mitigation in Appendix P where applicable. The crosswalk should also identify the related Cities' technical review memoranda and comments where those reviews identify unresolved methodological or mitigation issues. The FEIS should then explain how the discipline-specific findings support, modify, or qualify the conclusion that significant land use impacts would not occur.

Effects on Housing and Planned Growth Require Further Analysis

The DEIS states that housing would not be affected by the Proposed Action and therefore does not analyze housing further. That framing appears to address direct displacement or conversion of housing,

[21] Perteet, Inc., SEPA Review of Sustainable Airport Master Plan (SAMP) Near Term Projects (NTPs) - Land Use Planning Technical Report Review, pp. 2-9.

but it does not evaluate whether airport-related environmental conditions could affect the ability of surrounding jurisdictions to accommodate planned residential growth. The land use analysis should consider not only whether housing is physically removed, but also whether projected airport activity changes the practical suitability or feasibility of land relied upon for future housing and other sensitive uses. That question is particularly important where the current zoning framework authorizes additional residential capacity near transit and in areas exposed to airport-related effects.

The DEIS does not analyze the relationship between projected airport activity and the Cities' adopted housing strategies, land capacity assumptions, or planned growth areas. It likewise does not evaluate whether increasing noise, transportation, air-quality, or other airport-related effects may constrain the location or feasibility of residential development. Leland's Technical Memorandum: Economic, Fiscal, and Socioeconomic Impacts specifically identifies the interaction between airport effects, housing capacity, state housing requirements, and the Cities' growth obligations. The noise technical review identifies growth in the number of housing units and residents within modeled noise contours, while the transportation review identifies localized traffic, access, and queueing conditions that can affect development feasibility and neighborhood conditions. This is material because SeaTac, Burien, and Des Moines must accommodate future housing and employment growth through adopted comprehensive plans and development regulations. In SeaTac, adopted planning policy directs substantial future housing and employment growth toward the City's transit-served Urban Center and Regional Growth Center.

The planned-land-use condition also should not be treated as fixed at the assumptions used in Appendix H. State housing and transit-oriented development requirements adopted or made operative after 2024 may materially alter the reasonably foreseeable development pattern in areas affected by airport-related noise, transportation, or other environmental conditions. The FEIS should focus on where increased residential capacity or transit-oriented development potential overlaps areas experiencing airport-related effects and whether that overlap changes the land use compatibility analysis. It should also account for the commercial-airport provisions in the current middle-housing framework rather than treating state housing law as an undifferentiated requirement for additional residential density.

SeaTac's local development regulations changed materially before issuance of the DEIS. Ordinance 24-1022 adopted the Envision SeaTac 2044 periodic update and related development regulations, effective January 1, 2025. Ordinance 25-1008 then amended the City's middle-housing and ADU regulations, effective June 21, 2025, including the land-use charts, City Center and station-area overlay provisions, dimensional standards, landscaping, parking, and residential design standards. Both changes were in effect well-before the DEIS was issued on May 22, 2026. Where Appendix H relies on land-use, zoning, or development-capacity assumptions developed before those amendments, the FEIS should identify the discrepancy and update or explain the assumptions used.

The FEIS should therefore evaluate whether the Action Alternatives would affect the location, feasibility, or compatibility of planned housing, employment, and mixed-use development within affected jurisdictions. That analysis should specifically address areas planned for concentrated growth and high-capacity transit-oriented development. It should incorporate material changes in the reasonably foreseeable planned-land-use condition resulting from current state housing and TOD requirements and from SeaTac's adopted implementing regulations. The housing analysis should not be limited to direct displacement, and the FEIS should distinguish the airport-specific provisions of state law from broader residential capacity mandates.

The Airport Activity Area Is Not an Adequate Boundary for Land Use Effects

The DEIS places substantial weight on the fact that the NTPs are located within, or do not substantially expand beyond, the Airport Activity Area (AAA). The physical location of airport facilities, however, does not

establish that the environmental or land use consequences of those facilities are similarly confined. The land use analysis needs to distinguish between the location of the proposed facilities and the geographic extent of the effects generated by airport operations.

Noise contours, flight activity, freight movement, surface transportation effects, and other airport-related conditions extend beyond airport property and influence land use conditions in SeaTac, Burien, and Des Moines. The discipline-specific analyses demonstrate that the relevant effect geographies are not coextensive with the AAA. Appendix J maps noise exposure beyond airport property. Appendix L evaluates roadways, intersections, freight movement, and access conditions outside the AAA. Appendix K and the Leland technical memorandum address socioeconomic, environmental justice, property-value, and community effects experienced in the surrounding cities. SeaTac's own SEPA code recognizes the related analytical principle in SMC 16A.23.060(B), which provides that a land use otherwise consistent with City regulations and policies may create adverse impacts when aggregated with prior or reasonably anticipated future development. Using the airport boundary or AAA as a proxy for the geographic limits of land use impacts can therefore exclude areas where airport-related effects are actually experienced.

The FEIS should define the land use study area based on the geographic extent of probable environmental effects rather than the location of airport property alone. It should evaluate off-airport land use compatibility in each affected jurisdiction and expressly cross-reference the effect areas identified in Appendix J, Appendix L, Appendix K, Appendix C, and other relevant technical analyses. Where different discipline study areas do not align, the FEIS should explain how those geographic differences were reconciled in reaching the land use significance determination.

Cumulative Land Use Effects Must Account for Airport Development Embedded in the No Action Alternative

The No Action Alternative incorporates airport improvements completed or initiated during the SAMP planning period. Placing those projects within the baseline does not eliminate the need to evaluate their cumulative contribution to present and future land use conditions. Leland's Technical Memorandum: Economic, Fiscal, and Socioeconomic Impacts identifies the construction of the No Action baseline as a cross-disciplinary methodological issue because the baseline already reflects substantial airport capacity investment. The Cities' noise review separately distinguishes growth-driven expansion of modeled noise exposure from the incremental NTP effect. The transportation review likewise identifies airport-demand growth embedded in the No Action condition as material to how roadway impacts are characterized. Appendix H does not clearly disaggregate how those baseline conditions contribute to the existing noise, transportation, economic, and other environmental conditions affecting surrounding land uses.

This distinction matters because land use effects may occur incrementally over time. Successive increases in noise exposure, traffic, airport-support activity, or incompatible edge conditions may cumulatively alter the viability or redevelopment potential of surrounding areas even where each individual airport project produces a relatively small incremental change. A significance determination focused only on the incremental change between the Action and No Action alternatives can therefore miss the broader cumulative land use condition within which the NTPs would operate. SMC 16A.23.060(B), while a SeaTac local SEPA provision rather than a Port significance standard, is relevant context because it expressly recognizes that otherwise consistent development can create adverse impacts when aggregated with prior or reasonably anticipated future development.

The FEIS should identify how past, present, and reasonably foreseeable airport projects cumulatively contribute to land use compatibility conditions. The analysis should address cumulative effects on residential areas, planned growth centers, sensitive uses, parks, and open-space resources. It should cross-reference Appendix A's operational forecasts, Appendix J's noise analysis, Appendix L's

transportation analysis, Appendix K's socioeconomic and environmental justice analysis, the Leland economic and fiscal analysis, and Appendix P mitigation. The land use analysis should explain how the combined record supports the cumulative land use conclusion rather than leaving each discipline in a separate analytical compartment.

Airport-Related Property Use Within SeaTac's Planned Urban Center Requires Cumulative Evaluation

The land use analysis focuses primarily on airport property and the AAA and does not adequately address the cumulative interaction between airport-related land use activity and SeaTac's adopted City Center and Regional Growth Center strategy. Leland's Technical Memorandum: Economic, Fiscal, and Socioeconomic Impacts identifies Port acquisition and long-term leasing of properties within SeaTac's Urban Center but outside the AAA, including properties used for airport-related parking and support functions. These are also areas where adopted City plans contemplate denser, mixed-use, and pedestrian-oriented redevelopment. The issue is therefore not only the formal land-use designation of those parcels but whether long-term airport-related control or use affects implementation of the City's planned growth strategy.

The technical analysis further identifies the potential for long-term airport-related parking uses to reinforce existing market barriers to redevelopment within the City Center. SeaTac's City Center is implemented through SMC Chapter 15.300 and related development regulations. Current SMC 15.445.010 applies landscaping standards when property changes to public or private parking, and the SMC 15.445.210 landscaping standards chart identifies a Type II, twenty-foot buffer for public or private parking adjacent to specified residential zones. These provisions are relevant as evidence of the City's current approach to parking interfaces and compatible development, although the FEIS should separately identify whether an ILA provision or other legal authority changes their applicability to a particular Port-controlled parcel. Airport-related land use effects may therefore occur through long-term control or continued low-intensity use of strategically located properties even when those properties are outside the AAA.

The FEIS should evaluate airport-related property acquisition, leasing, parking, and support uses as part of the cumulative land use setting where those activities may affect implementation of adopted City Center and Regional Growth Center plans. It should connect the land use analysis to the Leland memorandum's discussion of redevelopment, fiscal effects, and airport-related parking, and to the transportation analysis where parking and employee travel affect the local network. Where a direct nexus to the NTPs has not been established, the analysis should distinguish these cumulative effects from direct NTP impacts rather than omitting them from the land use analysis.

Appendix H Must Correctly Distinguish Current and Future AAA Status

Appendix H identifies properties as 'Future AAA' and indicates that they may be used for airport operations following SAMP adoption and subsequent development actions. More fundamentally, Appendix H appears to misstate the operative ILA by treating Future AAA parcels as though they already have current AAA status and are already exempt from otherwise applicable development standards. A Future AAA designation is not the same as a present AAA designation. The land use analysis should distinguish the regulatory status that applies to each parcel today from a possible future change in that status.

That distinction is material both to the regulatory baseline and to the scope of the environmental analysis. Current AAA status can affect which SeaTac standards apply to a Port parcel and which standards are modified or displaced by the ILA. The FEIS should therefore identify, on a parcel-specific basis, current

zoning, current AAA status, the ILA provision relied upon, and the City standards that otherwise govern the proposed use. Relevant standards include SMC Chapter 15.445 for landscaping and incompatible-use buffering and SMC Chapter 15.460 for performance standards. If a parcel would require an amendment to the AAA Map, an additional development action, or another future approval before it could receive the regulatory treatment associated with the AAA, the DEIS should not rely on that future status to characterize present development standards or to support a no-significant-impact conclusion.

The FEIS should correct any characterization that treats Future AAA parcels as already subject to current AAA status or exemptions, identify the current AAA status of each affected NTP parcel, and identify any NTP or subsequent action that would require amendment of the AAA Map. It should then explain whether each Future AAA property is contextual only, part of the analyzed action, or reasonably foreseeable future development. If a Future AAA change is reasonably foreseeable, its combined land use effects should be addressed in the cumulative effects analysis and connected to the relevant noise, transportation, socioeconomic, air-quality, and mitigation analyses. If it is outside the present action, the FEIS should state that the present significance determination does not resolve the environmental effects of later development or a later AAA Map amendment.

Reliance on the Current Interlocal Agreement Must Reflect Its Duration and Geographic Limits

Appendix H repeatedly relies on the 2018 ILA between the Port and the City of SeaTac to describe allowable uses, AAA designations, and development standards. The ILA is part of the current regulatory setting, but the DEIS does not adequately distinguish that present role from an assumption that its existing provisions will continue throughout the NTP analysis horizon. The ILA also should not be treated as a substitute for identifying the other portions of SeaTac's current land use and environmental regulatory framework that would otherwise inform compatibility, permitting, or mitigation.

The current ILA expires on February 17, 2028, and the terms and continuity of any successor agreement are uncertain. The DEIS does not clearly identify where continued ILA provisions are assumed in reaching longer-term land use conclusions. The ILA is also geographically limited: it applies between the Port and SeaTac and does not establish the land use framework for Burien or Des Moines. For purposes of describing SeaTac's regulatory setting, SMC 16A.23.130 is also relevant because the City has adopted its Comprehensive Plan, Shoreline Management Master Program, and Municipal Code as bases for substantive SEPA authority in City decisions. That provision does not make SeaTac the lead agency for the SAMP DEIS, but it reinforces that the ILA is only one component of the City's regulatory framework.

The FEIS should identify where the ILA is relied upon in the land use significance analysis and state that it reflects the interlocal framework in effect at the time of review. That description should be consistent with the actual current AAA Map and should not assign Future AAA parcels regulatory treatment that depends on a future map amendment or other subsequent action. The FEIS should also identify the current SeaTac code provisions relevant to each affected parcel, including changes that postdate any underlying assumptions prepared before those ordinances, and explain whether the ILA modifies or displaces those provisions. Continued reliance on existing ILA provisions beyond February 17, 2028 should not be assumed unless that assumption is explicitly disclosed and supported.

Cargo Development North of SR 518 Requires a More Specific Compatibility Analysis

Appendix H acknowledges the relocation and intensification of cargo activities north of SR 518, including additional truck activity, but it does not adequately evaluate what that change in operational intensity means for adjacent residential edges. Land use compatibility depends not only on whether cargo activity is an allowable use, but also on the intensity and operational characteristics of that use. SeaTac's current

code provides a concrete local compatibility benchmark. Where otherwise applicable, SMC 15.445.210 identifies Type I, twenty-foot side and rear buffers for Airport Support Facility, Distribution Center/Warehouse, and Truck Terminal uses adjacent to specified residential zones, with SMC 15.445.240 addressing side and rear buffer landscaping for noncompatible uses. SMC 15.460.020 also contains noise performance standards relevant to industrial and commercial properties, while expressly distinguishing normal airport-related aircraft noise, and SMC 15.460.030 addresses glare. The FEIS should not assume these provisions control every Port parcel; it should state which standards apply, state which are modified by the ILA, and identify how equivalent edge protection is achieved where an exemption applies.

The land use analysis does not clearly characterize changes in truck activity, hours of operation, lighting, noise, circulation, access, or other operational characteristics associated with the cargo NTPs. Perteet's land use technical review specifically identifies this missing cargo intensity and edge-compatibility crosswalk. Appendix L and the Cities' transportation review address freight generation, truck routing, queuing, access, safety, and mitigation. Appendix J and the noise review provide information relevant to ground-noise exposure. Appendix C and related air-quality analysis can inform localized emissions conditions, while Appendix P identifies mitigation measures. Without bringing those findings together, Appendix H does not demonstrate whether the resulting edge conditions remain compatible with adjacent residential areas.

The FEIS should characterize the operational changes associated with the cargo NTPs and evaluate their compatibility with adjacent residential areas. The analysis should address truck activity and operating hours, lighting and noise, circulation and access, safety, and buffer performance. It should cross-reference the specific Appendix L, Appendix J, Appendix C, and Appendix P findings that support the conclusion and identify the applicable SeaTac standards or ILA provisions for each affected parcel. Where the discipline-specific analyses identify unresolved uncertainty or deferred mitigation, the land use analysis should explain how that uncertainty affects the compatibility determination.

Development Near Tub Lake Requires an Open-Space Compatibility Analysis

The DEIS concludes that development near Tub Lake is consistent with the City's Parks, Recreation and Open Space objectives because it would not prevent implementation of those objectives. That conclusion addresses policy consistency, but it does not adequately evaluate environmental compatibility at the park and open-space interface. An airport-support use may be consistent with a parks policy while still affecting the quality, function, or public enjoyment of an adjacent open-space resource. SeaTac's current regulatory framework also treats buffers, natural-resource functions, and impact mitigation as land use considerations where critical areas are present.

Appendix H does not clearly document how buffer function, edge conditions, construction effects, operational nuisance, or public enjoyment of the Tub Lake area were evaluated. Perteet's land use technical review identifies these as specific missing interface pathways and recommends cross-references to the underlying discipline analyses and mitigation. The FEIS should connect this issue to the relevant biological-resources, water and stormwater, construction, noise, and mitigation analyses rather than treating the parks policy consistency finding as dispositive. It should also identify the design, minimization, or mitigation measures relied upon to support the no-significant-impact conclusion.

SeaTac also updated its critical-areas and flood-hazard regulations well-before the DEIS was issued. Ordinance 25-1031 was adopted December 9, 2025, and became effective December 20, 2025. The current critical-areas provisions, now codified in SMC Chapter 18.15, require review of development affecting potential or confirmed critical areas or buffers (SMC 18.15.090), critical-area reports based on best available science when required (SMC 18.15.100 and SMC 18.15.110), and application of the

mitigation sequence (SMC 18.15.120). SMC 18.15.170 and SMC 18.15.180 also address site-plan delineation and building setbacks. The FEIS should determine whether these provisions apply to work in the Tub Lake vicinity and should not rely on a superseded critical-areas framework in describing the regulatory setting.

The FEIS should provide a Tub Lake-specific compatibility analysis addressing buffer performance, edge conditions, construction and operational effects, and public enjoyment. It should identify any design, minimization, or mitigation measures relied upon to avoid adverse impacts and cite the technical analysis supporting those measures. To the extent an NTP site or associated work affects a critical area or buffer in the Tub Lake vicinity, the FEIS should also identify the applicable current SeaTac critical-area standards and explain how the project is consistent with them.

The Legal and Policy Standards and City Regulatory Baselines Must Be Identified

Appendix H and Chapter 4 reference RCW 36.70.547 and other land use frameworks, but they do not clearly explain which provisions are being treated as operative standards and which are included only as general policy context. The same problem applies to the local regulatory baselines. The significance determination cannot be readily evaluated when the standards supporting it are unclear, outdated, or applied inconsistently among the affected cities.

SeaTac

By the May 22, 2026 DEIS release, SeaTac had adopted several material code changes. Ordinance 24-1022 was adopted on December 10, 2024, and became effective January 1, 2025, adopting Envision SeaTac 2044 and related development regulations. Ordinance 25-1008 was adopted on June 10, 2025, and became effective June 21, 2025, amending middle-housing and ADU regulations across multiple provisions of Title 15, including SMC 15.205.040, SMC 15.300.055, Chapters 15.305, 15.310, and 15.400, Chapter 15.445, and related parking and residential design standards. Ordinance 25-1031 was adopted on December 9, 2025, and became effective December 20, 2025, amending the City's Critical Areas and Flood Hazard Areas code, then identified as SMC Chapters 15.700 and 18.10. The current critical-area provisions are published in SMC Chapter 18.15.

Relevant SeaTac provisions include SMC 15.445.005 and SMC 15.445.210 for compatibility and buffering, SMC 15.460.020 and SMC 15.460.030 for noise and glare, SMC 16A.23.060(B) for cumulative environmental effects in the City's own SEPA framework, and SMC 16A.23.130 for the plans and regulations SeaTac has designated as bases for substantive SEPA authority. Where critical areas or buffers are implicated, SMC 18.15.090 through 18.15.120 establishes review, reporting, impact assessment, and mitigation requirements, and SMC 18.15.170 through 18.15.180 addresses site-plan delineation and building setbacks. The FEIS should distinguish these local requirements from ILA provisions and general policy concepts, and it should clearly state when an ILA exemption changes an otherwise applicable City standard. Regardless of when individual Appendix H supporting materials were prepared, the DEIS should identify and analyze the regulatory framework in effect at issuance rather than carry forward an older regulatory snapshot without reconciliation.

Burien

Burien likewise changed its regulatory baseline before the DEIS was issued. The City Council adopted Ordinance 847 on October 28, 2024, as part of the Burien 2044 Comprehensive Plan Update, establishing Burien's 20-year growth strategy and associated land use framework. Ordinance 849 amended the official zoning map and development regulations for the City's mixed-use and multifamily zones. Ordinances 844, 845, and 846 amended Burien's MFTE Program and Planned Action Ordinances, respectively, effective January 1, 2025. Burien subsequently adopted state-mandated housing and

zoning-map amendments through Ordinance 868 that increased the number and types of residential units allowed in the city, effective July 9, 2025, and its critical-areas amendments became effective December 30, 2025. Except for its industrial zones, Burien's residential, multifamily, and mixed-use zoning framework was substantially amended before issuance of the SAMP DEIS. Collectively, these amendments changed allowed uses, dimensional standards, development regulations, design requirements, the City's land use framework, and development capacity. The FEIS should identify and apply the Burien regulations in effect when the DEIS was issued. Regardless of when individual Appendix H supporting materials were prepared, the DEIS should identify and analyze the regulatory framework in effect at issuance rather than carry forward an older regulatory snapshot without reconciliation.

Des Moines

Des Moines has begun work on regulatory changes that may alter its regulatory baseline before the FEIS is issued. The FEIS should identify any comprehensive-plan, zoning, development-regulation, housing, or critical-areas changes adopted or made effective before FEIS issuance and explain how those changes affect Appendix H's assumptions and the land use significance analysis. Because the operative regulatory setting may change between the DEIS and FEIS, the FEIS should expressly reconcile any intervening Des Moines changes rather than repeat the May 2026 baseline without review. Regardless of when individual Appendix H supporting materials were prepared, the DEIS should identify and analyze the regulatory framework in effect at issuance rather than carry forward an older regulatory snapshot without reconciliation.

Cross-City Regulatory Baseline Reconciliation

The FEIS should provide a regulatory-baseline table identifying the specific statutory, comprehensive-plan, interlocal-agreement, and municipal-code provisions relied upon in the land use analysis for SeaTac, Burien, and Des Moines, in that order. For each source, the table should identify the version or effective date used, whether it is an enforceable requirement or policy context, the parcels or NTPs to which it applies, and how it supports the land use significance determination. The FEIS should reconcile Appendix H with SeaTac Ordinances 24-1022, 25-1008, and 25-1031; the Burien ordinances and codified changes identified above; any Des Moines changes effective before FEIS issuance; and the current codified provisions of each city's municipal code. It should also identify where the technical findings from Appendix J, Appendix L, Appendix K, Appendix C, and Appendix P are incorporated into the land use conclusion.

Taken together, these issues indicate that the land use analysis should more directly evaluate environmental compatibility and cumulative conditions surrounding the airport rather than rely primarily on plan consistency, regulatory permissibility, or airport property boundaries. It should connect the land use significance determination to the discipline-specific record, including Perteet's land use technical review, the Cities' noise and transportation reviews, Leland's Technical Memorandum: Economic, Fiscal, and Socioeconomic Impacts, and the underlying DEIS analyses in Appendices C, J, K, L, and P.

Noise

Thousands of Additional Residents Are Placed Within 65+ DNL Contours, Yet the DEIS Finds No Significant Impact

The DEIS applies FAA's DNL 65 / 1.5 dB significance framework under SEPA and finds significant impacts only if DNL increases ≥1.5 dB at noise-sensitive areas at or above 65 DNL.[22]

[22] SAMP NTP Draft SEPA EIS, 4.3.10.1.

For 2032, the Action Alternatives expand the 65+ DNL area by 0.15 square miles and add 337 housing units and 824 people within 65+ DNL — yet the DEIS finds no significant impact because modeled DNL increases are 0.0–0.6 dB. For 2037, the Action Alternatives expand the 65+ DNL area by 0.66 square miles and add 1,851 housing units and 4,439 people within 65+ DNL — yet the DEIS again finds no significant impact. Of significant note and concern to the commenting Cities, no operational noise mitigation is proposed.[23]

The exposure counts in the DEIS are not the only current estimates in the record. The draft Part 150 materials report 6,915 housing units and 18,410 people within the 2022 65 DNL contour, compared with the DEIS figures of 6,216 housing units and 14,061 people. For 2032, the draft Part 150 materials report approximately 10.2 square miles, 9,941 housing units, and 26,302 people within the 65 DNL contour. The FEIS should reconcile these datasets, identify their respective source years and methods, and explain which figures control the significance and mitigation analyses.[24]

The DEIS's conclusion that exposing nearly 4,500 additional people to aviation noise at or above 65 DNL constitutes "no significant impact" is an artifact of defining significance exclusively through the FAA's incremental-change metric. But this is a SEPA EIS. Under SEPA's context-and-intensity framework — which requires consideration of the affected environment and the characteristics of the proposed action — placing thousands of additional residents in communities already identified as highly burdened (EHD scores 9-10, Equity Index low/very low) into a 65+ DNL noise zone plainly constitutes significant adverse environmental impact requiring disclosure and mitigation in the instant environmental impact statement.

Appendix J itself acknowledges DNL is an annualized energy-average metric that does not reflect noise levels at any particular time of day and that short-duration loud events — especially at night — can drive DNL values, meaning areas well below 65 DNL may still experience frequent, high-amplitude noise events that disrupt sleep, learning, and health.

The Cities request that the FEIS: (1) Supplement DNL-based analysis with additional metrics (SEL, Lmax, event counts above threshold at sensitive receptors); (2) disclose noise impacts to populations below 65 DNL that experience frequent or high-amplitude overflights; (3) treat expansion of the 65+ DNL contour affecting hundreds to thousands of additional households as a significant impact; and (4) commit to enforceable, funded noise mitigation measures proportionate to the documented increase in exposed households.

The DEIS Assumes Flight Tracks Will Not Change Through 2037 Without a Sensitivity Analysis

Appendix J assumes 2032 No Action flight tracks would not change from 2022. Appendix J assumes 2032 Proposed Action flight tracks would also remain the same as 2022 because no runway or flight track changes are proposed. Appendix J assumes 2037 No Action flight tracks remain the same as 2022. Appendix J assumes 2037 Proposed Action flight tracks remain the same as 2022.

The noise protocol itself acknowledges that noise contours are a function of operations, fleet mix, time of day, how aircraft are flown, runway use, and routes of flight, and that "variations can cause marked changes in noise patterns." Locking 2022 flight track geography into 2032 and 2037 modeling — without sensitivity analysis — is inconsistent with the acknowledged complexity of noise pattern drivers,

[23] SAMP NTP Draft SEPA EIS, 4.3.10.

[24] Michael Minor, Review of the 2025-26 SEA Part 150 Noise and Land Use Compatibility Study and Draft Noise Exposure Maps, pp. 2-7.

particularly over a 10–15 year operational horizon during which RNAV procedures, airspace management, and congestion-driven vectoring may change materially.[25]

The Cities request that the FEIS: Provide evidentiary support for, and sensitivity analyses documenting, the basis for the "tracks unchanged" assumption and evaluating community noise outcomes under reasonable alternative track dispersions.

The Part 150 Record Identifies Increased Third-Runway and Nighttime Use as a Central Noise Driver

The Cities' Part 150 technical review identifies increased use of the third runway, including increased nighttime use, as a central driver of the westward expansion of the modeled contours. Because DNL applies a 10 dB nighttime penalty, shifts in nighttime runway allocation can materially affect contour size and location even when the number of shifted operations is comparatively small. The technical review concludes that the DEIS and Part 150 record should disclose runway-specific daytime and nighttime operations and explain how the distribution changes under the Action Alternatives.[26]

The Part 150 record also documents a substantial longer-term change in community exposure. The 2014 study's 2018 forecast identified approximately 7.3 square miles, 3,771 housing units, and 9,712 people within the 65 DNL contour; the draft Part 150 materials identify approximately 8.8 square miles, 6,915 housing units, and 18,410 people for 2022 and approximately 10.2 square miles, 9,941 housing units, and 26,302 people for 2032. These comparisons describe the cumulative trajectory between different study forecasts and should not be presented as though the entire change is caused by the NTPs. The FEIS should distinguish this broader trend from the Proposed Action increment while evaluating both in the cumulative noise analysis.[27]

The Cities request that the FEIS and the related Part 150 process disclose the number of daytime and nighttime operations assigned to each runway, evaluate preferential-runway and other abatement alternatives, and explain how additional third-runway operations would be limited or mitigated. Any reliance on future sound insulation should be accompanied by specific funding, eligibility, implementation schedules, and performance commitments.[28]

Runway 34R Glide Slope Relocation Was Excluded From Modeling With Only a Conclusory "Conservative" Assertion

Appendix J acknowledges that the Runway 34R arrival profile is expected to be "slightly higher" due to glide slope relocation but states it was not included because AEDT cannot reflect the change, and asserts the omission is "conservative." Appendix J repeats the same rationale for 2037. The noise modeling protocol reiterates that this change was excluded and characterized as "conservative" without quantification. Id.[29]

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[25] SAMP NTP Draft SEPA EIS, Appendix J, p. 15 of 204.

[26] Michael Minor, Review of the 2025-26 SEA Part 150 Noise and Land Use Compatibility Study and Draft Noise Exposure Maps, pp. 2-7.

[27] Michael Minor, Review of the 2025-26 SEA Part 150 Noise and Land Use Compatibility Study and Draft Noise Exposure Maps, pp. 2-7.

[28] Michael Minor, Review of the 2025-26 SEA Part 150 Noise and Land Use Compatibility Study and Draft Noise Exposure Maps, pp. 2-7.

[29] SAMP NTP Draft SEPA EIS, Appendix J, n. 13. SAMP NTP Draft SEPA EIS, Appendix J, n. 14.

The assertion that omitting a known change is "conservative" is not self-evidently true. Aircraft arriving higher may generate different noise footprints across different receptor locations — the change could reduce noise at some locations while increasing it at others. Without modeling or, at the very least, quantified estimation of the change's effect, neither the Port nor the public can evaluate whether the omission is actually conservative for any specific community.

The Cities request that the FEIS: Quantify and disclose the glide slope relocation's implications for communities under Runway 34R arrival paths and provide a technical demonstration (not a conclusory statement) that omission is conservative for all affected receptors.

Noise Mitigation Is Deferred to a Separate Part 150 Process Without Enforceable Commitments

The DEIS notes a Part 150 update is underway, treats it as a separate parallel process, and "conservatively assumes" no one will opt into voluntary sound insulation — rather than committing to enforceable mitigation in the DEIS. Appendix P confirms the Part 150 Study Update is "a separate process" and frames noise response largely in terms of existing/voluntary programs (Fly Quiet Incentive Program, Late-Night Noise Limitation Program, engine run-up restrictions) rather than project-specific mitigation commitments.[30]

As of 2022, 2,674 of the 6,216 housing units within the 65+ DNL contour are identified as "Not Sound Insulated." By the 2032 No Action, 4,984 housing units within the 65+ DNL contour would be "Not Sound Insulated." Deferring the question of noise mitigation eligibility and program expansion to a separate Part 150 process — scheduled after the SEPA decision — leaves thousands of current and future residents without any enforceable commitment for relief. That is anathema to SEPA's goals.[31]

The Part 150 technical review further identifies unresolved implementation concerns from the prior noise program. It reports that construction of some earlier sound-insulation commitments did not begin until 2025 and that the Port's current repair-and-replacement effort is a pilot limited to approximately 120 homes insulated before January 1, 1993. The FEIS should disclose the status of all outstanding commitments, expand verification to previously insulated properties regardless of installation year, and demonstrate that new mitigation can be delivered within a defined and substantially shorter schedule.[32]

The Cities request that the FEIS: Commit to specific, funded, and enforceable noise mitigation measures — including a plan and timeline for sound insulation for all newly eligible homes — and not rely on the Part 150 process as a substitute for SEPA mitigation obligations.

The DEIS Fails to Conduct an Independent SEPA Significance Analysis and Inappropriately Defaults to FAA NEPA Thresholds

The DEIS states it applies the same significance considerations for aircraft noise as the NEPA EA because FAA has determined 65 DNL is the appropriate threshold[33]. For both 2032 and 2037, the DEIS concludes no significant noise impact because no noise-sensitive area experiences a DNL increase of 1.5 dB or

[30] SAMP NTP Draft SEPA EIS, § 4.3.10.5. SAMP NTP Draft SEPA EIS, Appendix P, p. 10.

[31] SAMP NTP Draft SEPA EIS, Appendix J, Table 7-6.

[32] Michael Minor, Review of the 2025-26 SEA Part 150 Noise and Land Use Compatibility Study and Draft Noise Exposure Maps, pp. 2-7.

[33] DEIS at 4.3.10.1

more at or above 65 DNL compared to No Action[34]. SEPA significance is a separate and independent determination governed by WAC 197-11-330 and WAC 197-11-794, which requires consideration of the context and intensity of impacts, including the degree to which the action affects public health or safety, the unique characteristics of the geographic area, and the degree to which the action's effects are highly uncertain. The DEIS does not engage in this SEPA-specific framework analysis; it simply adopts FAA's NEPA threshold as dispositive. That approach is legally insufficient under SEPA because FAA's 1.5 dB / 65 DNL threshold was designed for NEPA purposes and is not a SEPA standard.

The DEIS reports that under the 2032 Proposed Action, 337 additional housing units and 824 additional people would be within the 65+ DNL contour compared to No Action, and under the 2037 Proposed Action, 1,851 additional housing units and 4,439 additional people would be within the 65+ DNL contour compared to No Action[35]. These are significant increases in the number of people exposed to levels the federal government has itself identified as incompatible with residential land use. SEPA requires that these impacts be evaluated on their own terms, not dismissed solely because modelled DNL increases are below the FAA's 1.5 dB trigger.

The DEIS also fails to address FAA's own Neighborhood Environmental Survey ("NES"), which presents material evidence about contemporary community response to aircraft noise at the exposure level the DEIS treats as dispositive. FAA designed the NES as a nationally representative survey of more than 10,000 residents near 20 airports and used the same DNL metric applied in the DEIS to develop an updated exposure-response curve. At 65 DNL, the historical FICON 1992 relationship estimated that 12.3 percent of the population would be highly annoyed. The NES estimated 65.7 percent highly annoyed, with a 95-percent confidence interval of 60.1 to 70.9 percent. FAA has acknowledged that the NES found substantially greater annoyance across the studied exposure range than the historical relationship. As of August 2026, FAA is still reviewing whether to continue using DNL 65 as the threshold for significant noise impacts and residential land-use compatibility. FAA has revised the review timeline to await recommendations from the Aircraft Noise Advisory Committee, for which membership was solicited in July 2026.[36]

The Cities recognize that the NES has not formally displaced FAA's existing national noise policy. The Cities are not asking the Port to establish a new federal threshold. The material issue is that the DEIS adopts FAA's 65-DNL and 1.5-DNL framework as the basis for its SEPA significance conclusion while omitting FAA's contemporary evidence about the community response associated with that framework. The unresolved status of the federal policy review does not permit the Port to disregard the NES in its independent, project-specific SEPA analysis. SEPA significance involves context and intensity and "does not lend itself to a formula or quantifiable test." WAC 197-11-330(3). The NES therefore bears directly on whether the DEIS reasonably characterizes the intensity of the Proposed Action's noise effects and the need for mitigation.

The adequacy of FAA's project-specific treatment of the NES is presently before the Ninth Circuit in litigation concerning FAA's September 2025 NEPA approval of the SAMP Near-Term Projects. Vashon Island Fair Skies has argued that FAA failed to explain what its contemporary survey meant for the Project's 65-DNL significance finding. The Cities do not ask the Port to prejudge the pending litigation. The

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[34] DEIS at pg. 4-60

[35] DEIS at pg. 4-60

[36] Federal Aviation Administration, Analysis of the Neighborhood Environmental Survey, DOT/FAA/TC-21/4 (Jan. 2021); Overview of FAA Aircraft Noise Policy and Research Efforts: Request for Input on Research Activities to Inform Aircraft Noise Policy, 86 Fed. Reg. 2722 (Jan. 13, 2021); Federal Aviation Administration, Noise Policy Review, https://www.faa.gov/noisepolicyreview (updated July 24, 2026; accessed Aug. 17, 2026).

pending challenge nevertheless places the Port on notice of a material analytical issue in the federal review upon which the DEIS relies. Regardless of the outcome of that litigation, the Port has an independent obligation as SEPA lead agency to evaluate the NES and explain its significance to this Project rather than await the outcome of the federal litigation or completion of FAA's national policy review. Although 49 U.S.C. § 47502 governs FAA rather than the Port, its requirement that the federal noise-measurement system maintain a highly reliable relationship to surveyed reactions of individuals further demonstrates why the NES is material to the federal framework the Port has chosen to use.[37]

The Cities request that the FEIS: Revise DEIS Section 4.3.10 to: (a) conduct a distinct, explicit SEPA significance analysis applying WAC 197-11-330(3) context and intensity criteria to the noise impacts of each alternative, including the increases in exposed housing units and population within 65+ DNL; (b) disclose and discuss the NES and its relationship to the historical exposure-response curve underlying the federal framework; (c) apply the NES exposure-response relationship to populations within modeled DNL bands under Existing, No Action, and Proposed Action conditions, using exposure bands or receptor-level results rather than mechanically applying the 65-DNL estimate to all residents within the contour; (d) explain how the NES informs the Port's SEPA significance determination and whether it changes the conclusion that 1,851 additional housing units and 4,439 additional people within 65+ DNL do not constitute a significant adverse environmental impact; (e) identify what mitigation measures were evaluated for newly exposed residents and explain why any measures were rejected or deferred; and (f) reconsider the significance and mitigation conclusions or provide a reasoned, project-specific explanation for why the NES does not alter those conclusions. The DEIS should not conflate the absence of an FAA "significant impact" finding with a SEPA "no significant impact" determination[38]

The DEIS Fails to Reconcile the AEDT Version Change and Lacks Adequate QA/QC Documentation

The Noise Modeling Protocol states that noise exposure contours "will be prepared using the FAA's AEDT Version 3e[39]." A subsequent memorandum then states that, following the release of AEDT Version 3f on 13 December 2023, the analysis was updated to AEDT 3f, which natively includes the Boeing 737-7 and Cessna 408 SkyCourier and thus avoids certain aircraft substitutions required under AEDT 3e[40]. Chapter 4 of the DEIS states that airport noise was modelled using AEDT Version 3f[41]. Despite this version change, the DEIS does not identify the full AEDT 3f build/release identifier, the aircraft noise and performance (ANP) database version, or the steps taken to ensure that results from the prior 3e modelling phase did not carry forward errors into the published 3f outputs. The memorandum identifies multiple ANP, airframe, and engine-code modifications between AEDT 3e and 3f, but provides no quantitative comparison of outputs before and after the version update[42].

Under SEPA's requirement for a reasonably thorough discussion of significant environmental impacts, an analysis that cannot be independently reviewed or reproduced is insufficient. The absence of QA/QC

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[37] 49 U.S.C. § 47502(1)-(2); Opening Brief of Petitioner Vashon Island Fair Skies and cited excerpts of record, 3-ER-304-13, 327, 340.

[38] Appendix J (1 of 2) at pg. 107 of 115

[39] Appendix J (2 of 2) at pg. 15 of 204

[40] Id. At pg. 3 of 204

[41] DEIS at Section 4.3.10.2

[42] Appendix J (2 of 2) at pg. 3 of 204

documentation prevents the public and reviewing agencies from verifying that the published contours and significance conclusions are accurate.

The cities request that the FEIS: Revise Appendix J and the relevant EIS sections to: (a) state the full AEDT 3f build identifier and ANP database version used for all published contours; (b) provide a QA/QC summary describing the verification steps applied to key inputs (fleet mix, operations, track data, run-up parameters) and outputs; (c) include a side-by-side or narrative comparison of AEDT 3e and 3f modelling results to confirm that the version change does not alter significance conclusions; and (d) confirm that all results presented in the DEIS reflect the corrected AEDT 3f inputs and not any intermediate 3e runs.

Fleet Mix Input Corrections Have Not Been Fully Reconciled With the Published Results

The Noise Modeling Protocol memorandum states that Table 17 was updated to include the accurate number of Boeing 737-9 operations[43], and that Tables 22 and 23 were updated to reflect correct day/night percentage splits for the Narrowbody Jet category[44], with the updated 2037 No Action Narrowbody Jet arrival split revised to 81.9% day / 18.1% night, and departures to 81.6% day / 18.4% night. The memorandum further states that Tables 26–29 were updated to include Boeing 767-300 Freighter run-up operations[45]. The DEIS does not contain a consolidated record identifying all input corrections, what the prior incorrect values were, and how those corrections affect modelled DNL contours and significance conclusions. Because DNL is highly sensitive to nighttime operation percentages and total fleet operations, these corrections are material.

The Cities request that the FEIS: Revise Appendix J to include a consolidated errata or correction table that: (a) identifies each corrected input (by table number, aircraft category, and parameter); (b) states the prior (incorrect) value and the corrected value; and (c) confirms, with supporting model output comparison, that all contours and impact conclusions in the FEIS reflect the fully corrected inputs. This is essential for SEPA completeness, because the day/night split corrections to Narrowbody Jet categories directly affect the DNL weighting of the largest single aircraft category at SEA.

The Flight Track Sample Period Is Incomplete and Its Representativeness Has Not Been Demonstrated

The Noise Modeling Protocol states that flight track definition and percentage utilization were derived from EnvironmentalVue radar data covering January, February, March, April, May, July, September, and October 2022, supplemented by previous studies[46]. June, August, November, and December 2022 are absent from the flight track sample. The DEIS provides no justification for the exclusion of these months, no statistical comparison of track dispersion across seasons, and no sensitivity test demonstrating that the omitted months do not contain operationally distinct patterns—such as peak-summer traffic with altered routing, winter weather-related deviations, or holiday-period operational surges—that would affect annual DNL contour shape and extent.

Under SEPA, an EIS must demonstrate that the affected environment and future conditions are represented by the best reasonably available information. *See* WAC 197-11-080. An unvalidated partial-

[43] Appendix J (2 of 2) at pg. 4 of 204

[44] Id

[45] Id

[46] Appendix J (2 of 2) at pg. 24 of 204

year sample for the most geometrically sensitive model input (lateral flight track location) does not satisfy that standard.

The Cities request that the FEIS: (a) provide a statistical justification for the month selection—demonstrating either that omitted months are operationally indistinguishable from included months, or that any differences are immaterial to DNL contour shape; (b) supplement the analysis with data from the omitted months (June, August, November, and December), or provide a reasoned explanation why doing so is not practicable; and (c) include a sensitivity comparison showing contour change if full-year tracks are used. This is particularly important given that future track locations are assumed unchanged from Existing conditions and any baseline track error propagates through all future alternatives[47].

TAAM Calibration and Validation Are Not Disclosed and the TAAM-to-AEDT Translation Cannot Be Independently Verified

The Noise Modeling Protocol states that future runway end utilization was estimated using TAAM airfield simulation outputs and that taxiway improvements under Alternative 2 (the Proposed Action) would influence those utilization rates. Future runway utilization assumptions are presented in Tables 30–37[48][49]. The DEIS does not include TAAM model configuration, calibration runs against observed 2022 operations, or validation statistics demonstrating that TAAM outputs reproduce observed runway-use patterns before being used to project future conditions. Additionally, the published tables contain highly rounded utilization values (e.g., 0.50%, 1.00%, 5.00%, 55.00%), which suggest generalization rather than simulation precision. The DEIS does not explain whether these rounded values are TAAM outputs or post-processing simplifications and does not test how sensitive modelled DNL contours are to plausible alternative utilization assumptions.

The Cities request that the FEIS: (a) summarize TAAM model setup, baseline calibration, and validation against observed 2022 data (including key metrics such as runway throughput, flow direction, and utilization comparisons); (b) confirm whether the rounded utilization values in Tables 30–37 are direct TAAM outputs or simplified approximations, and explain the basis for any rounding; and (c) provide a sensitivity analysis demonstrating the effect of plausible alternative utilization assumptions on modelled DNL contours for each alternative/year.

The Run-Up Scaling Assumption Is Untested and Potentially Inconsistent With the Proposed Action Change

For Future No Action (2032 and 2037), run-up operations are scaled from 2022 based on total operations, assuming the same distribution across aircraft types[50]. For the Proposed Action, run-up locations change due to taxiway and terminal modifications, yet the same proportional scaling assumption is applied[51]. The DEIS does not provide any empirical basis for the assumption that run-up frequency and duration scale linearly with total operations, nor does it explain whether fleet changes, maintenance practice shifts, or the geometric consolidation of run-up areas under the Proposed Action

[47] See id. At pg. 54 of 204

[48] Id. At 51-52 of 204

[49] Id at 54 of 204

[50] Id at 45 of 204

[51] Id at 46 of 204

might alter per-operation run-up demand[52]. Appendix J acknowledges that under the Proposed Action, run-up locations would change, with fewer locations on the north and south ends of the airfield[53]. This spatial consolidation could concentrate ground-noise impacts on specific communities, an effect not evaluated in the DEIS.

The cities request that the FEIS: (a) provide an empirical or operational basis for the linear-scaling assumption, including whether airline maintenance contracts, fleet type, or turnaround practices at SEA support this assumption; (b) conduct and disclose a sensitivity test varying run-up frequency and duration assumptions within a plausible range; and (c) provide a localized noise assessment for communities adjacent to consolidated run-up areas under the Proposed Action, identifying the nearest noise-sensitive land uses and estimated noise levels. The analysis should also confirm that the Boeing 767-300 Freighter run-up additions noted in the memorandum are reflected in all modelled alternatives and years[54].

The Missed-Approach Modeling Lacks Validation and Is Insufficiently Integrated Into the Text of the DEIS

Appendix B states that 798 missed approaches occurred at SEA in 2022, representing an average of 2.2 operations per day, and that 58 airframe/engine combinations were identified from operational log data[55]. The methodology recommends modelling missed-approach operations on Runways 16R and 34L because the majority occurred on those runways[56]. Track utilization percentages for missed-approach backbone tracks are presented in Table 4 of Appendix B[57]. The methodology was coordinated with FAA/AEE and received approval on 2 August 2023[58]. However, the DEIS main body does not summarize missed-approach assumptions, operational totals, or how this model component contributes to published contours and impact findings. The DEIS also does not state whether missed-approach rates are held constant or scaled in future alternatives, or whether changing operational patterns under the Proposed Action are expected to alter missed-approach frequency.

The cities request that the FEIS: (a) summarize, in the main impact analysis narrative, missed-approach operational assumptions (total operations per year, runway allocation, track utilization) for each modelled scenario; (b) state clearly whether missed-approach rates are scaled proportionally to total operations for future alternatives and justify that approach; and (c) disclose the contribution of missed-approach operations to modelled DNL at representative noise-sensitive receptors. Given the concentrated flight-path nature of missed approaches and their high thrust/noise profile, SEPA requires adequate disclosure of this source's contribution to community noise exposure.

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[52] Id at 45-46

[53] Appendix J (1 of 2) at 74 of 115

[54] Appendix J (2 of 2) at 4 of 204

[55] Id at 79 of 204

[56] Id at 81 of 204

[57] Id

[58] Id at 78

The DEIS Fails to Address Below-65 DNL Impacts and Ignores Sub-Threshold Populations

Appendix J states the Existing (2022) 65 DNL contour encompasses 8.8 square miles and 6,216 housing units and an estimated population of 14,061 within the 65+ DNL contour[59]. The analysis provides no characterization of the population or housing units exposed to levels between 60 and 65 DNL, or between 45 and 60 DNL, despite the fact that FAA Order 1050.1F establishes "reportable change" thresholds—including a 3 dB increase in the 60–65 DNL band and a 5 dB increase in the 45–60 DNL band—that apply even where the overall significance threshold is not exceeded. The DEIS does not demonstrate whether any modelled scenario produces reportable changes in these sub-threshold bands, leaving a compliance gap.

Additionally, a substantial residential population lives within these sub-65 DNL exposure bands and may experience meaningful increases in annoyance, sleep disruption, or health effects without any analysis or mitigation being considered in this DEIS.

The Cities Request that the FEIS: Revise Section 4.3.10 (and Appendix J) to: (a) present exposure estimates (housing units, population) for the 60–65 DNL and 55–60 DNL contour bands for all modelled alternatives and years; (b) evaluate whether any modelled scenario produces FAA Order 1050.1F "reportable changes" below 65 DNL and, if so, describe how those findings affect the SEPA significance determination; and (c) provide a SEPA-specific discussion of whether impacts to the sub-65 DNL population constitute significant adverse environmental impacts. *See* WAC 197-11-330 & WAC 197-11-704. This analysis should be informed by Appendix J's own recognition that DNL is an annual average metric that does not represent noise at any particular time and is dominated by the loudest events[60].

Growth-Driven Contour Expansion Has Not Been Adequately Distinguished From Project-Caused Impacts

Appendix J reports the Future (2032) No Action 65+ DNL contour area increases to 10.10 square miles—an increase of 1.31 square miles compared to the Existing (2022) condition—primarily attributable to forecast operations growth[61]. This translates to 9,518 housing units within the 65+ DNL contour under Future (2032) No Action, an increase of 3,302 units over Existing (2022[62]). Under the Future (2032) Proposed Action, the 65+ DNL contour area is 10.25 square miles—a further increase of 0.15 square miles over No Action—and 9,855 housing units are within 65+ DNL, an increase of 337 over No Action[63].

The DEIS narrative does not clearly distinguish between (a) growth-driven contour expansion that would occur under No Action and (b) project-caused incremental expansion attributable to the NTPs. This conflation obscures the actual scope of project-specific impacts and may understate the cumulative noise burden on affected communities when both growth and project effects are considered together. SEPA requires adequate analysis of cumulative impacts, including the combined effect of proposed and related actions.

The Cities Request that FEIS: Revise Section 4.3.10 (and Appendix J) to (a) present a clear three-way comparison—Existing (2022), Future No Action, and Future Proposed Action—for each analysis year, with explicit identification of growth-driven versus project-caused changes in contour area, housing units, and

[59] Appendix J (1 of 2) at pg. 51-52 of 115

[60] See Appendix J (1 of 2) at pg. 22 of 115

[61] Appendix J (1 of 2) at pg. 65 of 115

[62] Id.

[63] Id at 77-78 of 115

population; (b) discuss the cumulative noise burden on communities that are affected by both forecast growth and project-related increments; and (c) evaluate whether, in aggregate, these cumulative effects warrant mitigation beyond that currently proposed.

The Land Use Compatibility Analysis Applies a Binary 65 DNL Threshold Without Overlaying State or Local Standards

Appendix J acknowledges that DNL is the FAA-required metric and that other cumulative metrics may supplement but not replace DNL for federal compatibility purposes[64]. The DEIS applies the 14 CFR Part 150, Appendix A compatibility table as a uniform standard, treating all land uses below 65 DNL as compatible without any overlay of Washington State or local jurisdiction land use plans, zoning ordinances, or noise standards. This gap is material, because the DEIS identifies nine schools, 19 places of worship, three nursing homes, and two libraries within the existing 65+ DNL contour—land uses for which many jurisdictions maintain heightened noise sensitivity standards regardless of federal compatibility determinations[65].

The Cities request that the FEIS: Revise Section 3.3.11 (and the land use compatibility sections of Appendix J) to (a) identify and apply any state or local noise compatibility standards applicable to the jurisdictions surrounding SEA, including any standards more protective than Part 150; (b) evaluate compatibility of proposed action noise impacts against those standards; and (c) where state or local standards are more stringent, explain whether the DEIS's significance conclusions remain valid under those standards or require revision. This analysis should also address single-event noise levels at sensitive receptors such as schools and health-care facilities, where instantaneous noise exposure may be more pertinent than annual DNL averages.

The Health Effects Discussion Is Conclusory and Divorced From Project-Specific Modelled Outcomes

Appendix J summarizes research on health effects of aviation noise, noting variability and complexity in determining causal effects[66]. Section 3 of Appendix J describes sleep disturbance research using FICON/FICAN relationships and notes field studies on awakenings[67]. Appendix J concludes there are no definitive conclusions on percentage of persons awakened at specific aircraft noise levels and cautions against over-interpretation[68]. The DEIS does not connect these health-effects references to project-specific modelled outcomes—for example, using number-above metrics (events exceeding a threshold Lmax), single-event exposure level (SEL) analysis, or any non-DNL noise endpoint—for the populations newly brought within, or already residing within, the 65+ DNL contour. The discussion remains at the level of a general literature review, which is insufficient under SEPA to demonstrate a "hard look" at potential health impacts on identifiable communities.

The Cities request that the FEIS: Revise the health-effects discussion in Section 4.3.10 (and Appendix J) to: (a) apply the health-effects literature to the specific, project-modelled noise changes at SEA, including identification of the number of persons likely to experience increased annoyance or sleep disturbance

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[64] Appendix J (1 of 2) at pg. 22 of 115

[65] Id at 52-53

[66] Appendix J (1 of 2) at pg. 18 of 115

[67] Id at 19 of 115

[68] Id. At 19-20

based on standard dose-response relationships; (b) supplement the DNL analysis with non-DNL metrics (e.g., number of events above 65 dBA Lmax at night, or single-event SEL) at representative residential receptors; and (c) address the distribution of health effects across the environmental justice communities identified in the DEIS EJ analysis (DEIS Section 3.3.12), given the DEIS's own finding that most census tracts in the noise study area score 9–10 on the WADOH Environmental Health Disparities Map.

The DEIS Fails to Analyze Supplemental Non-DNL Noise Metrics for Health or Annoyance Endpoints

Appendix J acknowledges that DNL is an annual average metric dominated by the loudest events and does not represent noise at any particular time[69]. It further recognizes that health effects research relies on various metrics, including single-event levels, long-term averages, and number of events above threshold levels[70]. Despite these acknowledgements, the DEIS relies exclusively on DNL for all noise impact characterization in both Chapter 3 and Chapter 4. Neither day-time maximum levels (Lmax), single-event exposure level (SEL), number of events above specified thresholds, nor night-time Lnight—which is referenced in WHO Environmental Noise Guidelines as preferable for sleep disturbance assessment—are presented for any receptor or scenario. This gap limits the ability of decision-makers and the public to evaluate community annoyance, sleep disruption, or compliance with health-based criteria.

The Cities request that the Port: Revise the DEIS to include supplemental noise characterization at representative noise-sensitive receptors (at minimum, one location per affected jurisdiction) using at least two non-DNL metrics, such as: (a) number of annual aircraft events exceeding 65 dBA (daytime) and 55 dBA (night-time) at ground level; (b) day-time and night-time maximum sound levels (Lmax) for representative aircraft types; and (c) single-event SEL for the dominant aircraft types in the fleet mix. These supplemental metrics should be presented for Existing (2022) conditions and all future alternatives, with a narrative discussing their implications for community health and annoyance alongside the primary DNL analysis.

Housing and Population Exposure Data Are Outdated and the Pending Part 150 Update Creates Unquantified Uncertainty

The DEIS states that the Port is working on a Part 150 Study Update using the same model and data used in the NEPA EA and SEPA EIS, but that the Part 150 Update has not been completed, and that updated housing counts will be provided once approved[71]. The DEIS asserts that the updated numbers are "not anticipated" to substantially change the conclusions, but provides no quantitative comparison, confidence interval, or sensitivity analysis to support this assertion[72]. The existing published housing exposure figure of 6,216 units and population of 14,061 within the 65+ DNL contour is thus acknowledged to be subject to revision without any bounding of how that revision might affect impact findings or mitigation requirements[73].

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[69] Appendix J (1 of 2) at pg. 22 of 115

[70] Id at pg. 18 of 115

[71] DEIS at pg. 3-86

[72] DEIS at pp. 4-60, 4-67

[73] Appendix J (1 of 2) at p. 52 of 115

Under SEPA, an EIS must be based on the best reasonably available information. WAC 197-11-080. Using acknowledged potentially out-of-date exposure data for significance determinations, without disclosing the range of uncertainty, does not satisfy that obligation.

The Cities request that the Port: Revise the DEIS to (a) provide a quantitative estimate of the potential range of change in housing units and population exposure attributable to the pending Part 150 update, based on available data; (b) assess whether that range of change could affect the significance conclusions or mitigation requirements; and (c) commit to supplementing the SEPA record with revised exposure data once the Part 150 Update is FAA-approved, with a mechanism for public notice if material changes result. If the Part 150 Update is expected imminently, consideration should be given to delaying finalization of the EIS until those numbers are available.

The Construction Noise Screening Methodology Is Not Disclosed and Non-Residential Sensitive Receptors Have Not Been Adequately Evaluated

The DEIS states that a detailed construction noise assessment was completed for NTPs C02 and C03 because they are directly adjacent to residential properties, producing quantified impacts on thirteen and eight residential properties respectively[74]. A screening analysis was used to limit detailed assessment to these two projects, but the DEIS does not describe the screening methodology, screening thresholds applied, or how other nearby sensitive receptors—including schools, nursing homes, places of worship, and libraries identified within and near the noise study area—were evaluated against or excluded from detailed assessment. The DEIS has already identified nine schools, 19 places of worship, three nursing homes, and two libraries within the existing 65+ DNL contour[75]—these facilities may be significantly more sensitive to construction noise than residential properties during their hours of operation and should have been explicitly evaluated.

Additionally, the DEIS does not disclose key FHWA TNM 3.2 inputs used to generate the construction noise modelling, including terrain and ground absorption assumptions, receptor heights, equipment activity schedules, or usage factors, preventing independent review of the analysis.

The Cities request that the FEIS: Revise Section 4.3.10.6 to (a) describe the screening methodology and thresholds used to determine which NTPs required detailed construction noise analysis; (b) explicitly evaluate construction noise impacts on schools, nursing homes, places of worship, and other sensitive land uses within or adjacent to NTP construction areas; (c) disclose TNM 3.2 key modelling inputs (equipment list, usage factors, receptor locations and heights, terrain and ground assumptions) in sufficient detail for independent review; and (d) assess whether existing local noise ordinances for SeaTac, Burien, and Des Moines—including numeric daytime and prohibited-hour thresholds—are met at each identified sensitive receptor. Because some construction impacts are projected to last up to 26 continuous weeks, the absence of this analysis is a material gap[76].

[74] DEIS at Section 4.3.10.6

[75] Appendix J (1 of 2) at pp. 52-53 of 115

[76] DEIS at p. 4-68

Construction Timing Uncertainty Has Not Been Addressed Through Schedule Sensitivity Analysis and Modelled Levels Have Not Been Compared Against Specific Numeric Standards

The DEIS explicitly acknowledges that construction timing is "subject to change," but states that the SEPA EIS preserves the same timing assumptions used in the NEPA EA for consistency[77]. No sensitivity analysis is presented for alternative construction schedules—including extended durations, phasing changes, concurrent NTP construction, or night-time work scenarios. Additionally, the DEIS characterizes noise-compliance as requiring that "major construction activities are anticipated to be limited to daylight hours" and that best management practices (BMPs) will be followed, without presenting modelled receptor noise levels compared against the specific numeric thresholds of applicable local ordinances[78].

The Cities request that the FEIS: Revise Section 4.3.10.6 to (a) present modelled construction noise levels at representative sensitive receptors for each NTP, compared against each applicable jurisdiction's specific numeric daytime threshold; (b) provide a sensitivity or bounding analysis for alternative construction schedules, including any scenario involving concurrent NTP construction, accelerated completion, or permissible evening-hour work; (c) define, with contractual enforceability, the construction-hour commitments and noise BMPs that will be required near residential and other sensitive receptors; and (d) identify a complaint-response protocol and responsible party for addressing noise exceedances during construction. Where Port Construction General Requirements or FAA FONSI/ROD conditions impose noise BMPs, summarize those requirements in the EIS body rather than relying solely on cross-references.

The "No Mitigation Proposed" Conclusion Is Inconsistent With Identified Impacts and SEPA Obligations

The DEIS concludes "No mitigation is proposed" for aircraft noise impacts[79]. This conclusion appears despite findings that the Proposed Action would bring an additional 1,851 housing units and 4,439 persons within the 65+ DNL contour by 2037 compared to No Action. Under SEPA, an EIS must evaluate and disclose feasible mitigation measures for identified adverse environmental impacts; that obligation exists independently of whether impacts are characterized as "significant" under a federal threshold. The blanket "no mitigation proposed" conclusion, unsupported by analysis of mitigation alternatives considered and rejected, does not satisfy SEPA's mitigation disclosure requirement.

The DEIS references the Port's voluntary sound insulation program but assumes conservatively that no eligible individuals will seek sound insulation while the Part 150 Study Update is underway. No bounding analysis is presented showing how varying participation rates would affect interior noise exposure or the number of benefited receptors.

The Cities Request that the FEIS: Revise Section 4.3.10 and Appendix P to (a) identify mitigation measures considered for the additional housing units and population newly within 65+ DNL under each Proposed Action alternative, and explain for each measure either (i) why it is not feasible, (ii) the extent to which it would reduce impacts, or (iii) the commitment to implement it; (b) provide a bounding analysis for the voluntary sound insulation program showing the potential range of benefits under low, medium, and high participation scenarios; (c) commit to a specific timeline and process for updating the Part 150 Study and initiating any required sound insulation eligibility reviews for properties newly within 65+ DNL under the Proposed Action; and (d) include in Appendix P a comprehensive, enforceable mitigation and

[77] DEIS at p. 4-68

[78] DEIS at p. 4-68

[79] DEIS at p. 4-53

commitments table for noise impacts identifying each measure, its status (required/committed vs voluntary), responsible party, implementation timing, and monitoring and reporting requirements. This is consistent with the DEIS's own description of Appendix P as a consolidated list of minimization and mitigation measures[80].

Mitigation Commitments Are Not Linked to Specific Receptor Outcomes or Performance Standards

The mitigation discussion in Chapter 4 describes program-level commitments—Part 150 Study updates, voluntary sound insulation, and operational BMPs—but does not link these measures to quantified noise reduction at specific affected receptors or to demonstrated compliance with any regulatory or performance standard. The absence of a performance-based mitigation framework prevents decision-makers from evaluating whether proposed measures are adequate to address identified impacts and prevents the public from monitoring whether commitments are fulfilled.

The Cities request that the FEIS: Revise Section 4.3.10 and Appendix P to establish measurable performance standards for noise mitigation commitments, including: (a) specific dB reduction targets for sound insulation, by receptor type; (b) defined criteria for determining when new sound insulation eligibility reviews are triggered by changes in contour extent; (c) monitoring and reporting requirements to demonstrate that mitigation measures achieve intended outcomes; and (d) a process for adaptive management if monitoring demonstrates mitigation is insufficient to reduce impacts to intended levels.

Compliance With FAA Order 1050.1F Has Not Been Formally Demonstrated With Respect to AEDT Version Acceptability

The DEIS states that FAA Order 1050.1F requires use of the latest AEDT version and characterizes AEDT Version 3f as the "latest version when modelling was completed[81]." The modelling completion date is not identified in the DEIS, and no record of FAA coordination confirming version acceptability at the relevant time is presented. Because AEDT versions are updated periodically and the gap between the protocol approval (naming AEDT 3e) and the stated use of AEDT 3f is documented, the DEIS should confirm whether FAA formally accepted the version change and whether a newer version was available at the time the final model runs were completed[82].

The Cities request the FEIS: Revise Appendix J to include documentation of FAA coordination confirming that AEDT 3f was the appropriate version for this analysis, and state the specific date on which final model runs were completed. If a newer version of AEDT was released before model runs were finalized, explain why it was not used or provide FAA concurrence with the version selected.

Transportation

The Analysis Is Improperly Limited to the Weekday PM Peak Hour

Appendix L limits intersection operations analysis to the weekday commuter PM peak hour (defined within 4–6 p.m., Tuesday through Thursday), rather than evaluating multiple time periods relevant to

[80] DEIS at p. 4-2

[81] DEIS at p. 3-84

[82] See Appendix J (2 of 2) at pg. 3 of 204

airport operations. The VISSIM methods memo acknowledges airport congestion can occur after 7 p.m., when regional congestion decreases, yet the analysis nevertheless limits evaluation to 4–6 p.m.[83]

An airport traffic analysis limited to the commuter PM peak hour systematically fails to capture morning bank departures, early morning cargo operations, late-night passenger activity, and weekend peaks — all of which affect SeaTac, Burien, and Des Moines communities. This temporal narrowing structurally minimizes disclosed transportation impacts.

The Cities request that the FEIS: Evaluate the AM peak, late evening/early morning employee and cargo peaks, and weekend peaks, and then disclose worst-case operational and queue impacts for surrounding communities.

The 25 Percent Base-Year Calibration Underprediction Has Not Been Adequately Validated

The WSP Dynamic Traffic Assignment model underpredicted observed 2019 traffic volumes by approximately 25 percent on average. A uniform 1.25 adjustment was applied, but the DEIS does not establish whether the shortfall reflects trip generation, geographic trip distribution, mode share, or time-of-day allocation. Those failure modes have materially different implications for future forecasts and for streets outside the validation screenlines.[84]

The FEIS should provide a validation memorandum addressing the geographic representativeness of the screenlines and the basis for the 1.25 adjustment. It should also present sensitivity results using factors of 1.25, 1.30, and 1.35 for Category 1, Category 2, and WSDOT ramp-terminal facilities so that the robustness of impact and mitigation conclusions can be evaluated.[85]

Core Technical Documentation Is Withheld From Public Review

Appendix L states that turning movement count graphics, LOS reports, queue/travel time outputs, and other core model documentation are not included and are "available by request." For future conditions, critical materials — freeway volume diagrams, 2032/2037 intersection LOS results, HCS results, corridor volume/queuing summaries, and turning movement volumes — are likewise "available by request."[86]

Failing to contemporaneously provide core analytical documentation with the DEIS undermines the Cities' and the public's ability to independently verify analysis inputs and results, replicating model runs, or identifying methodological errors. This approach is inconsistent with the transparency requirements of SEPA's public review process and, by costing commenters precious time, undermines the purpose of a comment period.[87]

The Cities request that the FEIS: Include all core transportation technical data — including Synchro, SimTraffic, VISSIM, and HCS model files and outputs — as publicly available documents, not merely available upon individual request.

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[83] SAMP NTP Draft SEPA EIS, Appendix L, p. 2. SAMP NTP Draft SEPA EIS, Appendix L, p. 39 of 252.

[84] Perteet, Inc., Washington's State Environmental Policy Act (SEPA) Review of Sustainable Airport Master Plan (SAMP) Near Term Projects (NTPs) - Surface Transportation Technical Review, pp. 1-15.

[85] Perteet, Inc., Washington's State Environmental Policy Act (SEPA) Review of Sustainable Airport Master Plan (SAMP) Near Term Projects (NTPs) - Surface Transportation Technical Review, pp. 1-15.

[86] SAMP NTP Draft SEPA EIS, Appendix L, p. 1.

[87] SAMP NTP Draft SEPA EIS, Appendix L, p. 1.

Construction, Emergency Response, Freight, Transit, and Pedestrian-Safety Effects Are Not Adequately Addressed

The transportation review identifies no construction-phase traffic analysis, no committed Construction Traffic Management Plan, and no assessment of emergency-response access during the multi-year construction program. It also identifies the absence of system-level freight and transit-reliability summaries even though the NTPs include truck-intensive cargo facilities and affect corridors used by RapidRide, Sound Transit, and King County Metro routes.[88]

Pedestrian safety on International Boulevard requires specific treatment. The technical review identifies 76 pedestrian collisions, including seven fatalities and eight serious injuries, on the SeaTac segment between South 152nd and South 216th Streets during the study period. The FEIS should disclose how NTP traffic redistribution and proposed intersection measures affect pedestrian exposure on this high-injury corridor.[89]

The FEIS should commit to a Construction Traffic Management Plan developed with the affected cities and emergency-service providers; provide corridor-level freight and transit travel-time and reliability results; identify cargo truck volumes and routes; and evaluate pedestrian and bicycle safety effects and mitigation on International Boulevard and other affected corridors.[90]

Plan Consistency, Regional-Project Timing, and Longer-Term Cumulative Effects Require Analysis

Appendix L does not provide a formal consistency determination against the adopted transportation plans of SeaTac, Burien, Des Moines, and Tukwila or the relevant regional plans. Several findings also depend on completion of the SR 509 extension, the South Access Road, and other projects outside the Port's direct control, without testing the consequences of schedule delay. The analysis stops at 2037 even though the broader SAMP vision extends beyond the NTP horizon.[91]

The FEIS should add a plan-consistency matrix, identify the regional projects on which its conclusions depend, test one- to three-year timing delays, and provide a cumulative transportation analysis addressing longer-term passenger and cargo growth beyond 2037.[92]

Traffic Volumes and Road-Maintenance Effects Are Not Quantified

Appendix L reports intersection delay and level of service but does not provide corridor-level average daily traffic, vehicle-miles traveled, truck-miles traveled, or vehicle-class changes needed to evaluate roadway

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[88] Perteet, Inc., Washington's State Environmental Policy Act (SEPA) Review of Sustainable Airport Master Plan (SAMP) Near Term Projects (NTPs) - Surface Transportation Technical Review, pp. 1-15.

[89] Perteet, Inc., Washington's State Environmental Policy Act (SEPA) Review of Sustainable Airport Master Plan (SAMP) Near Term Projects (NTPs) - Surface Transportation Technical Review, pp. 1-15.

[90] Perteet, Inc., Washington's State Environmental Policy Act (SEPA) Review of Sustainable Airport Master Plan (SAMP) Near Term Projects (NTPs) - Surface Transportation Technical Review, pp. 1-15.

[91] Perteet, Inc., Washington's State Environmental Policy Act (SEPA) Review of Sustainable Airport Master Plan (SAMP) Near Term Projects (NTPs) - Surface Transportation Technical Review, pp. 1-15.

[92] Perteet, Inc., Washington's State Environmental Policy Act (SEPA) Review of Sustainable Airport Master Plan (SAMP) Near Term Projects (NTPs) - Surface Transportation Technical Review, pp. 1-15.

maintenance and pavement wear. This omission prevents the affected jurisdictions from estimating the continuing fiscal consequences of airport-related passenger and heavy-truck traffic.[93]

The FEIS should report base-year, 2032, and 2037 ADT, VMT, and TMT for the affected corridors under No Action and the Proposed Action, with separate passenger-vehicle and truck components, and should evaluate maintenance implications using available city and WSDOT pavement-condition and traffic-count data.[94]

The No Action Alternative Embeds Airport-Specific Demand Growth, Weakening Its Baseline Function

Appendix L defines the No Action scenario to include background growth, roadway network changes, funded projects, and an "expected increase in demand for air travel" based on the SAMP NTP COGS forecast. Appendix L then uses the fact that many intersections are already failing in No Action to characterize Proposed Action impacts as limited or incremental additions to an already-degraded baseline.[95]

Embedding forecasted airport demand growth within the transportation No Action baseline produces the same distortion identified throughout this letter: the Proposed Action's incremental contribution appears smaller because the baseline already contains much of the growth. This approach fails to disclose the Proposed Action's true traffic contribution in the communities surrounding the airport.

The Cities request that the FEIS: (1) present existing conditions, 2032 and 2037 No Action conditions, and Proposed Action traffic volumes in a common comparison; (2) separately quantify the portion of No Action traffic growth attributable to forecast airport demand; (3) explain which airport-demand growth would occur without the NTPs and the evidence supporting that assumption; and (4) provide sensitivity analysis showing traffic and intersection conditions with and without the airport-specific demand growth embedded in No Action.

Ramp Terminal Delays Are Extremely Large at Key Community Locations

Appendix L reports extremely large increases in delay attributable to NTP trips at key ramp terminals, including SR 518 EB Ramps/Des Moines Memorial Drive (#23), where NTPs add 344.1 seconds of delay in 2032 and 719.6 seconds in 2037 compared to No Action — representing an increase from 124.0 seconds (2032 No Action) to 468.1 seconds (2032 Proposed Action) and to 981.0 seconds (2037 Proposed Action). Yet Appendix L concludes the Proposed Action will not cause additional deficient freeway segments beyond No Action and characterizes impacts primarily at ramp terminals.[96]

Ramp terminal delays of 8–16 minutes are not minor impacts when they translate into queue spillback onto SR 518 mainline, increased idling-related emissions in adjacent residential areas, emergency response access interference, and neighborhood cut-through traffic. These localized ramp impacts are significant for the communities they affect, and the EIS should treat them accordingly.

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[93] Perteet, Inc., Washington's State Environmental Policy Act (SEPA) Review of Sustainable Airport Master Plan (SAMP) Near Term Projects (NTPs) - Surface Transportation Technical Review, pp. 1-15.

[94] Perteet, Inc., Washington's State Environmental Policy Act (SEPA) Review of Sustainable Airport Master Plan (SAMP) Near Term Projects (NTPs) - Surface Transportation Technical Review, pp. 1-15.

[95] SAMP NTP Draft SEPA EIS, Appendix L, p. 53 of 252.

[96] SAMP NTP Draft SEPA EIS, Appendix L, p. 82 of 252.

Appendix L acknowledges potential off-ramp queue spillback to SR 518 mainline under future conditions, including scenarios where queues could spill back to the gore point.

The Cities request that the FEIS: Disclose the operational, safety, and neighborhood effects of ramp terminal impacts (spillback, diversion routes, cut-through traffic effects, emergency response access, transit delay) with maps, quantitative queue lengths, and full sensitivity testing.

Key WSDOT Intersections Receive No Mitigation Despite Forecast Degradation

Appendix P and Chapter 4 indicate that multiple WSDOT-controlled intersections are identified where WSDOT "is not requiring mitigation," even though they appear in impact categories showing degradation. Appendix P lists several WSDOT-controlled intersections and states "WSDOT is not requiring mitigation at this intersection."[97]

The fact that WSDOT has declined to require mitigation from the Port does not relieve the Port of its SEPA obligation to mitigate project-caused impacts on communities and public roadways. SEPA does not contain an exemption for impacts at intersections controlled by other agencies.

Congestion at WSDOT-controlled ramps and intersections does not remain within state right-of-way. Queue spillback, diversion, and cut-through traffic can shift delay and safety effects onto city streets and adjacent city-controlled intersections. Those effects can consume capacity used in local concurrency programs, affect adopted level-of-service standards, and constrain the Cities' ability to accommodate planned growth. If airport-generated traffic consumes available local capacity without Port mitigation, the cost of restoring system performance can be shifted to city capital programs or later development applicants, including housing projects. The Cities therefore have a direct interest in these impacts even where WSDOT elects not to require mitigation at the state-controlled facility.

The Cities request that the FEIS: (1) disclose the operational, safety, and community effects at each affected WSDOT-controlled intersection; (2) analyze queue spillback, diversion, and delay at connected city-controlled intersections and corridors; (3) show how NTP traffic affects local level-of-service and concurrency capacity; and (4) identify mitigation and funding commitments sufficient to prevent project-related impacts and costs from being shifted to the Cities or subsequent development applicants.

Category 3 Intersections Experience Added Delay Without Mitigation

Appendix L creates a category (Category 3) where intersections "meet" mobility standards in both No Action and Proposed Action but still experience increased delay and explicitly proposes no mitigation for those locations. Signal timing optimization is assumed in all future scenarios as "reasonable" and routine, which can mask project-caused impacts by embedding operational improvements into the baseline and presenting optimization as an impact-avoidance measure.[98]

Added delay, queue spillback into neighborhoods, and increased idling are community impacts that are not resolved by the fact that a mobility standard is technically met. This shifts the mitigation of the impacts on to small project developers and increases project costs.

The Cities request that the FEIS: disclose community impacts occasioned by Category 3 in Appendix L and identify appropriate mitigation for those impacts.

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[97] SAMP NTP Draft SEPA EIS, Appendix P, pp. 2-3.

[98] SAMP NTP Draft SEPA EIS, Appendix L, p. 71 of 252.

Mitigation Commitments Are Deferred and Not Yet Finalized

Chapter 4 acknowledges the Port and local jurisdictions are still "in the process of formalizing the mitigation commitments" in MOUs. Appendix L states mitigation agreements will be finalized before the FONSI/ROD, implying material mitigation terms are deferred to future negotiations rather than committed in the environmental document. For the City of Des Moines' intersection #93, mitigation is described as a proportionate-share payment based on the City's traffic impact fee schedule (identified as $7,651.41 per PM peak hour trip), rather than a committed physical improvement with performance standards.[99]

The Cities request that the FEIS: Include actual, finalized mitigation commitments — design concepts, right-of-way identification, funding sources, construction triggers, completion deadlines, monitoring protocols, and enforcement mechanisms — rather than deferring these to post-SEPA agreements.

Hazardous Materials

Section 4.3.6 Relies on Incorporation-by-Reference in a Manner That Prevents Meaningful Public Review

Section 4.3.6 of the DEIS largely incorporates the NEPA Environmental Assessment's hazardous materials and solid waste section "by reference," with "additional information" said to be contained in Appendix F. This structure — in which the primary impact analysis narrative defers substantive content to a separately bound appendix — is not acceptable in a community-facing SEPA disclosure document. SEPA's public review process requires that the environmental impact statement itself be sufficiently self-contained that an affected community member can read and understand the nature, extent, and significance of impacts without being required to navigate a multi-document federal EA and its associated appendices. The incorporation-by-reference structure adopted in Section 4.3.6 effectively places the substantive analytical record beyond the reach of ordinary public review and makes independent verification of the conclusions in Section 4.3.6 impossible without access to the full EA record.

The Cities request that the FEIS: Present a self-contained hazardous materials and solid waste impact analysis in the body of the EIS, including all site-specific baseline data, impact characterizations, and mitigation commitments necessary for public evaluation of the section's significance conclusions.

The Baseline Characterization in Appendix F Rests on a Desktop Review Only, Without Field Verification, Despite Documented Contamination in the Limits of Disturbance

Appendix F states that the hazardous materials analysis was based on a desktop search of the Washington Department of Ecology's "What's in My Neighborhood" database, supplemented by Port data, and explicitly states "No field surveys were conducted as part of this analysis."[100]

The decision to conduct no field surveys as part of the DEIS hazardous materials baseline is a significant methodological deficiency. Section 4.3.6 identifies eleven documented incidents of hazardous materials contamination within the limits of disturbance of the Proposed Action. A baseline characterization that rests entirely on a desktop database review — without field verification of the current condition, extent, or media affected at any of those eleven documented sites — cannot reliably support the impact and significance conclusions that follow. Database records may be outdated, incomplete, or fail to reflect changes in site conditions since the most recent regulatory action. For a construction program that will

[99] SAMP NTP Draft SEPA EIS, § 4.3.12. SAMP NTP Draft SEPA EIS, n. 38.

[100] SAMP NTP Draft SEPA EIS, Appendix F, p. 2 of 261.

involve substantial excavation in areas with confirmed soil and groundwater contamination, the absence of field verification is not a conservative methodological choice — it is a gap that leaves both the Port and the surrounding community without adequate information about the risks to which construction workers and neighboring residents will be exposed.[101]

Section 4.3.6 of the DEIS acknowledges that excavated material will be tested and managed, and that environmental professional monitoring will be used for unanticipated contamination — yet provides no contaminant concentrations, no characterization of media affected (soil versus groundwater versus surface water), no estimate of the lateral or vertical extent of contamination at any site, and no project-specific estimate of contaminated material volumes expected to be excavated. The absence of this information makes it impossible to evaluate whether the proposed management measures are adequate or to understand the scale of contaminated materials handling that construction activities will generate.

The Cities request that the Port: (1) provide current contaminant type, concentration, media, plume extent, volume, remediation history, and worker-safety information for each of the eleven documented sites; (2) conduct and disclose a Phase II Environmental Site Assessment for each site where the existing record is insufficient to support those findings; and (3) use the resulting field-based information to establish project-specific contaminated-materials management commitments rather than the EIS relying only on generic compliance protocols.[102]

The Regulatory Database Review Is Incomplete and Out of Date

Appendix F relies principally on Ecology's What's in My Neighborhood database and EPA's National Priorities List and reports database work from 2020, 2021, and 2023. The hazardous-materials technical review concludes that this is not the comprehensive and current search contemplated by the SEPA checklist guidance and FAA Order 1050.1F. The FEIS should complete a 2026 search of all relevant federal, state, and local contaminated-site databases and evaluate any additional sites identified.[103]

Contaminated Sites Outside the Mapped Disturbance Area May Extend Into It

Ecology database locations are mapped as points even though soil or groundwater contamination can extend beyond the mapped point. Appendix F does not adequately demonstrate that contamination associated with sites near, but outside, the disturbance boundary does not extend into areas that will be excavated or otherwise affected. The FEIS should identify nearby sites, characterize contaminant type and plume extent, and document the basis for excluding each site from further analysis.[104]

The PFAS and AFFF Site Disclosures Are Inadequate and Mitigation Is Deferred to Future Regulatory Developments

Section 4.3.6 of the DEIS identifies five PFAS-related sites — H-60, H-63, H-67, H-72, and H-73 — that would be impacted by the Proposed Action and states that construction would follow contaminated-soil

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[101] SAMP NTP Draft SEPA EIS, p. 4-41.

[102] Perteet, Inc., SEPA Review of Sustainable Airport Master Plan (SAMP) Near Term Projects (NTPs) - Appendix F - Hazardous Materials and Solid Waste, pp. 1-6.

[103] Perteet, Inc., SEPA Review of Sustainable Airport Master Plan (SAMP) Near Term Projects (NTPs) - Appendix F - Hazardous Materials and Solid Waste, pp. 1-6.

[104] Perteet, Inc., SEPA Review of Sustainable Airport Master Plan (SAMP) Near Term Projects (NTPs) - Appendix F - Hazardous Materials and Solid Waste, pp. 1-6.

handling specifications. However, Section 4.3.6 notes that PFAS regulations are "in development" and states the Port would comply with whatever regulations apply at the time of construction.[105]

For PFAS, Appendix F notes sixteen AFFF-related areas and states that "additional sampling would be conducted" to evaluate PFAS presence, acknowledges that cleanup levels are not yet established, and provides that remediation would be completed if PFAS is found at levels requiring action under regulations "applicable at the time of construction."[106]

This is deferred mitigation of an uncharacterized risk. PFAS contamination from historical AFFF use at airports is a well-documented environmental problem. EPA has established screening and removal-management levels for certain PFAS, and the Washington Department of Ecology has published investigation and remediation guidance and cleanup levels for PFAS-contaminated media. The availability of current guidance and cleanup criteria undercuts the DEIS's reliance on future regulatory development as a substitute for present characterization and mitigation.[107]

DEIS Section 4.3.6 and Appendix F provide no PFAS-specific sampling results for any of the sixteen AFFF-related areas, no characterization of PFAS groundwater plumes or surface water linkages, no disclosure of whether PFAS has been detected in downgradient receiving waters, and no project-specific management controls beyond general compliance. For communities with documented concerns about PFAS in drinking water supplies and environmental pathways, this level of disclosure is wholly inadequate.

The Cities request that the Port: (1) conduct and disclose PFAS sampling for the five identified PFAS sites and for AFFF-related areas with potential to affect the disturbance areas, including areas approximately within 500 feet, using soil, groundwater, and surface-water sampling as appropriate; (2) assess migration pathways to receiving waters and community drinking-water sources; (3) apply current EPA and Washington cleanup criteria rather than deferring analysis to future regulations; and (4) commit to enforceable and funded remediation schedules before construction begins in PFAS-affected areas.[108]

Site H-45 Proceeds to an Insignificance Conclusion Despite Acknowledged Absence of Basic Site Characterization Data

For Site H-45, a documented underground storage tank fuel release, Appendix F states that "additional details on the extent of Site H-45 contamination are not available" and that "there has been no documented action regarding this incident since 2007," yet still proceeds to an insignificance conclusion for the project area.[109]

It is analytically indefensible to conclude that a known contamination site presents no significant impact when the fundamental characterization data — the extent of contamination, the media affected, the current site conditions — are expressly acknowledged to be unavailable, and when no regulatory action has been taken in nearly two decades. A contamination site with no documented action since 2007 and no available extent data is not a closed site; it is an uncharacterized site. Treating an uncharacterized site

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[105] SAMP NTP Draft SEPA EIS, p. 4-46.

[106] SAMP NTP Draft SEPA EIS, Appendix F, p. 13 of 261.

[107] Perteet, Inc., SEPA Review of Sustainable Airport Master Plan (SAMP) Near Term Projects (NTPs) - Appendix F - Hazardous Materials and Solid Waste, pp. 1-6.

[108] Perteet, Inc., SEPA Review of Sustainable Airport Master Plan (SAMP) Near Term Projects (NTPs) - Appendix F - Hazardous Materials and Solid Waste, pp. 1-6.

[109] SAMP NTP Draft SEPA EIS, Appendix F, p. 28 of 261.

as presenting no significant impact is not a conservative conclusion — it is an assumption unsupported by any analytical basis, made in a community where excavation in contaminated soil poses direct worker health and stormwater pathway risks.

The Cities request that the Port: Commission a current Phase II Environmental Site Assessment for Site H-45, disclose the results, and revise the significance conclusion in the EIS to reflect actual documented site conditions rather than the absence of available data.

The Institutional Controls for Site H-53 Have Not Been Fully Implemented to Ecology's Satisfaction, Yet the Analysis Relies Upon Them as Effective Mitigation

Appendix F relies on compliance with institutional controls for Site H-53 during and after construction and demolition in the A08/S04 area. However, the administrative record reflects a significant and undisclosed limitation on the adequacy of those controls. Ecology's No Further Action opinion for Site H-53 is expressly dependent on ongoing post-cleanup controls, and Ecology has stated that the Port's Operational Area Institutional Controls documentation "does not include some elements required under WAC 173-340-440," specifically requesting additions including interference and protection provisions, conveyance notice requirements, access provisions, and database updates.[110]

Relying on institutional controls as effective mitigation for a known contamination site — when the agency with jurisdiction over those controls has documented that the controls are incomplete and do not satisfy statutory requirements — creates a fundamental assurance gap. If those controls are not yet in compliance with WAC 173-340-440, the mitigation commitment for Site H-53 is premised on a regulatory instrument that has not been properly established. The DEIS does not disclose this compliance gap to the public.

The Cities request that the FEIS: (1) Disclose the current status of the Site H-53 institutional controls documentation, including whether all elements required by WAC 173-340-440 identified in Ecology's correspondence have been incorporated; (2) Revise the mitigation commitment for Site H-53 to reflect actual, completed institutional controls rather than controls that remain incomplete; and (3) Confirm Ecology's concurrence with the adequacy of controls.

The Swissport Fueling Site (H-49) Description Understates the Residual Contamination Remaining in Place

Appendix F describes the H-49 jet fuel release response as excavation to the maximum extent practicable, with "approximately 83 percent of the released fuel" removed. This characterization is materially incomplete when read against the fuller administrative record. Ecology's initial investigation summary states that because approximately 83 percent was removed, "612 gallons of product were NOT removed" and that "GW remains on the water table," indicating residual free-phase product and groundwater contamination that has not been remediated.[111]

Appendix F's framing — which emphasizes the percentage removed rather than the absolute quantity and phase of contamination remaining — minimizes the community's and decision-makers' ability to understand the actual current condition of the site. Six hundred and twelve gallons of jet fuel remaining in subsurface soil with documented groundwater impact is not a trivial residual condition, particularly for a

[110] SAMP NTP Draft SEPA EIS, Appendix F, p. 28. SAMP NTP Draft SEPA EIS, Appendix F, pp. 67-68.

[111] SAMP NTP Draft SEPA EIS, Appendix F, p. 29 of 261. SAMP NTP Draft SEPA EIS, Appendix F, p. 77 of 261.

site where construction activities will involve excavation that may intersect the contaminated zone and where groundwater pathways connect to receiving waters already listed as impaired.

The Cities request that the FEIS: Provide a current characterization of Site H-49 including residual soil and groundwater contaminant concentrations, plume extent and migration status, and a project-specific assessment of construction interaction risks with the residual contamination, together with enforceable remediation or containment commitments.

Fuel Farm Expansion Requires Specific SPCC and Facility Response Plan Analysis

The fuel-farm expansion and relocation of the deicing tank change aggregate storage capacity, secondary-containment needs, and the potential consequences of a worst-case discharge. Appendix F does not identify the specific amendments to SEA's Spill Prevention, Control, and Countermeasure Plan or demonstrate whether the expanded facility meets the substantial-harm criteria that would trigger an EPA Facility Response Plan under 40 CFR Part 112.[112]

The FEIS should disclose total oil-storage and secondary-containment capacity, identify specific spill-prevention and response-plan amendments, evaluate the worst-case discharge pathway to navigable waters and adjoining shorelines, and document whether Facility Response Plan requirements apply.[113]

Demolition-Phase Hazardous Building Materials Surveys Are Absent for Multiple Buildings, With Conclusions Based on Assumptions Rather Than Actual Data

Appendix F identifies twelve buildings to be demolished and, for several — including Buildings 160D, 161E, 161G, and 166B — states that no hazardous materials surveys were conducted and instead assumes that asbestos, lead-based paint, and mercury-containing equipment "may be present," yet still concludes that no significant impacts are anticipated based on anticipated adherence to construction manuals and requirements.

For Building 188WB, a leased facility, Appendix F states that the Port lacks access and that no surveys have been conducted, with surveys deferred until acquisition.[114]

Concluding that demolition of multiple buildings will produce no significant hazardous materials impacts — when actual surveys have not been conducted and the conclusion rests on the assumption that applicable regulations will be followed — is not a meaningful environmental analysis. Asbestos, lead-based paint, and mercury in demolition debris present well-documented exposure risks to construction workers and, through fugitive dust pathways, to neighboring communities. For buildings in which the actual presence and quantity of these materials is unknown at the DEIS stage, the significance conclusion is premised on a regulatory compliance assumption rather than on any characterization of actual conditions.

The deferral of Building 188WB surveys to post-acquisition compounds this deficiency: a building to be demolished as part of the Proposed Action should be surveyed before the environmental review is completed, not after. Deferring surveys to post-acquisition removes a significant source of potential hazardous materials exposure from the public record during the comment period.

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[112] Perteet, Inc., SEPA Review of Sustainable Airport Master Plan (SAMP) Near Term Projects (NTPs) - Appendix F - Hazardous Materials and Solid Waste, pp. 1-6.

[113] Perteet, Inc., SEPA Review of Sustainable Airport Master Plan (SAMP) Near Term Projects (NTPs) - Appendix F - Hazardous Materials and Solid Waste, pp. 1-6.

[114] SAMP NTP Draft SEPA EIS, Appendix F, p. 33.

The Cities request that the FEIS: (1) complete and disclose hazardous-building-material surveys for each building proposed for demolition that lacks a current survey; (2) present actual survey findings rather than assumption-based conclusions; (3) develop building-specific demolition waste-management plans identifying material types, quantities, and disposal pathways; and (4) identify the Puget Sound Clean Air Agency demolition permit and AHERA survey requirements applicable before demolition.[115]

The Significance Framework Is Internally Inconsistent, Conflating Regulatory Compliance With Mitigation and Applying an Undisclosed Significance Standard

Section 4.3.6 of the DEIS labels as "Mitigation" the following: compliance with MTCA cleanup levels, use of an Environmental Agent Work Plan, and adherence to construction manuals and requirements — framing regulatory compliance obligations as if they were project-specific mitigation measures. The section then concludes "no significant impacts" are anticipated largely on the basis that the Port would comply with applicable requirements.[116]

This conflation of compliance with mitigation, and the use of anticipated compliance as the basis for a significance determination, is a foundational analytical error. Regulatory compliance is the minimum legal floor required of all projects — it is not mitigation and achieving it does not establish that impacts are insignificant. SEPA's significance determination requires consideration of the context and intensity of the action's effects on the environment. WAC 197-11-330. A contamination site where known residual contamination remains, surveys have not been completed, and PFAS regulatory standards are still evolving cannot be adequately characterized through a compliance-based significance framework alone.

This internal inconsistency is compounded by the fact that other subsections within Section 4.3.6 — including solid waste and spill response — state "No mitigation is proposed" despite describing waste diversion programs and SPCC plans that appear to function as mitigation in practical effect. The document thus simultaneously labels compliance as mitigation in some subsections and disclaims mitigation entirely in others, without a coherent or disclosed significance standard governing either conclusion.[117]

The Cities request that the FEIS: (1) Adopt and disclose a clear significance framework for hazardous materials and solid waste impacts that goes beyond regulatory compliance to evaluate the probability, magnitude, and community health consequences of hazardous material releases under construction and operational conditions; (2) Distinguish clearly between regulatory compliance obligations and project-specific mitigation measures; and (3) Apply the significance framework consistently across all subsections of the hazardous materials and solid waste analysis.

The Unanticipated Discoveries Protocol Is Generic and Does Not Disclose Decision Criteria, Notification Obligations, or Community Notification Procedures

Appendix F states that if unanticipated hazardous materials or contaminated soils are encountered during construction, the contractor must stop disturbance until the Port Project Manager determines appropriate action. This protocol provides a process trigger — work stoppage — but discloses nothing about the criteria the Port Project Manager will apply in determining appropriate action, the timeline for that determination, the regulatory notification obligations triggered by unanticipated discoveries under

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[115] Perteet, Inc., SEPA Review of Sustainable Airport Master Plan (SAMP) Near Term Projects (NTPs) - Appendix F - Hazardous Materials and Solid Waste, pp. 1-6.

[116] SAMP NTP Draft SEPA EIS, pp. 4-46 to 4-47.

[117] SAMP NTP Draft SEPA EIS, p. 4-47. SAMP NTP Draft SEPA EIS, p. 4-48.

MTCA and applicable spill reporting requirements, or the procedure for notifying surrounding communities of unanticipated contamination discoveries that could affect neighborhood air quality, stormwater, or groundwater.[118]

Given that the project area contains eleven documented contamination sites, sixteen AFFF-related areas, and multiple buildings for which no hazardous materials surveys have been conducted, unanticipated discoveries are not a remote possibility — they are a reasonably foreseeable construction-phase occurrence. The DEIS's unanticipated discoveries protocol must be commensurately detailed and must include enforceable community notification provisions.

The Cities request that the Port: Develop and disclose in the FEIS a comprehensive unanticipated discoveries protocol that includes: decision criteria and timelines for the Port Project Manager's determination; applicable regulatory notification requirements under MTCA and spill reporting law; procedures and timelines for notification of affected local jurisdictions, including SeaTac, Burien, and Des Moines; and community-protective work-stoppage and air monitoring requirements pending resolution of each unanticipated discovery.

Water & Biological Resources

The Proposed Action Generates a Substantial Net Increase in Impervious and Pollution-Generating Impervious Surfaces

The Proposed Action would add and expand impervious areas through taxiway reconfiguration, fuel farm expansion, the westside maintenance campus, and new cargo and parking facilities north of SR 518. Total impervious area is expected to increase by approximately 75 acres net (74.43 acres net) across the project's drainage subbasins. The Biological Evaluation ("BE") prepared for this project characterizes the increase in more precise terms: the Proposed Action would add approximately 72 acres of impervious surface — a 7.6 percent overall increase — including approximately 50.03 acres of pollution-generating impervious surface ("PGIS"), representing a 5.4 percent overall increase in PGIS.[119]

The distribution of this added impervious area is not uniform, and the resulting incremental stormwater impacts fall disproportionately in specific drainage subbasins proximate to community and aquatic resources. The largest modeled impervious-area increase occurs in the "New Development North of SR 518" subbasin at +37.59 acres net, with an estimated 82 percent increase in the 100-year peak runoff rate absent mitigation — indicating substantial potential for greater runoff volumes and peaks capable of mobilizing and conveying pollutants into downstream receiving waters. Other subbasins also show significant net impervious increases and associated unmitigated peak runoff rate increases: SDW2 (+8.54 acres, +61%); SDW1B (+15.84 acres, +49%); SDE4 and SDE4X (+34.18 acres, +24%); and SDN2/3/4 (+9.72 acres, +21%).[120]

Without appropriate stormwater quantity controls, this impervious-area expansion would be expected to increase stormwater runoff quantity and negatively affect stormwater quality. That finding is acknowledged in the Port's own technical record, yet — as discussed below — the DEIS fails to translate it into enforceable, performance-based mitigation commitments adequate to protect human health and the aquatic environment.

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[118] SAMP NTP Draft SEPA EIS, Appendix F, p. 30.

[119] SAMP NTP Draft SEPA EIS, p. 4-118.

[120] Perteet, Water Impacts Technical Memorandum, p. 3.

Receiving Waters Are Already Impaired, and the DEIS Fails to Adequately Account for Incremental Pollutant Loading Into Listed Waterbodies

The streams receiving the Proposed Action's stormwater and treated industrial wastewater discharges are not pristine. Multiple receiving streams draining the project area — including the Miller Creek, Walker Creek, and Des Moines Creek systems — are already listed on the Washington Department of Ecology's 303(d) list for parameters that affect aquatic life: lower Walker Creek and lower Miller Creek are Category 5 for bacteria, dissolved oxygen, and temperature; portions of Gilliam Creek are listed for bioassessment impairment; and Des Moines Creek is listed for bacteria, copper, dissolved oxygen, and temperature.[121]

Adding substantial volumes of stormwater and industrial wastewater to waterbodies already failing to meet water quality standards is not a neutral act. Each increment of pollutant loading — even treated loading — narrows the margin between current concentrations and levels harmful to aquatic life. The DEIS does not perform a loading-based analysis of how the Proposed Action's incremental contributions relate to applicable Total Maximum Daily Load ("TMDL") allocations or how they interact with the already-degraded baseline water quality in these named, impaired waterbodies.

Stormwater from new, replaced, and retrofitted PGIS would discharge to Miller Creek, Walker Creek, and Des Moines Creek through SEA's stormwater system, and industrial wastewater would discharge through the Industrial Wastewater Treatment Plant outfall to Puget Sound. Although the project includes system improvements and operational source-control BMPs, treated discharges are expected to retain some pollutants, and large storms could exceed system performance and potentially produce untreated runoff discharges. The FEIS should quantify that risk rather than assume it is immaterial.[122]

As the BE recognizes, regulated pollutants represent only a fraction of the many chemicals that may occur in stormwater and wastewater, and that treatment effectiveness for unregulated and emerging contaminants is not fully understood. Because the fate, transport, and synergistic effects of many contaminants are not fully understood, the extent, duration, and severity of stormwater effects cannot currently be quantified with certainty, and contaminant concentrations may be greatest during "first-flush" events following long dry periods — precisely the events most likely to deliver concentrated pulse loads to already-impaired streams.

The Cities note that the DEIS's significance conclusion for water quality relies heavily on regulatory compliance (NPDES permit coverage, Ecology stormwater manual standards) as a proxy for environmental protection. Regulatory compliance is necessary but not sufficient under SEPA, particularly where receiving waters are already listed as impaired, ESA-listed species are documented or potentially present, and the project generates nearly 75 net additional acres of impervious surface draining to those waters.[123]

Federal Consultation Identifies Likely Adverse Effects on Listed Aquatic Species and Essential Fish Habitat

The aquatic environment downstream of the Proposed Action's drainage supports federally protected species whose recovery depends on water quality. The FAA Biological Evaluation proposed several may-affect, not-likely-to-adversely-affect determinations. NMFS and USFWS did not concur with material

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[121] Perteet, Water Impacts Technical Memorandum, p. 5.

[122] Perteet, Inc., SEPA Review of Sustainable Airport Master Plan (SAMP) Near Term Projects (NTPs) - Review of Biological Resources and Water Resources Documentation, pp. 1-6.

[123] SAMP NTP Draft SEPA EIS, pp. 4-116 to 4-118; Perteet, Water Impacts Technical Memorandum, p. 5.

portions of that analysis, and the consulting-agency record identifies likely adverse effects associated with pollutant-driven degradation and chronic exposure. The FEIS should use the agencies' precise effect determinations and should not characterize uncertainty as evidence of no impact.[124]

The National Marine Fisheries Service ("NMFS") has evaluated the Proposed Action's effects on Endangered Species Act ("ESA")-listed species and its findings — incorporated into the DEIS record through the Biological Evaluation and related materials — are significantly more alarming than the DEIS's chapter-level narrative suggests:

Puget Sound Chinook Salmon and Steelhead: NMFS identifies the project's primary long-term effect pathway to ESA-listed aquatic species and critical habitat as decreased water quality in Puget Sound from stormwater runoff and wastewater discharge, with chronic exposures to low levels of contaminants expected to still injure or kill individuals, including through synergistic interactions with other contaminants already present. For salmonids, stormwater and wastewater pollutants may include persistent bioaccumulative toxicants (e.g., PCBs, PBDEs, and PFCs), petroleum hydrocarbons (PAHs), tire-derived pollutants such as 6PPD-quinone, metals (including copper, zinc, and lead), pesticides and surfactants, and nutrients and sediment — with potential effects ranging from acute toxicity and mortality to sublethal endocrine, behavioral, immune, and respiratory impacts that reduce feeding, growth, migration success, reproduction, and survival. NMFS expects that, following project implementation, some individuals of all life stages of Puget Sound Chinook salmon and Puget Sound steelhead will experience sublethal effects such as stress and reduced prey consumption, with some exhibiting avoidance behaviors that disrupt feeding and migration and others experiencing reduced growth, physiological trauma, reproductive failure, and mortality — thereby reducing fitness and survival for an indeterminate number of fish in exposed cohorts.

Listed Rockfish: For listed bocaccio and yelloweye rockfish, NMFS expects direct exposure to pollutants in treated operational stormwater and indirect exposure via contaminated prey, and — given anticipated chronic, pervasive water quality pollution — expects adverse effects including metabolic dysfunction that reduce fitness and likelihood of survival for an indeterminate number of individuals across life stages.

Southern Resident Killer Whales and Bull Trout: The biological-resources technical review identifies Southern Resident killer whales and bull trout, together with their critical habitats, as part of the federal consultation record. NMFS concluded that the FAA's conclusions for Southern Resident killer whales did not meet applicable regulatory and scientific standards, and USFWS did not concur with the Biological Evaluation's reasoning for bull trout. The FEIS should expressly disclose these determinations and identify the conservation measures required for each affected species and habitat.[125]

6PPD-Quinone — An Emerging Contaminant of Acute Concern: The BE identifies 6PPD-quinone ("6PPD-Q") — formed from tire-wear particles washed from hard surfaces into streams during storm events — as an emerging contaminant of concern specifically associated with salmonid pre-spawn mortality. Laboratory studies indicate that coho salmon are acutely sensitive to 6PPD-Q, supporting documented concerns about stormwater-driven pre-spawn mortality in urban streams. Steelhead and Chinook salmon appear less sensitive, though reported 24-hour LC50 values of less than 2 ppb for steelhead reflect acute lethality at concentrations potentially achievable in first-flush urban stormwater. The BE acknowledges that bull trout and rockfish sensitivity to 6PPD-Q is not currently known, creating a gap in the risk characterization that cannot responsibly be resolved by default in favor of "no impact." A project that adds

[124] Perteet, Inc., SEPA Review of Sustainable Airport Master Plan (SAMP) Near Term Projects (NTPs) - Review of Biological Resources and Water Resources Documentation, pp. 1-6.

[125] Perteet, Inc., SEPA Review of Sustainable Airport Master Plan (SAMP) Near Term Projects (NTPs) - Review of Biological Resources and Water Resources Documentation, pp. 1-6.

approximately 50 acres of PGIS — including roadways, taxiways, cargo aprons, and parking facilities generates a measurable and uncharacterized risk to ESA-listed salmonids in Miller Creek and Des Moines Creek.

Essential Fish Habitat: Consistently with all of the above, NMFS determined the Proposed Action would adversely affect Essential Fish Habitat for Pacific salmon, coastal pelagic species, and groundfish due to water quality degradation from stormwater and wastewater discharge. The DEIS does not prominently disclose this adverse EFH determination in the impact narrative, and proposes no site-specific mitigation directed at EFH protection.

Bioaccumulation and Food Web Effects: The BE states that ESA-listed salmonids could be exposed to low levels of treated stormwater pollutants both in the water column and through consumption of contaminated prey, and it cites documented bioaccumulation of stormwater-related contaminants in zooplankton, forage fish, and predator fish — including Chinook salmon — in Puget Sound. NMFS also indicates that stormwater-derived contaminants and suspended sediment can harm other sensitive marine organisms, including sunflower sea star, with documented impacts in marine invertebrates ranging from developmental abnormalities and behavioral effects to mortality at low concentrations — underscoring broader aquatic food web risks that the DEIS does not characterize.

Mitigation Commitments Are Not Sufficiently Specific, Deferred to Post-SEPA Design, and Fail to Address Unregulated Emerging Contaminants

The DEIS and its Appendix M identify a suite of planned stormwater controls, but the level of specificity and the enforceability of those commitments fall well short of what SEPA requires when one considers the adverse impacts to ESA-listed species and further impairment of receiving waters.

Wetland and Stream Mitigation Lacks a Conceptual Plan and No-Net-Loss Performance Standards

The DEIS identifies approximately 0.79 acre of permanent wetland impact, 2.66 acres of wetland-buffer impact, less than 0.02 acre of stream impact, and 0.12 acre of stream-buffer impact. The likely impact is understated in the DEIS, as SeaTac's regulatory scheme includes increased buffer requirements following the update of critical area regulations. It identifies potential mitigation opportunities and ratios but does not select a mitigation mechanism or site, provide a conceptual mitigation plan, or establish performance and monitoring standards sufficient to demonstrate no net loss of aquatic-resource functions.[126]

The FEIS should provide a conceptual wetland and stream mitigation plan identifying the proposed method and location of mitigation, performance standards, monitoring requirements, corrective-action triggers, and the basis for concluding that no net loss will be achieved before mitigation is deferred to later permits.[127]

A detailed analysis supporting the Utility Master Plan evaluated future stormwater conveyance and control needs and identifies recommended detention and treatment expansions, but final layouts and sizing are to be refined during project design. Planned controls include detention expansions by subbasin (for example, SDW1B at +4.4 acre-feet; SDW2 at a total of 14.3 acre-feet; SDE4/SDE4X at +2.0 acre-feet with canister filters; SDN2/3/4 at up to +4.7 acre-feet; SDS4 at +0.1 acre-feet plus bioretention swale

[126] Perteet, Inc., SEPA Review of Sustainable Airport Master Plan (SAMP) Near Term Projects (NTPs) - Review of Biological Resources and Water Resources Documentation, pp. 1-6.

[127] Perteet, Inc., SEPA Review of Sustainable Airport Master Plan (SAMP) Near Term Projects (NTPs) - Review of Biological Resources and Water Resources Documentation, pp. 1-6.

expansion) and new facilities north of SR 518 with detention and water-quality treatment volumes identified for specific project groupings — but final design is not committed. Deferring final sizing, layout, and performance specification to the design phase after environmental review is complete means that the SEPA record contains no enforceable guarantee that these controls will be adequate to protect the receiving environment.[128]

The Biological Evaluation characterizes the project's incremental contribution to chronic pollutant loading as potentially occurring but not meaningfully measurable or evaluable and concludes that effects are not expected to reach the scale of take. The inability to quantify an effect does not eliminate the effect. Where information remains incomplete, the FEIS should disclose the uncertainty, evaluate a reasonable range of outcomes, and adopt enforceable protective measures sufficient to support the stated effects and significance conclusions.[129]

The Port identifies BMPs it already implements that are "likely" to reduce emerging contaminants such as 6PPD-quinone — including detention basins, constructed wetlands, cartridge filters, bioswales, filter strips, and oil/water separators — but no performance standards, removal efficiency targets, or monitoring commitments are proposed for these emerging contaminants. Moreover, stormwater management at SEA is not sparing receiving waters from very real impacts, evidenced by the persistent pH issues in stormwater discharges and SEA's numerous violations of its NPDES permits in recent years.[130]

The Cities identify the following specific deficiencies in the stormwater and aquatic resources analysis and request that each be corrected in the Final EIS:

- TMDL Loading Analysis: Provide a quantitative assessment of how the Proposed Action's incremental pollutant loads relate to applicable TMDL allocations and existing water quality conditions in Miller Creek, Walker Creek, and Des Moines Creek. The current analysis does not evaluate whether additional loading from 74-plus net acres of impervious surface is consistent with achieving or maintaining water quality standards in already-impaired, 303(d)-listed waterbodies.
- 6PPD-Quinone Performance Standards: Develop site-specific BMP performance standards and monitoring requirements for 6PPD-quinone and other tire-wear-derived contaminants, given the documented acute lethality to coho salmon and the substantial increase in PGIS — particularly taxiways, roadways, and parking facilities — that are primary sources of tire-wear particle accumulation.
- First-Flush and Large-Storm Event Analysis: Quantify stormwater quality and quantity conditions during first-flush events and storms exceeding the 50-year design storm event, and disclose the frequency and volume of untreated overflows expected over the project's operational life. The current record acknowledges that system performance can be exceeded during large events but does not characterize how frequently this will occur or what the resulting pollutant concentrations and loads would be.
- Enforceable Mitigation Commitments Prior to SEPA Completion: Replace the deferred "final design will refine" language with specific, performance-based stormwater control commitments — including detention volumes, treatment standards, removal efficiency targets, monitoring parameters,

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[128] SAMP NTP Draft SEPA EIS, Appendix M, p. 99 of 320. Perteet, Water Impacts Technical Memorandum, p. 4.

[129] Perteet, Inc., SEPA Review of Sustainable Airport Master Plan (SAMP) Near Term Projects (NTPs) - Review of Biological Resources and Water Resources Documentation, pp. 1-6.

[130] SAMP NTP Draft SEPA EIS, Appendix M, pp. 97-98; Perteet, Water Impacts Technical Memorandum, p. 4. SAMP NTP Draft SEPA EIS, Appendix D, Nautilus reports.

maintenance obligations, and adaptive management triggers — that can be evaluated and enforced. Additionally, wetlands compensatory mitigation planning must not be left entirely to post-SEPA permitting, as Appendix P currently contemplates.

- EFH Mitigation: Develop and commit to site-specific Essential Fish Habitat conservation measures proportionate to NMFS's adverse EFH determination and include those measures as mitigation under SEPA.
- Cumulative Water Quality and Aquatic Resources Analysis: The cumulative impacts chapter does not adequately analyze combined stormwater and aquatic resource effects from the Proposed Action together with the other 58 past, present, and reasonably foreseeable future projects identified in the study area. Given that receiving waters are already impaired and listed for multiple parameters, the cumulative analysis must evaluate whether the combination of all contributing sources — including the Proposed Action — moves these waters further from, rather than toward, water quality standard attainment.
- Wetland Hydroperiod and Off-Airport System Analysis: Evaluate how changes in stormwater inputs will affect the hydroperiod of wetlands and streams identified as dependent on airport runoff. The FEIS should also evaluate individual and cumulative effects on municipal stormwater conveyance, detention, and treatment systems, downstream wetlands and floodplains, and receiving waters outside airport property.[131]

Air Quality

Emissions Increase Substantially Under the Proposed Action, Yet No Mitigation Is Proposed

Appendix C's Table 10 documents a 2032 increase in emissions for the Proposed Action compared to No Action of +110 short tons of CO, +70 short tons of NOx, +20 short tons of SOx, +9 short tons of PM10, and +2 short tons of PM2.5. Appendix C's Table 14 documents a 2037 increase of +263 short tons of CO, +225 short tons of NOx, +34 short tons of SOx, +3 short tons of PM10, and +2 short tons of PM2.5 compared to No Action.[132]

Despite these documented increases, the DEIS defines significance solely as whether modeled totals (increment plus background) exceed the NAAQS and concludes "no probable significant impact" because, it says, NAAQS levels are not exceeded. The DEIS then proposes "no mitigation" for operational air quality.[133]

NAAQS compliance is a necessary but wholly insufficient measure of community protection for communities already identified as highly burdened (EHD scores of 9-10). NAAQS are national baseline standards designed to protect public health generally; they do not establish that incremental emissions increases in communities already overburdened by air pollution are acceptable (or “insignificant”) under SEPA. The Cities contend that quantified increases of this magnitude in criteria pollutant emissions, concentrated over communities with documented health vulnerabilities, constitute significant adverse environmental impacts under SEPA's context-and-intensity framework.[134]

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[131] Perteet, Inc., SEPA Review of Sustainable Airport Master Plan (SAMP) Near Term Projects (NTPs) - Review of Biological Resources and Water Resources Documentation, pp. 1-6.

[132] SAMP NTP Draft SEPA EIS, Appendix C, p. 41 of 1663. SAMP NTP Draft SEPA EIS, Appendix C, p. 50 of 1663.

[133] SAMP NTP Draft SEPA EIS, p. 4-11. SAMP NTP Draft SEPA EIS, p. 4-3.

[134] Sunpro Technical Memorandum, § 4.

The Cities request that the FEIS: (1) Supplant the NAAQS-based significance framework with community-scale metrics in light of the communities that will be most impacted by forecasted emissions increases; (2) Provide localized concentration estimates at sensitive receptors in SeaTac, Burien, and Des Moines (the DEIS references Appendix C for geographic distribution but does not present receptor-specific results in the impact narrative); and (3) Develop and commit to enforceable operational air quality mitigation measures with measurable performance standards.

The 2022 Existing-Conditions Baseline Does Not Reflect the Most Recent Operational Record

The DEIS uses 2022 as the existing-conditions year even though SEA operations remained below the 2019 pre-pandemic level and increased materially by 2024. The air-quality technical review reports 401,351 operations in 2022 and 434,321 operations in 2024, an 8.2 percent increase. Applying the DEIS's aircraft NOx rate, the reviewer estimates that the operational difference represents approximately 170 to 229 additional tons per year of aircraft NOx that are absent from the existing-conditions inventory.[135]

The FEIS should provide comparative 2022, 2023, and 2024 operational emissions inventories and use the most recent complete year, or clearly explain and test the effect of retaining 2022. This existing-conditions issue is distinct from the use of 2020-2024 meteorological observations in the dispersion model.[136]

The HAP Inventory, HHRA Screening Record, and Project-Specific UFP Analysis Are Incomplete

Appendix C does not prepare a comprehensive hazardous-air-pollutant emissions inventory. The HHRA instead applies a tiered screening process and carries only 1,3-butadiene, diesel particulate matter, and formaldehyde into quantitative risk characterization. The DEIS materials do not provide the complete initial TAP inventory, a pollutant-by-pollutant account of the screening decisions, or receptor-level results sufficient to confirm that screened-out TAPs make only a de minimis contribution to cumulative risk.[137]

FAA's Aviation Emissions and Air Quality Handbook identifies preparation of a criteria-pollutant inventory as one trigger for considering a HAP inventory, but the DEIS rationale does not address that trigger. Appendix C also discusses ultrafine-particle research without providing a project-specific UFP exposure analysis. The FEIS should reconcile the HAP inventory decision with the HHRA's TAP-of-concern list and disclose enough receptor-level information to permit independent review of the cumulative-risk screening outcome.[138]

Scientific uncertainty does not justify omitting available exposure information. The FEIS should identify what is known, what remains uncertain, and what monitoring, sensitivity analysis, or mitigation would reduce uncertainty in the HHRA and the associated community-exposure analysis.

The Cities request that the FEIS: (1) publish the complete initial TAP inventory and document each screening decision; (2) quantify or otherwise demonstrate that screened-out TAPs do not materially change cumulative cancer or non-cancer risk at sensitive receptors; (3) provide receptor-level risk results

[135] Sunpro Technical Memorandum, pp. 2-19.

[136] Sunpro Technical Memorandum, pp. 2-19.

[137] Sunpro Technical Memorandum, pp. 2-19.

[138] Sunpro Technical Memorandum, pp. 2-19.

and a project-specific UFP exposure characterization; and (4) identify mitigation measures that reduce ground-idle and taxi emissions in affected corridors.

Acute DPM Risk Is Not Quantified Because Acute Toxicity Criteria Are Unavailable

Appendix C states that acute toxicity values are not available for diesel particulate matter, even though DPM is one of the three TAPs carried into quantitative risk characterization. The resulting acute assessment therefore does not quantify an acute DPM hazard quotient.[139]

The Cities request that the FEIS: (1) identify and apply a technically supported current surrogate or reference value, if one is available; or (2) state plainly that acute DPM risk remains an unresolved limitation and explain how that limitation affects the acute-risk and significance conclusions. The FEIS should not characterize the acute assessment as complete without addressing this gap.

Non-Inhalation Exposure Pathways Are Excluded Without Site-Specific Screening

Appendix C treats dermal contact, incidental ingestion, and vegetable uptake as generally negligible, while acknowledging that exclusion of non-inhalation pathways may understate total risk and that HHRAs for other airports evaluated deposition, soil, surface water, and food-chain pathways. The letter's water-resources analysis separately identifies metals and persistent contaminants in affected receiving systems. The combined record supports a site-specific screening step, but not an assumption that every non-inhalation pathway is significant.[140]

The Cities request that the FEIS: conduct a site-specific screening of reasonably complete non-inhalation pathways for airport-related contaminants with deposition, soil, surface-water, or food-chain potential; disclose the data and exclusion criteria used; and perform quantitative pathway analysis where the screening cannot support exclusion.

Receptor Shifts and Exclusion-Zone Adjustments Require Disclosure and Sensitivity Testing

Appendix C describes filtering receptor grids and moving receptors that fall within AERMOD volume-source exclusion zones. Sunpro separately requests receptor coordinates and confirmation that off-airport sensitive receptors coincide with modeled receptor locations. The materials reviewed do not quantify how many sensitive receptors were moved, the distance of each move, or the resulting concentration difference. Because the effect is model- and location-specific, the record supports disclosure and sensitivity testing rather than a categorical assumption about the direction or magnitude of bias.[141]

The Cities request that the FEIS: identify each sensitive receptor affected by an exclusion-zone adjustment; disclose the original and modeled coordinates and shift distance; provide a methodologically valid estimate or sensitivity bound at the original location; and state whether any risk or significance conclusion changes.

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[139] SAMP NTP Draft SEPA EIS, Appendix C, p. 497 of 1663.

[140] SAMP NTP Draft SEPA EIS, Appendix C, pp. 481 and 498 of 1663.

[141] SAMP NTP Draft SEPA EIS, Appendix C, pp. 461-462 of 1663; Sunpro Services LLC, Air Quality Review: Seattle-Tacoma International Airport Draft Environmental Impact Statement, § 2.3, pp. 4-5.

Background Concentration Methodology Relies on a Distant Monitor Despite Availability of a Near-Airport Station[142]

The DEIS finds no localized NAAQS exceedances during construction or operation and therefore concludes "no significant impacts" are expected for air quality. However, background criteria pollutant concentrations used for modeling were obtained from Seattle-area monitoring stations, specifically estimated from three years of data at the Seattle Beacon Hill station — not from the SeaTac-Sunset Park PM2.5 station, which was excluded due to insufficient years of data. The SeaTac-Sunset Park PM2.5 station was installed in 2024 and became operational in spring 2025 specifically to characterize PM2.5 concentrations in communities immediately north of SEA influenced by airport operations, major roadways, and other sources.[143]

In other words, the DEIS uses a distant background monitor while simultaneously acknowledging that a monitor was created precisely to characterize near-airport community exposure. Using the more distant monitor as background, rather than the monitor purpose-built for this community context, risks underestimating (perhaps profoundly so) incremental concentration impacts.[144]

The Cities request that the FEIS provide a sensitivity analysis using the available SeaTac-Sunset Park data as an alternative background and commit to updating the analysis when sufficient quality-assured data are available. The analysis should explain how monitor representativeness and temporal completeness were weighed and whether the background choice materially affects conclusions.[145]

The Meteorological Data Used in the Air Dispersion Analysis are Unrepresentative of the Atmospheric Conditions Affecting Surrounding Communities in Several Material Respects

Appendix C to the DEIS states that meteorological data are "a critical input to AERMOD" because "dispersion of aircraft- and airport-related emissions is strongly influenced by wind speed and direction, atmospheric stability, and vertical mixing conditions," with surface data characterizing "near-ground wind fields and turbulence that control plume transport and horizontal dispersion" and upper-air data defining "temperature profiles, atmospheric stability, and mixing heights that govern vertical dispersion and plume rise." The document further acknowledges that for SEA, "use of airport-specific and regionally representative meteorological data is particularly important because of the complex coastal influences, terrain effects, and seasonal wind patterns that can affect pollutant dispersion and concentration patterns near the airport."[146]

The Cities agree with these characterizations of the importance of meteorological data to the reliability of the dispersion analysis. It is therefore all the more significant that, as set out below, several aspects of the meteorological data selection and processing introduce representativeness problems that likely systematically affect predicted concentrations at sensitive community receptors in SeaTac, Burien, and Des Moines. If any of the below corrective analyses materially affect predicted concentrations at

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[142] SAMP NTP Draft SEPA EIS, Appendix C, Air Quality and Human Health Risk Assessment Technical Report, Table 3.7, p. 3-16; Sunpro Services LLC, Air Quality Review: Seattle-Tacoma International Airport Draft Environmental Impact Statement, § 3.2, pp. 8–9.

[143] Sunpro Services LLC, Air Quality Review: Seattle-Tacoma International Airport Draft Environmental Impact Statement, §§ 3.1–3.2, pp. 8–9.

[144] Sunpro Technical Memorandum, § 2.4.

[145] Sunpro Technical Memorandum, pp. 2-19.

[146] SAMP NTP Draft SEPA EIS, Appendix C, p. 454.

community receptors, the Port should re-evaluate significance conclusions for air quality and human health risk accordingly.

The Quillayute Upper-Air Station Requires Additional Representativeness Analysis

Use of Quillayute upper-air data is conventional for Puget Sound AERMOD applications, and the DEIS explains that Quillayute is the nearest long-term station with complete, quality-assured data. However, the outer-coast atmospheric setting differs from the Puget Sound lowland setting, and the DEIS does not quantify how the station choice affects mixing heights, stability classifications, or modeled concentrations. Those differences could materially alter results.[147]

The FEIS should document the representativeness of Quillayute for SEA, provide sensitivity analysis for the upper-air station choice, and evaluate site-specific prognostic meteorological data (such as WRF output processed through EPA's Mesoscale Model Interface) where feasible.[148]

The Mixing Height is Based on a 1972 National Study and Has Not Been Validated Against Site-Specific Measurements

Appendix C to the DEIS states the mixing height used for the SEA analysis is defined as 3,084 feet above field elevation, described as "the recommendation by the FAA based on the USEPA's Mixing Heights, Wind Speeds, and Potential for Urban Air Pollution Throughout the Contiguous United States," a 1972 publication. That source reports Seattle's diurnal variation of mixing heights as ranging between 705 meters (2,313 feet) and 1,175 meters (3,855 feet), with the daily average being 940 meters (3,084 feet).[149]

The mixing height used in the aircraft emissions dispersion analysis — which determines how much of each flight's emissions are attributed to the surface-level analysis as opposed to above-mixing-height sources excluded from the model — is derived from a 1972 national generalization. The DEIS does not present any site-specific mixing height validation using radiosonde data, lidar measurements, or other contemporary observations at or near SEA.[150]

Using a 1972 daily average figure as the universal mixing height for all flight operations in the model — regardless of season, time of day, atmospheric stability, or year — produces a uniform treatment of aircraft emissions that almost certainly underestimates surface-level contributions during periods of suppressed mixing. The Puget Sound basin is known for seasonal and nocturnal temperature inversions that can substantially reduce the effective mixing height below the 1972 daily average, trapping near-surface emissions and elevating ground-level concentrations. If mixing heights during these inversion events are materially lower than 3,084 feet, aircraft emissions that the model assigns to "above mixing height" (and thus excludes from ground-level impact assessment) would actually be retained within the surface mixing layer and contribute to community-level concentrations — a systematic omission from the impact analysis.

The Cities request that the FEIS: (1) Validate the 3,084-foot mixing height assumption against contemporary upper-air and lidar measurements representative of SEA's atmospheric environment, including characterization of inversion frequency, depth, and seasonal distribution; (2) conduct sensitivity

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147 Sunpro Technical Memorandum, pp. 2-19.

148 Sunpro Technical Memorandum, pp. 2-19.

149 Sunpro Services LLC, Air Quality Review: Seattle-Tacoma International Airport Draft Environmental Impact Statement, § 2.5, pp. 6–7.

150 Id.

analyses showing how predicted community-level concentrations change if lower inversion-period mixing heights are applied; and (3) disclose the extent to which nighttime and early morning operations are captured by the uniform mixing height assumption.

The Rural/Urban Dispersion Classification Is Not Independently Verifiable and Requires Sensitivity Analysis

Appendix C applies rural dispersion coefficients based on an Auer land-use determination that less than 50 percent of the three-kilometer study radius consists of urban-indicating land-use categories. The report does not disclose the underlying quantitative tabulation and does not address EPA's alternative population-density procedure, under which the developed communities around SEA could plausibly support a different classification. Notably, Appendix H separately uses urban, commercial, industrial, residential, and open-space terminology to describe the planning context. .[151]

The rural/urban selection materially affects AERMOD boundary-layer treatment and predicted concentrations, but the DEIS materials do not establish that either designation is uniformly conservative. The direction and magnitude of the difference depend on meteorology, source characteristics, and receptor location. The record therefore supports, at the very least, a sensitivity analysis, though the urban classification is likely the most appropriate in this circumstance..[152]

The Cities request that the FEIS: (1) disclose the quantitative Auer land-use tabulation and the rationale for the selected classification; (2) evaluate the population-density procedure identified in 40 CFR Part 51, Appendix W; and (3) provide rural/urban sensitivity modeling showing the resulting concentration differences at sensitive receptors. The FEIS should not assume that either designation is conservative without supporting model results.[153]

Climate Change Analysis Was Removed from the NEPA Record; GHG Increases Are Substantial

Appendix C to the DEIS states that "references to climate," a "qualitative climate evaluation," and the "cumulative impact analysis were removed" from the Final EA, and that FAA's final decision "will only rely upon the GHG emissions disclosed in the Final EA." Appendix C reiterates that "all references to climate and the qualitative climate evaluation" were removed from the Technical Report after the Draft EA.

Appendix C's Table 30 shows the Proposed Action increases total CO2e by 152,703 metric tons compared to No Action in 2032. Appendix C's Table 34 shows the Proposed Action increases total CO2e by 539,569 metric tons compared to No Action in 2037. Despite these quantified increases, the DEIS proposes "No mitigation" for GHG/climate.

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[151] SAMP NTP Draft SEPA EIS, Appendix C, Air Quality and Greenhouse Gas Technical Report, § 5.1.2 & n. 18; Appendix C, Air Quality and Human Health Risk Assessment Technical Report, p. 2-6.

[152] Sunpro Services LLC, Air Quality Review: Seattle-Tacoma International Airport Draft Environmental Impact Statement, § 2.5, pp. 6–7.

[153] SAMP NTP Draft SEPA EIS, Appendix C, Air Quality and Human Health Risk Assessment Technical Report, § 2.1.4.3, pp. 2-8–2-9; Appendix H, § 3, p. 5.

The removal of qualitative climate effects and cumulative GHG analysis eliminates a critical component of public disclosure, leaving the community unable to understand how these projects contribute to climate change or how climate change may affect their homes, health, and infrastructure over time.[154]

The Cities request that the FEIS: Reinstate a qualitative climate effects analysis and cumulative GHG analysis commensurate with Washington State's climate policy framework and SEPA's disclosure obligations.

Construction and Operational Emissions Mitigation Should Be Specific and Enforceable

The air-quality technical review identifies feasible measures that are not evaluated as binding mitigation. For construction, the FEIS should require an enhanced emissions-control plan incorporating Tier 4 Final or equivalent non-road equipment, anti-idling requirements, fence-line monitoring during peak activity, and community notification procedures. These requirements should be incorporated into construction contracts.[155]

For operations, the FEIS should evaluate and commit to measurable schedules for gate electrification and use of preconditioned air and ground power, ground-support-equipment electrification, electric-vehicle charging, aircraft and vehicle idle reduction, and implementation of sustainable-aviation-fuel commitments. It should identify responsible parties, implementation dates, monitoring, and adaptive-management triggers rather than relying on aspirational goals.[156]

The FEIS should also establish post-construction monitoring and reporting, including use of available near-airport monitoring data, annual emissions updates during construction and early operations, and a process for additional mitigation if monitored concentrations or performance measures exceed defined triggers.[157]

Key Operational Assumptions Rely on Proportional Scaling and "Professional Judgment" Without Empirical Support

Appendix C to the DEIS increases future run-ups proportional to operations for 2032 No Action, assuming the same distribution across aircraft types. GSE activity is assumed to increase commensurate with operations with "no new pieces of equipment" added because no future purchasing assumptions could be made. Where only WSDOT roadway data exist, traffic volumes were increased proportional to forecast passenger increases. For new Proposed Action parking facilities, volumes were assumed at "full capacity" with turnover rates based on "professional judgment."[158]

Multiple key operational inputs that drive emissions estimates rely on scaling factors and professional judgment rather than empirically supported project-specific modeling. These simplifications systematically risk understating peak-hour and localized burdens.

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[154] Sunpro Services LLC, Air Quality Review: Seattle-Tacoma International Airport Draft Environmental Impact Statement, § 2.6, pp. 7–8.

[155] Id.

[156] Sunpro Technical Memorandum, pp. 2-19.

[157] Sunpro Technical Memorandum, pp. 2-19.

[158] SAMP NTP Draft SEPA EIS, Appendix C, n. 38.

The Cities request that the FEIS: (1) replace scaling-based assumptions with empirically supported operational inputs and (2) provide sensitivity analyses (high/low cases) to bound the range of plausible emissions outcomes.

Superseded Modeling Tools Are Being Used in the Primary Analysis in Chapter 4, Section 4.3.1[159]

Section 4.3.1 of the DEIS expressly states that AEDT version 3f and MOVES version 4 "were used for the NEPA analysis and are reflected in the results shown below," while "updated results" using AEDT version 3g and MOVES version 5 "are included in the Air Quality and Human Health Risk Assessment Technical Report in Appendix C." In a DEIS published in May 2026, this version split means that the primary significance conclusions presented to the public, reviewing agencies and decision-makers in Chapter 4 rest on superseded model outputs, while the Port's own more current results are confined to a supporting appendix.

This inverts the proper relationship between a document's primary analysis and its supporting technical appendices. Appendix C should substantiate the conclusions presented in Chapter 4, yet the current-version results appear only in the appendix. The DEIS materials do not establish that every difference between AEDT 3f and 3g or MOVES 4 and 5 is material. They do establish that two sets of model outputs were used and that the updated results were available when the DEIS was published. Chapter 4 should therefore use the current outputs or provide a documented comparison demonstrating that the version differences do not affect total emissions, modeled concentrations, significance-threshold comparisons, or mitigation conclusions.

The Cities request that the FEIS: (1) Replace the AEDT 3f and MOVES 4 outputs in Chapter 4 § 4.3.1 with the AEDT 3g and MOVES 5 results currently in Appendix C, so that all emissions tables and significance determinations in Chapter 4 reflect the most current available modeling; (2) disclose, within revised Chapter 4, whether and in what respects the updated results differ from the superseded results in total emissions, modeled concentrations, and significance threshold comparisons; and (3) if any significance conclusions change as a result, identify corresponding binding mitigation measures.

NOx / NO2 In-stack Ratio Selection Understates Directly Emitted NO2 and is Inconsistent with EPA Guidance.[160]

DEIS Appendix C's construction-phase NO2 dispersion modeling applies Tier 3 Ozone Limiting Method (OLM) processing with an NOx/NO2 in-stack ratio (ISR) of 0.15. Using this value, Appendix C reports a modeled 1-hour construction NO2 concentration of 106 µg/m3 against a background of 79 µg/m3, producing a peak total concentration of 185 µg/m3 — which is only 3 µg/m3 below the 1-hour NO2 NAAQS of 188 µg/m3. Given this proximity to the applicable standard, the ISR assumption is not an abstract methodological choice: it is outcome-determinative, and its adequacy demands rigorous justification.[161]

The selected ISR of 0.15 is not adequately justified. Appendix C defends the value on two grounds: first, that early OLM screening formulations "commonly assumed approximately 0.10" ISR for combustion sources; and second, that an EPA ISR database shows an average ISR of "less than 0.1" for diesel

[159] Sunpro Technical Memorandum, § 2.1.

[160] Sunpro Technical Memorandum, § 2.2.

[161] SAMP NTP Draft SEPA EIS, Chapter 4, § 4.3.1, p. 4-3; Sunpro Services LLC, Air Quality Review: Seattle-Tacoma International Airport Draft Environmental Impact Statement, § 2.1, p. 4.

internal combustion engines. Neither justification is sufficient. The references to early OLM formulations predate EPA's current Tier 3 guidance framework. The database average, even if accepted at face value, does not constitute validated, source-specific ISR data for the particular construction equipment fleet, load profiles, and operating conditions modeled here. Appendix C itself acknowledges that ISR values must be "selected and documented on a case-by-case basis" — yet the record does not contain the fleet characterization, emission testing data, or operating condition documentation that would be necessary to validate 0.15 as a defensible site-specific value.

EPA guidance supports a substantially higher default. EPA's Appendix W to 40 CFR Part 51 — the governing framework Appendix C itself cites for the 1-hour NO2 NAAQS modeling methodology — and EPA's associated NO2 modeling technical guidance direct analysts to use an ISR of 0.5 as the conservative default value when source-specific data are unavailable. An ISR of 0.15, applied to a source category for which the record contains no validated site-specific data, represents a deviation of two-thirds below the applicable EPA default. That deviation biases modeled directly emitted NO2 concentrations downward and, at a modeled total of 185 µg/m3, may be the difference between a below-threshold and at- or above-threshold significance finding.

The Cities request that the FEIS: Revise Appendix C to apply EPA's default ISR of 0.5, consistent with Appendix W and EPA's NO2 modeling technical guidance, and update all NO2 concentration estimates, significance determinations, and mitigation commitments accordingly. If application of the 0.5 default produces a modeled total NO2 concentration at or above 188 µg/m3, the Final EIS must identify the resulting significant impact and propose enforceable mitigation measures.

Appendix C of the DEIS Inappropriately Omits Lead (Pb) from the Criteria Pollutant Emissions Inventory.[162]

Appendix C to the DEIS states that a lead (Pb) emissions inventory is "not warranted" for SEA because the airshed is in attainment for lead, Avgas fueling ceased at SEA in 2018, and the Proposed Action does not involve a potentially significant lead source. Yet the HHRA identifies leaded aviation gasoline and lead in Jet A as airport lead sources and estimates Pb using fuel-based Pb-to-SO2 ratios. Those HHRA inputs demonstrate that quantifiable lead-emissions information exists and should be reconciled with the inventory-level omission, including for aircraft that arrive at SEA after fueling elsewhere.[163]

The DEIS (correctly) identifies Pb as one of six criteria pollutants regulated under EPA's National Ambient Air Quality Standards, with a primary and secondary standard of 0.15 µg/m3 expressed as a rolling three-month average. Notwithstanding that identification, the operational and construction emissions inventories presented in Appendix C quantify only CO, NOx, VOC, SOx, PM10, and PM2.5 — and do not include Pb as an inventoried pollutant. The omission of a NAAQS criteria pollutant from the primary emissions inventory is a deficiency that must be corrected in the Final EIS.

Appendix C also states that AEDT 3g does not directly model ground-level Pb, that Pb concentrations were derived from modeled SO2 using emission ratios, and that the lead health evaluation compared estimated air concentrations with the NAAQS rather than modeling blood-lead levels. Those disclosures support a focused uncertainty analysis. They do not, without additional technical support, establish the direction or magnitude of any bias from the surrogate method.[164]

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[162] Sunpro Technical Memorandum, § 3.3.

[163] SAMP NTP Draft SEPA EIS, Appendix C, p. 18.

[164] SAMP NTP Draft SEPA EIS, Appendix C, pp. 461 and 500 of 1663.

The Cities request that the FEIS: (1) include Pb explicitly in the construction and operational emissions inventory tables, using the same format applied to the other criteria pollutants; (2) provide the source-category, fleet, and emissions-factor basis for any zero or de minimis estimate; (3) disclose the annual piston-engine operations and 100LL fuel-consumption assumptions underlying the HHRA's Pb estimates so the inventory and health-risk analysis can be independently reconciled; (4) disclose and, where feasible, quantify the uncertainty introduced by using SO2 as a dispersion surrogate for Pb; and (5) explain whether the NAAQS comparison adequately characterizes risk to child receptors and whether a child-specific blood-lead analysis would alter the health-risk conclusions.

If this supplementation produces any non-zero Pb estimate at a sensitive receptor, the Final EIS must assess that estimate against the applicable NAAQS and disclose the result.

The DEIS / Appendix C Inadequately Evaluates Ozone Impacts Despite Substantial Increases in Ozone Precursor Emissions.[165]

The Draft EIS acknowledges that ozone is formed photochemically from nitrogen oxides (NOx) and volatile organic compounds (VOCs) in the presence of sunlight and heat, and on that basis "discloses" NOx and VOC emissions rather than directly evaluating ozone concentrations. Here, that approach is inadequate. The Proposed Action would increase annual NOx emissions by 70 tons per year in 2032 relative to the No Action Alternative, rising to 225 tons per year by 2037. Annual VOC emissions would increase by 8 tons per year in 2032 and 20 tons per year in 2037. Precursor increases of this magnitude — from a concentrated cluster of ozone-forming sources including aircraft LTO operations, APUs, ground support equipment, and motor vehicles.[166]

The DEIS appears to conclude that ozone impacts would not be significant primarily because the region is currently designated attainment for the ozone NAAQS and because emissions inventories alone do not directly correspond to ambient ozone concentrations. While attainment status is relevant context, it does not by itself demonstrate that the projected precursor increases would have no meaningful effect on ozone formation or ozone-related public health impacts. Nor does disclosure of annual emissions inventories, standing alone, quantify the extent to which the Proposed Action may influence ozone concentrations under meteorological conditions most conducive to ozone formation.

Because the DEIS relies on substantial increases in ozone precursor emissions while providing only limited analysis of the resulting ozone implications, the analytical basis for the conclusion that the Proposed Action would not contribute to adverse ozone impacts is not fully disclosed. Additional analysis would assist decision-makers and the public in understanding whether the projected NOx and VOC increases could materially affect regional ozone formation, influence future attainment status, or warrant further mitigation measures.

The Cities request that the FEIS: Provide additional technical analysis supporting its conclusion regarding ozone impacts, including evaluation of the relationship between the projected NOx and VOC increases and regional ozone formation, disclosure of any photochemical modeling or other technical analyses relied upon, and identification of any mitigation measures to reduce ozone precursor emissions where warranted.

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[165] Sunpro Services LLC, Air Quality Review: Seattle-Tacoma International Airport Draft Environmental Impact Statement, § 3.3, pp. 9–10.

[166] SAMP NTP Draft SEPA EIS, Appendix C, Air Quality and Greenhouse Gas Technical Report, § 4.2, p. 9; Appendix C, Air Quality and Human Health Risk Assessment Technical Report, pp. 2-3 & 2-16; Sunpro Services LLC, Air Quality Review: Seattle-Tacoma International Airport Draft Environmental Impact Statement, § 3.3, pp. 9–10.

Comment Regarding Deficiencies in the NO2 Emissions Modeling and Related NAAQS Compliance Disclosure.[167]

The nitrogen dioxide (NO2) analysis presented in Appendix C is procedurally and technically deficient in three material respects: (1) it discloses an alarmingly narrow margin against the 1-hour NO2 NAAQS without adequate transparency; (2) it relies on modeled averages that demonstrably understate peak-exceedance risk under real-world worst-case meteorological conditions; and (3) it withholds the receptor-level outputs and methodological documentation necessary for independent review. These deficiencies must be remedied before the SEPA process ends.

Inadequate Margin Against the 1-Hour NO2 NAAQS and Insufficient Disclosure. Appendix C reports a background 1-hour NO2 concentration of 79 µg/m3 and incremental operational peaks of 21 µg/m3 (2032 scenario) and 22 µg/m3 (2037 scenario), yielding combined 1-hour totals of 100–101 µg/m3 against a 1-hour NAAQS of 188 µg/m3 — consuming approximately 54% of the available regulatory headroom. Despite this narrow margin, the DEIS discloses only peak-increment summary tables rather than receptor-by-receptor 1-hour NO2 design values in NAAQS-compliant form (i.e., the 3-year average of the annual 98th percentile of daily maximum 1-hour concentrations). Because the 1-hour NAAQS is defined on a design-value basis, compliance can only be properly evaluated — and near-standard conditions properly identified — through transparent disclosure of receptor-specific design values, not aggregate peak summaries. The DEIS does not provide this information.[168]

The construction modeling reports a peak combined 1-hour NO2 total of 185 µg/m³, or approximately 98 percent of the NAAQS. Appendix C states that this result was processed into the applicable design-value form using five years of meteorological data. The remaining concern is not that the result is a simple average; it is that the reported value depends on the 0.15 in-stack ratio, while receptor-level design values, OLM inputs, and the source-specific basis for that ratio are not fully disclosed. Those omissions prevent independent evaluation of the narrow margin below the standard.[169]

Incomplete OLM/ISR and Meteorological Methodology Documentation. The DEIS states that construction NO2 was modeled using AERMOD's Ozone Limiting Method (OLM) with an upper-bound equilibrium NO2/NOx ratio of 0.9 and a fleet-average in-stack ratio (ISR) of 0.15, with hourly background ozone drawn from the Seattle–Beacon Hill monitor. However, the DEIS does not provide the OLM configuration files, the O3 input data or its processing, or the ISR basis and source-group disaggregation necessary to confirm that near-standard concentrations are not artifacts of screening defaults. The DEIS further states that the analysis uses five years of meteorological data (1/1/2020 to 12/31/2024) with an 8-hour PST time-zone adjustment but provides no AERMET/AERMINUTE/AERSURFACE preprocessing outputs or representativeness justification sufficient to confirm that the selected period adequately bounds worst-case low-wind, stable atmospheric conditions.[170]

Prior to issuance of the FEIS, the Cities request that the Port: (1) publish receptor-specific 1-hour NO2 design values in NAAQS-compliant form for all operational and construction scenarios, including combined background-plus-increment totals; (2) map and tabulate the spatial distribution of receptors where combined concentrations exceed 80% of the NAAQS, identifying all sensitive receptor categories; and (3) provide complete OLM/ISR documentation — including O3 input files, ISR selection basis, source-

[167] Sunpro Technical Memorandum, § 3.5.

[168] SAMP NTP Draft SEPA EIS, Appendix C, p. 477. SAMP NTP Draft SEPA EIS, Appendix C, p. 463.

[169] Sunpro Technical Memorandum, pp. 2-19.

[170] SAMP NTP Draft SEPA EIS, Appendix C, pp. 458-459. SAMP NTP Draft SEPA EIS, Appendix C, pp. 454-455.

group settings, and full AERMET preprocessing diagnostics — with a justified explanation of why the five-year meteorological period adequately represents worst-case 1-hour NO2 conditions.

Failure to provide this information renders the NO2 analysis inadequate for NAAQS compliance demonstration and incompatible with the disclosure obligations of SEPA.

Hazard-Index Additivity Should Be Reported by Target Organ

Appendix C acknowledges that summing hazard quotients across chemicals is most meaningful for compounds affecting the same target organ or system. Because the quantitative HHRA includes only three retained TAPs while other TAPs were screened out individually, a single aggregate HI can obscure target-organ groupings and leave the effect of screened-out pollutants undisclosed. The record supports a target-organ presentation and sensitivity check; it does not establish that the existing HI necessarily overstates or understates risk.[171]

The Cities request that the FEIS: present target-organ-specific HIs for the retained TAPs; identify screened-out TAPs that share the same target organs; evaluate whether including those pollutants could materially change any target-organ HI; and disclose whether the corrected analysis changes significance or mitigation conclusions.

Cancer Toxicity Characterization Should Use Current Classifications and Toxicity Values

Appendix C states that EPA revised its carcinogen classification system in 2005 but that the HHRA retained the earlier weight-of-evidence scheme for chemicals for which the revised scheme had not been implemented. The classification framework and the numerical toxicity factors are related but distinct. The record therefore supports requiring transparency and current values, not assuming that every older classification necessarily changes a quantitative risk estimate.[172]

The Cities request that the FEIS: identify each chemical evaluated under the earlier classification scheme; provide the current EPA and Washington State Department of Ecology weight-of-evidence classification and numerical toxicity value used for each chemical; explain any difference from the HHRA inputs; recalculate risk where a current value differs; and disclose whether any significance or mitigation conclusion changes.

Comment Regarding the Inadequacy of the Cumulative Cancer Risk Threshold in the Human Health Risk Assessment.

The HHRA applies a cumulative cancer risk threshold that is materially less protective than Washington's own individual-pollutant screening standard and that fails to account for the disproportionate existing pollution burden borne by environmental justice communities adjacent to the airport. This deficiency must be corrected in the Final EIS.

Internal Inconsistency Between Screening and Cumulative Thresholds. The HHRA screens individual toxic air pollutants (TAPs) using Washington Acceptable Source Impact Levels (ASILs), which are themselves based on a target cancer risk of 1-in-1,000,000 (1E-06). Yet for cumulative cancer risk — the metric that captures the combined burden of all carcinogenic TAPs to which receptors are simultaneously exposed — the HHRA applies a less protective second-tier decision threshold of 1E-05. This is internally contradictory: the framework uses 1E-06 as the foundation for identifying carcinogenic TAPs of concern,

[171] SAMP NTP Draft SEPA EIS, Appendix C, p. 500 of 1663.

[172] SAMP NTP Draft SEPA EIS, Appendix C, p. 488 of 1663.

then relaxes the acceptable risk tenfold when those same pollutants are evaluated together. The cumulative stage is precisely where the protective threshold is most consequential, and the HHRA weakens it without adequate justification.[173]

Failure to Account for Existing Cumulative Burden. The HHRA acknowledges that ambient concentrations in the project area already reflect existing pollution from automobiles, industry, and other sources unrelated to SEA. Despite this acknowledgement, the HHRA's incremental cancer risk analysis does not adjust the decision threshold to reflect that nearby residents — particularly in SeaTac, Burien, and Tukwila — already carry an elevated cumulative cancer and respiratory disease burden. The non-cancer hazard index (HI) threshold is set at 1.0, and the HHRA evaluates sensitive receptors including schools, daycare facilities, workers, and adult and child residents. Applying a 1E-05 threshold to a population already at elevated risk from pre-existing pollutant loading does not reflect the protective intent of the tiered review framework.[174]

The More Protective 1E-06 Comparison Is Warranted. The air-quality technical review identifies 1E-06 as the more protective benchmark; the FEIS should be utilizing that measure for the communities most impacted by the SAMP.

The Cities request that the FEIS: (1) present cumulative cancer-risk results for sensitive receptors and environmental-justice communities against the 1E-06 and 1E-05 benchmarks; and (2) explain whether use of the more protective benchmark would change any significance or mitigation conclusion.

Without making this change, the FEIS cannot demonstrate that its cumulative-risk framework adequately accounts for sensitive receptors and communities already experiencing elevated environmental burdens. Because the HHRA also depends on the emissions inventory, mixing-height, meteorological, dispersion-classification, and TAP-screening inputs addressed above, the Cities request an independent technical peer review of the corrected HHRA before the FEIS significance conclusions are finalized.

Economic and Fiscal Effects

Noise-Related Property-Value and Municipal-Revenue Effects Require Analysis

The DEIS does not quantify how expansion of the 65 DNL contour may affect residential property values, household wealth, or municipal revenue. Leland's preliminary parcel analysis estimates approximately $240,000 in annual property-tax revenue already foregone across the three cities due to cumulative noise-related value effects and approximately $35,600 in additional annual revenue associated with the SAMP-related contour expansion. These estimates require city-specific levy modeling because Washington's budget-based property-tax system can adjust levy rates, but the estimates demonstrate a fiscal pathway that the DEIS does not evaluate.[175]

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[173] SAMP NTP Draft SEPA EIS, Appendix C, p. 483. SAMP NTP Draft SEPA EIS, Appendix C, p. 491.

[174] SAMP NTP Draft SEPA EIS, Appendix C, p. 467. SAMP NTP Draft SEPA EIS, Appendix C, pp. 480, 490.

[175] SAMP NTP Draft SEPA EIS, Appendix C, Air Quality and Human Health Risk Assessment Technical Report, § 3, p. 3-4 & pp. 3-12–3-13; Sunpro Services LLC, Air Quality Review: Seattle-Tacoma International Airport Draft Environmental Impact Statement, § 4.2, p. 12.

The FEIS should evaluate property-value effects using a documented methodology, disclose the implications for household wealth and municipal revenues, and explain whether sound insulation addresses exterior-noise, market-value, or fiscal effects in addition to interior exposure.[176]

Airport-Related Parking and Property Control Create Long-Term Fiscal Effects

The Port's long-term leases of three Master Park facilities for employee parking have converted taxable parking transactions into employee parking uses and have already reduced SeaTac parking-tax revenue by approximately $600,000 per year. Leland estimates that losses over the 20- to 30-year lease periods could approach $20 million. The DEIS does not address this direct fiscal consequence or the related effect of long-term airport control of properties within SeaTac's planned Urban Center.[177]

The Master Park leases also demonstrate that airport-related operations are expanding beyond airport property and beyond the area the Port identifies as the Airport Activity Area. By moving employee parking to off-airport, non-AAA property under long-term Port control, these arrangements can extend airport-support uses into areas planned by the Cities for taxable redevelopment, housing, employment, or mixed-use growth. The fiscal effect is not limited to parking-tax receipts. Long-term airport-related control can foreclose or delay higher-value taxable development and can shift traffic, public-service, and infrastructure demands beyond airport boundaries.

A separate property-tax issue arises when the Port acquires property or when Port use changes the tax status of a previously taxable parcel. If the Port acquires property in SeaTac, Burien, or Des Moines and the property becomes tax-exempt, the acquisition can remove assessed value from the affected city's tax rolls. A long-term lease may have a different property-tax consequence than acquisition, so the analysis should not treat all arrangements as legally or fiscally identical. It should disclose the ownership, use, tax status, lease term, and anticipated municipal revenue effect of each existing or reasonably foreseeable off-airport acquisition or lease.

The Cities request that the FEIS: (1) identify existing and reasonably foreseeable airport-related acquisitions, long-term leases, parking facilities, and support uses outside the AAA; (2) quantify city-by-city parking-tax, property-tax, redevelopment, public-service, and infrastructure effects over the applicable acquisition or lease horizon; (3) evaluate how off-airport property control affects each City's adopted growth and redevelopment strategy; and (4) identify mitigation or fiscal commitments for documented local revenue losses and service costs.[178]

Emergency-Service and Road-Maintenance Costs Are Not Adequately Evaluated

The 2018 ILA recognizes that airport operations impose off-airport policing, traffic, parking-enforcement, and code-enforcement costs in SeaTac and provides a Community Relief Contribution that expires with the current agreement in 2028. Leland reports that SeaTac police spending increased by approximately 51 percent between 2021 and 2025 while population increased by approximately three percent and airport passenger activity increased by approximately 46 percent. Those figures do not establish that

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[176] Sunpro Services LLC, Air Quality Review: Seattle-Tacoma International Airport Draft Environmental Impact Statement, §§ 4.2–4.3, p. 12.

[177] Leland Consulting Group, Technical Memorandum: Economic, Fiscal, and Socioeconomic Impacts, pp. 1-27.

[178] Leland Consulting Group, Technical Memorandum: Economic, Fiscal, and Socioeconomic Impacts, pp. 1-27.

airport activity caused the full cost increase, but they demonstrate the need for an airport-specific service-demand analysis that also addresses Burien and Des Moines.[179]

The transportation technical review likewise finds that the DEIS does not provide the vehicle-class and traffic-volume information necessary to estimate pavement wear and ongoing road-maintenance costs. The FEIS should quantify NTP-related demand for police, fire, emergency response, traffic management, and roadway maintenance, identify costs by jurisdiction, and establish an equitable and enforceable funding mechanism.[180]

Regional Economic Benefits Do Not Resolve Localized Community Costs

The economic benefits cited by the Port are regional, while many environmental and fiscal effects are concentrated in the adjacent cities. Leland reports that only approximately nine percent of employed residents of Burien, Des Moines, and SeaTac worked within SeaTac in 2023. Among workers at the airport and airport-serving businesses , approximately 1.8 percent lived in SeaTac and a combined 1.8 percent lived in Burien and Des Moines. The FEIS should therefore disclose the geographic distribution of employment and visitor-spending benefits rather than using regional totals to offset localized effects.[181]

Environmental Justice

The EJ Significance Framework Is Borrowed From a Federal Standard That Has Been Withdrawn and Is Independently Inadequate Under SEPA

The DEIS EJ analysis, as constructed, remains tethered to the FAA's significance framework in ways that are both legally inappropriate and analytically inadequate for SEPA purposes.

The absence of SEPA-specific EJ standards does not authorize the Port to adopt a significance framework that has been revoked at the federal level and that, as set out throughout this letter, relies on NAAQS compliance, FAA DNL thresholds, and mobility standard benchmarks that are systematically insensitive to the cumulative burden carried by already-overburdened communities.

SEPA's context-and-intensity framework (WAC 197-11-330) is the appropriate significance standard. Applied to a community where the majority of census tracts in each of the different study areas have scores of 9 or 10 on the WADOH EHD Index, indicating that the area is vulnerable to changes in environmental exposures and economic impacts, and where scores in the GSA, noise, and air dispersion study areas are identified as low or very low on the Port Equity Index, a context-sensitive significance evaluation must account for the fact that communities at the ceiling of existing environmental burden experience the effects of even small incremental impacts differently — and more severely — than the general population for whom significance thresholds were designed.

The Cities request that the FEIS: (1) use SEPA's context-and-intensity factors to evaluate effects on environmental-justice communities rather than defaulting to withdrawn federal significance thresholds;

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[179] Leland Consulting Group, Technical Memorandum: Economic, Fiscal, and Socioeconomic Impacts, pp. 1-27.

[180] Perteet, Inc., Washington's State Environmental Policy Act (SEPA) Review of Sustainable Airport Master Plan (SAMP) Near Term Projects (NTPs) - Surface Transportation Technical Review, pp. 1-15.

[181] Leland Consulting Group, Technical Memorandum: Economic, Fiscal, and Socioeconomic Impacts, pp. 1-27.

and (2) use the Washington Environmental Health Disparities Map and the Port Equity Index as contextual screening tools that inform, but do not mechanically determine, the significance analysis.[182]

The Study Area Definitions Are Constructed in Ways That Dilute the Concentration of Affected EJ Populations and Obscure Localized Impacts

The DEIS's EJ analysis uses four different study areas: (1) the General Study Area (GSA), used for most elements of the environment including socioeconomics; (2) the Noise Study Area, defined as the area within the 65 DNL contour for the Proposed Action in 2037; (3) the Transportation Study Area, which extends beyond the GSA; and (4) the Air Dispersion Analysis Receptor Locations, encompassing receptors used to determine peak ambient air pollutant impacts.[183]

The use of four separate study areas — with different boundaries for each resource category — creates a fragmented analytical structure in which no single study area presents the full combined picture of EJ impact. Communities within the noise study area are analyzed separately from those within the air dispersion receptor zone, which are analyzed separately from those within the transportation study area, making it structurally impossible for the EJ analysis to evaluate the cumulative burden that any single receptor community bears across all resource categories simultaneously.

King County was used as the reference area because SEA is located in King County. That comparison shows substantial differences between the affected communities and the county as a whole, but a single countywide benchmark may not describe how impacts are distributed among communities of similar urban form and proximity to SEA. The FEIS should explain why King County was selected and provide sensitivity comparisons using appropriate sub-county or similarly situated reference geographies without presuming that the choice necessarily biases the result in one direction.[184]

The majority of the census block groups for each of the study areas evaluated were identified as having minority populations, and a substantial portion also met the low-income criteria, such that the majority of the study areas were identified as environmental justice populations. The Cities note that this finding — that the majority of affected communities are EJ communities — represents an extraordinary and underappreciated finding that should heighten, not merely acknowledge, the rigor of the subsequent impact analysis. The DEIS identifies the predominance of EJ populations but does not treat that predominance as a reason to apply a higher standard of impact scrutiny.

The Cities request that the FEIS: (1) provide an integrated, community-level EJ analysis that overlays noise, air quality, transportation, health-risk, and socioeconomic effects at consistent receptor geographies; (2) justify the King County reference area and present reasonable alternative comparisons; and (3) explain how differing discipline study areas were reconciled in reaching the EJ significance conclusion.[185]

The EHD and Port Equity Index Vulnerability Findings Are Not Integrated Into the Impact Significance Determination

The Washington Department of Health's Environmental Health Disparities Map combines environmental exposures and effects with socioeconomic and sensitive-population indicators to identify relative

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[182] Leland Consulting Group, Technical Memorandum: Economic, Fiscal, and Socioeconomic Impacts, pp. 1-27.

[183] SAMP NTP Draft SEPA EIS, Appendix K, p. 116 of 142.

[184] Leland Consulting Group, Technical Memorandum: Economic, Fiscal, and Socioeconomic Impacts, pp. 1-27.

[185] Leland Consulting Group, Technical Memorandum: Economic, Fiscal, and Socioeconomic Impacts, pp. 1-27.

disparities among census tracts. The EHD map ranks census tracts from 1 to 10, and the State Environmental Justice Council recommends using scores of 7 or higher to help identify geographies for outreach. These indicators provide useful context concerning vulnerability and cumulative burden..[186]

Each of the census tracts in the GSA scores 7 or higher for environmental exposures. Increases in exposures from projects such as the SAMP NTPs could affect environmental justice populations but, the DEIS says, these effects are not expected to be significant based on the SEPA analysis for these resource areas.[187]

The DEIS thus acknowledges that every census tract in the GSA scores 7 or higher for environmental exposures — placing the entire affected community in Washington's recommended EJ outreach category — and then defers to the same SEPA resource-area analyses that the Cities have identified throughout this letter as methodologically inadequate. The EHD Vulnerability score represents precisely the community-level characteristic that should modulate significance determinations: a community with EHD Vulnerability scores of 9 or 10 is more susceptible to harm from the same increment of environmental exposure than a low-vulnerability community. The DEIS documents this vulnerability extensively but then applies uniform, vulnerability-insensitive significance thresholds across all resource categories, treating the EJ population in the same manner as the general population for which those thresholds were designed. This analytical approach is internally inconsistent with the EHD framework the DEIS itself selects and endorses.

In addition to the EHD map, the Port used its Equity Index to identify additional vulnerability indicators across Demographics, Economy, Livability, Accessibility, and Environment categories to rank areas around the airport based on their degree of vulnerability. Scores in the GSA, noise, and air dispersion study areas are identified as low or very low on the Port Equity Index, while some areas on the western and southern part of the transportation study area rank as moderate. The convergence of EHD scores of 9–10 and Port Equity Index scores of low or very low across all primary study areas creates a documented, multi-metric portrait of severe community vulnerability that the DEIS's significance analysis fails to meaningfully engage / address.[188]

The Cities request that the FEIS use the EHD and Port Equity Index results as contextual screening and vulnerability information in each resource-area significance determination. The FEIS should explain how documented vulnerability changes the interpretation of project-related noise, emissions, traffic, and fiscal burdens rather than treating threshold compliance as automatically dispositive. The indices should not be presented as a stand-alone numerical SEPA significance formula unless the Port identifies and supports a validated methodology for doing so.[189]

The Noise Health Effects Analysis Is Superficial and Inconsistent With Current Epidemiological Evidence

The Action Alternatives would result in an increase in the 65+ DNL noise contour in 2032 and 2037. In 2032, approximately 337 additional housing units and 824 additional people would be exposed to noise levels of 65 DNL or above compared to No Action. In 2037, approximately 1,851 additional housing units

[186] Leland Consulting Group, Technical Memorandum: Economic, Fiscal, and Socioeconomic Impacts, pp. 1-27.

[187] SAMP NTP Draft SEPA EIS, Appendix K, p. 134.

[188] SAMP NTP Draft SEPA EIS, Appendix K, p. 119. SAMP NTP Draft SEPA EIS, Appendix K, p. 126.

[189] Leland Consulting Group, Technical Memorandum: Economic, Fiscal, and Socioeconomic Impacts, pp. 1-27.

and 4,439 additional people would be exposed to noise levels of 65 DNL or above compared to No Action.[190]

While there would be increases in noise due to the Action Alternatives, noise-sensitive areas within the 65+ DNL contour would not experience noise level increases of 1.5 DNL or more under the 2032 or 2037 conditions. The range of increase was between 0.0 DNL and 0.6 DNL, which is lower than the FAA threshold of significance for noise impacts. On the basis of the 1.5 DNL increment threshold, the DEIS finds no significant noise impact on EJ populations.

Analysis of recent studies on the health effects of aviation noise found that aircraft noise exposure at some levels can, inter alia, disturb sleep. These studies suggest that aircraft noise exposure has potential effects on hypertension.[191]

The Cities submit that this characterization of the epidemiological literature is selective, incomplete, and inconsistent with the weight of current research. The DEIS cites aviation noise as having only "marginal" effects on hypertension and no effect on cardiovascular disease — a conclusion that is inconsistent with a substantial body of peer-reviewed literature documenting associations between long-term aviation noise exposure and increased risks of coronary heart disease, stroke, type 2 diabetes, and all-cause mortality, including studies from European airport communities and the United States that have been published within the last decade. For communities already documented as having elevated EHD Vulnerability scores — which integrate sensitive population characteristics including rates of chronic illness, age, and socioeconomic deprivation — the health significance of noise exposure is likely to be greater than for the general population, a dimension the DEIS does not address.[192]

Furthermore, the EJ noise analysis focuses entirely on the 1.5 DNL increment metric, which measures the change in annual energy-averaged noise exposure relative to No Action — not the absolute noise level experienced by residents, nor the frequency of high-amplitude single-event exposures that are most directly associated with sleep disturbance and stress-pathway health effects. Exposing nearly 4,500 additional people to 65+ DNL aviation noise in communities that already score 9–10 on the EHD index is framed as a non-significant EJ impact solely because the increment of change is less than 1.5 DNL. That conclusion is not supported by the epidemiological literature on cumulative noise burden and health outcomes in vulnerable populations.

The Cities request that the FEIS: (1) Provide an updated and comprehensive review of the epidemiological evidence on aviation noise and health outcomes, including cardiovascular, metabolic, and neurodevelopmental effects, with specific attention to evidence applicable to chronically exposed and health-vulnerable populations; (2) evaluate absolute noise exposure levels — not merely incremental changes — as the basis for EJ noise health impact assessment; and (3) address the health significance of high-amplitude single-event exposures and night-time disturbance for EHD 9–10 communities.

The Children's Health Analysis Relies on a Circumscribed School Inventory That Excludes the Schools Most Directly Affected by Noise and Air Quality Impacts

The children's health analysis focuses on locations where children spend time outside of their residences, including schools and child-care centers, public parks, recreation facilities, and medical facilities. Within

[190] SAMP NTP Draft SEPA EIS, Appendix K, p. 141.

[191] SAMP NTP Draft SEPA EIS, Appendix K, p. 141.

[192] SAMP NTP Draft SEPA EIS, Appendix K, p. 141.

the GSA there are two schools (Puget Sound Skills Center and Choice Academy). No licensed child-care facilities are located within the GSA.[193]

The Children's Health analysis restricts its school and child-care inventory to facilities located within the GSA — defined primarily as Port-owned or Port-adjacent property. However, as the DEIS documents elsewhere, multiple schools are located within the existing 65+ DNL noise contour, which extends well beyond the GSA into residential communities in SeaTac, Burien, and Des Moines. Children attending those nine schools are exposed to aviation noise at levels the DEIS's own analysis characterizes as affecting annoyance and sleep — yet those schools are not included in the Children's Health analysis because they fall outside the narrowly defined GSA.

This boundary choice produces an internally inconsistent children's-health analysis. Puget Sound Skills Center is identified both as a school within the GSA and as a school within the existing 65+ DNL contour, while other schools within the contour are excluded because they fall outside the GSA. The FEIS should reconcile the school inventory, explain the treatment of closed or relocated schools, and evaluate all schools and child-care facilities within the relevant noise, air-quality, and transportation effect areas.[194]

The FAA has not established a significance threshold for children's environmental health and safety risks. However, the FAA has identified a factor to consider when evaluating potential impacts: whether the action has the potential to lead to a disproportionate health or safety risk to children. Because the DEIS identifies no significant impacts to children's environmental health and safety, no mitigation is deemed to be necessary by the Port.

The Cities submit that the absence of a federal significance threshold should have prompted expanded, conservative analysis — particularly given the documented presence of multiple schools within the 65+ DNL contour and the air quality and health risk deficiencies identified elsewhere in this letter. Instead, the absence of a threshold is used as a basis for applying the most minimal possible analytical framework: a GSA-bounded school inventory, a cross-reference to resource-area analyses whose own methodological adequacy is disputed, and a "no mitigation necessary" conclusion.

The Cities request that the FEIS: (1) Expand the children's health analysis to encompass all schools, child-care facilities, parks, and play areas within the noise, air quality, and stormwater impact study areas — not merely those within the narrowly defined GSA; (2) conduct child-specific exposure assessments addressing noise, criteria pollutants, air toxics, and non-inhalation pathways (soil, surface water contact) at each identified sensitive receptor; (3) adopt an explicitly precautionary analytical approach in the absence of a federal significance threshold, rather than using the threshold gap as justification for minimizing analysis; and (4) develop project-specific mitigation commitments for children's health rather than relying on the blanket "no mitigation necessary" conclusion.

The Transportation Impact Finding Is Treated as an EJ Non-Issue Despite Eight Unmitigated Intersections Serving EJ Communities

Appendix K states that the Action Alternatives would adversely affect 26 intersections and describes eight ramps or intersections as remaining without mitigation. The transportation technical review separately identifies four WSDOT-controlled facilities, Intersections 23, 24, 33, and 42, for which binding mitigation

[193] SAMP NTP Draft SEPA EIS, Appendix K, p. 3 of 142.

[194] Leland Consulting Group, Technical Memorandum: Economic, Fiscal, and Socioeconomic Impacts, pp. 1-27.

commitments are needed. The FEIS should reconcile these counts and identify each unmitigated location, its jurisdiction, the affected EJ population, and the mitigation status.[195]

The fact that WSDOT has not required mitigation at a facility does not resolve the Port's SEPA responsibility to disclose and mitigate project-caused effects. The EJ analysis should not treat the unmitigated locations as distributionally neutral and should evaluate whether delay, spillback, diversion, and safety effects are concentrated in EHD 9-10 or low/very-low Port Equity Index communities.[196]

The EJ analysis does not disclose which of the eight unmitigated intersections are located within EHD 9–10 or low/very low Port Equity Index census tracts, which communities bear the greatest share of unmitigated transportation burden, or whether the communities hosting the 18 mitigated intersections differ socio-demographically from those hosting the eight unmitigated intersections. This distributional information is essential for a meaningful EJ transportation analysis.

The Cities request that the FEIS: Map the 26 adversely impacted intersections against EHD scores and Port Equity Index scores, determine whether unmitigated impacts are disproportionately concentrated in EJ communities, and develop EJ-specific transportation mitigation commitments for those locations.

The EJ Mitigation Commitment Is Entirely Derivative, Non-Specific, and Unenforceable

The EJ mitigation commitment as described consists entirely of: (1) a cross-reference to resource-area mitigation measures developed for other categories; and (2) a commitment to "communicate" and "engage" — activities that are process commitments, not substantive environmental protections. There are no EJ-specific mitigation measures in the DEIS record. There are no performance standards, monitoring requirements, adaptive management triggers, or enforceable commitments directed specifically at the documented disproportionate burdens carried by EHD 9–10 communities. The phrase "context-specific mitigation measures and actions, if necessary" is not a mitigation commitment — it is a placeholder that defers the substance of EJ protection to a post-SEPA engagement process whose scope, timeline, and outcomes are entirely undefined.[197]

The Cities note that Appendix P's summary of mitigation measures does not contain a single EJ-specific measure. The conclusion that resource-area measures "would minimize impacts to environmental justice communities" is not supported by any analysis showing that those measures — developed without reference to EJ community vulnerability — are adequate to address disproportionate impacts in the specific communities affected.

The Cities request that the FEIS: (1) Develop substantive, EJ-specific mitigation measures addressing each resource category in which disproportionate impacts are documented, including noise insulation commitments for newly exposed households, operational air quality and health risk minimization measures, transportation mitigation at unmitigated EJ-community intersections, and enhanced community health monitoring; (2) include enforceable performance standards, timelines, monitoring protocols, and adaptive management provisions for each EJ mitigation measure; and (3) establish an ongoing community-level health monitoring program with results reported publicly and triggering adaptive management measures if adverse trends are observed.

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[195] Perteet, Inc., Washington's State Environmental Policy Act (SEPA) Review of Sustainable Airport Master Plan (SAMP) Near Term Projects (NTPs) - Surface Transportation Technical Review, pp. 1-15.

[196] Perteet, Inc., Washington's State Environmental Policy Act (SEPA) Review of Sustainable Airport Master Plan (SAMP) Near Term Projects (NTPs) - Surface Transportation Technical Review, pp. 1-15.

[197] SAMP NTP Draft SEPA EIS, Appendix K, p. 142.

Conclusion

The DEIS for the SAMP Near-Term Projects fails to satisfy Washington's SEPA requirements for impartial, full-disclosure analysis of environmental impacts to surrounding communities. Throughout the document — from the aviation forecast methodology to the noise significance framework, from the air quality analysis to the cumulative impact conclusions — the DEIS systematically applies assumptions, methodologies, and significance thresholds that minimize disclosed impacts while simultaneously documenting measurable, quantified increases in noise exposure, air emissions, water pollution, and traffic burdens on communities that are already among the most environmentally burdened in Washington State.

The Cities do not oppose economic development or airport operations. However, the Cities and their residents are entitled to accurate, complete, and candid disclosure of the environmental consequences of the Proposed Action, to a genuine evaluation of alternatives that could reduce those consequences, and to enforceable mitigation commitments that protect community health and quality of life. The DEIS does not provide that disclosure.

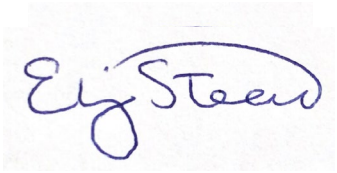
The Cities request that the Port take the comments in this letter seriously and address each identified deficiency in the Final EIS. The Cities further request a meeting with Port staff to discuss these comments and the approach to the Final EIS prior to its completion.

These comments are submitted without waiver of any legal rights or remedies available to the Cities, and the Cities reserve all rights to supplement these comments upon review of additional administrative record materials.

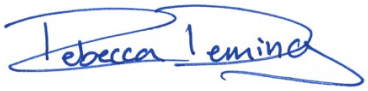
Sincerely,



Jenn Kester
Interim Director – CED
SEPA Official
City of SeaTac



Liz Stead
Community Development Director
SEPA Official
City of Burien



Rebecca Deming
Community Development Director
SEPA Official
City of Des Moines

APPENDIX A

Land Use Planning Review Memo

MEMORANDUM

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To: Zack Shields, Senior Planner
City of SeaTac
Community and Economic Development
206.973.4850

From: John Larson-Friend, AICP, Senior Transportation Planner
Perteet, Inc
206.436.0524

Re: SEPA Review of Sustainable Airport Master Plan (SAMP) Near Term Projects (NTPs) – Land Use Planning Technical Report Review

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Introduction

The Port of Seattle's Sustainable Airport Master Plan (SAMP) for the Seattle-Tacoma International Airport (SEA) identifies 31 near-term projects (NTPs) intended to accommodate near-term activity levels and support future airport facility needs. The NTPs include new terminal and landside elements, off-site cargo facilities, airfield taxiway improvements, and fuel facility modifications. SEPA requires the Port to complete a Draft Environmental Impact Statement (DEIS) for the proposed NTPs, and on May 22, 2026, the Port published its DEIS for public review and comment. This memorandum identifies deficiencies in the land use significance determination documented in the DEIS Land Use Technical Report (Appendix H, Contents [PDF p. i]), with a focus on plan consistency, land use compatibility, indirect effects, and phasing and cumulative effect framing.

The central concern is that the DEIS has inverted the SEPA land use inquiry. Chapter 4 frames a potentially significant land use impact as one in which adjacent uses conflict with airport facilities or operations, then concludes that because the NTPs are not inconsistent with local plans, no significant land use impact occurs and no mitigation is proposed. SEPA requires the opposite inquiry: whether the proposed action causes adverse effects on surrounding land uses. The deficiencies documented in this memo are evidence of that inversion, not isolated documentation gaps. As a corollary, where the DEIS relies on the Port-City of SeaTac Interlocal Agreement (ILA) to support its no-significant-finding conclusion, that reliance does not extend to off-airport receptor areas in Burien, Des Moines, Tukwila, or other jurisdictions. The ILA is an agreement between two parties and has no jurisdictional reach beyond Port-owned property in SeaTac. Whether indirect compatibility effects occur in those communities requires an independent evidentiary basis the DEIS does not clearly provide.

Supporting Documents

Perteet reviewed Appendix H of the SEPA DEIS which includes 14 supporting documents. Other relevant portions of the DEIS reviewed include, but not limited to, Noise and Noise-Compatible Land Use (Appendix J), Surface Transportation (Appendix L), and Socioeconomics, Environmental Justice (EJ), Children's Health (Appendix K). External documents reviewed included the following:

- 2018 Interlocal Agreement

- Envision SeaTac 2044, Land Use Element
- SeaTac City Center Plan
- Angle Lake District Station Area Plan
- Imagine Des Moines 2044, Chapter 2: Land Use Element
- Imagine Des Moines 2044, Chapter 3: Transportation Element
- Imagine Des Moines 2044, Chapter 7: Housing Element
- Burien 2044 Comprehensive Plan, Land Use
- Burien 2044 Comprehensive Plan, Community Health and Well Being
- Tukwila 2024-2044 Comprehensive Plan Goal 8
- Tukwila 2024-2044 Comprehensive Plan Policy T-5.1
- PSRC Vision 2050, Economic Policy MPP-EC-4 and MPP-EC-5
- PSRC Vision 2050, Transportation Policy MPP-T-28
- SeaTac Parks Comprehensive Plan

Overview of Deficiencies

Perteet reviewed Appendix H and relevant portions of Chapter 4, cross-referenced against the technical analyses in Appendices J, K, and L, and assessed consistency with the ILA, local comprehensive plans, and applicable state frameworks. Six deficiencies were identified, organized into three categories: land use compatibility beyond plan consistency, scope and phasing, and standards and assumptions. The deficiencies are primarily methodology and internal-consistency issues rather than isolated documentation gaps. Targeted FEIS revisions addressing each deficiency are identified at the close of each section and summarized in the Recommendations section of this memo.

#	Deficiency	Category
1	Land use significance methodology inverts the SEPA inquiry and treats plan consistency as a dispositive compatibility test	Compatibility
2	Cargo development intensity shifts north of SR 518 are not bounded or tied to off-airport compatibility pathways	Compatibility
3	Tub Lake open space adjacency and interface effects are not evaluated beyond a plan consistency finding	Compatibility
4	Future AAA parcels are mischaracterized as already exempt from ILA development standards, and scope and phasing boundaries are unclear	Scope and Phasing
5	ILA reliance and time horizon are not clearly defined across the SEPA record	Scope and Phasing
6	RCW 36.70.547 does not appear applicable to SEA on it's face, and the compatibility frameworks actually relied upon are not clearly defined	Standards and Assumptions

Deficiencies Found in the DEIS Documentation: Land Use

Land Use Compatibility Beyond Plan Consistency

The three deficiencies in this category are evidence that the DEIS significance methodology screens out indirect compatibility effects on surrounding land uses by treating plan consistency and ILA allowability as substitutes for an effects-based evaluation. Deficiencies 1 through 3 identify the specific pathways and receptor areas where that substitution produces an unsupported no-significant-impact conclusion and specify the targeted FEIS clarifications needed to make the land use conclusion traceable to the technical analyses elsewhere in the SEPA record. Deficiencies 1 through 3 identify the key compatibility pathways and sensitive edges most relevant to SEA and specify the targeted FEIS clarifications needed to make the land use conclusion traceable to the technical analyses elsewhere in the SEPA record.

1. Land Use Impacts and Plan Consistency

This deficiency is evidence that the DEIS significance methodology inverts the SEPA land use inquiry. Chapter 4 frames a potentially significant land use impact as one in which adjacent uses conflict with airport facilities or operations, then concludes that because the NTPs are not inconsistent with local plans, no significant land use impact occurs and no mitigation is proposed. That formulation asks whether surrounding land uses are compatible with the airport. SEPA requires the prior question: whether the proposed action causes adverse effects on the surrounding land uses. By treating plan consistency and ILA allowability as the dispositive test, the methodology screens out indirect compatibility effects on surrounding land uses before those effects are evaluated on their merits.

Appendix H frames land use impacts primarily as consistency with adopted plans and policies and as allowability under the ILA, within the General Study Area (GSA) (Appendix H, Section 3.2.1, Table 2 [PDF p. 6]). Appendix H concludes that the Action Alternatives would not result in significant land use impacts because the projects would be consistent with planning documents, would not significantly alter general land use patterns, would not disrupt or divide an established community, would not cause residences to relocate, and would not induce adverse socioeconomic impacts (Appendix H, Section 4, Potential Impacts [PDF p. 12]). Chapter 4 echoes this approach, stating construction and operation would not be inconsistent with local plans, and, therefore, there would be no significant land use impacts, and no minimization or mitigation is proposed because no inconsistencies were identified (DEIS Chapter 4, Land Use impact considerations and RCW framing [PDF p. 4-51]). This conclusion is also reflected in the Chapter 4 impact summary table for Land and Shoreline Use [DEIS Chapter 4, Table 4.3.11-4 [PDF p. 4-82])

Appendix H also evaluates "planned and future land use," but the land use documentation does not address whether post-2024 state housing and transit-oriented development requirements, including RCW 36.70A.840, materially affect the reasonably foreseeable planned-land-use condition in station areas near SEA, particularly where increased residential capacity could overlap areas experiencing airport-related effects. The FEIS does not need to assume incompatibility parcel-by-parcel, but it should disclose whether these requirements change planned intensity assumptions that inform the land use affect environment and compatibility context.

This plan consistency framing does not clearly address indirect land use compatibility effects on adjacent residential areas and park and open space resources. In this context, compatibility concerns are typically mediated through changes in nuisance conditions (for example, noise, light, construction disturbance, and visual effects), changes in traffic exposure and access conditions, and changes in buffer and edge condition

performance. The SEPA record includes technical analyses that bear directly on these pathways, including noise and noise-compatible land use analysis (Appendix J), surface transportation operations and mitigation analysis (Appendix L), and environmental justice and community vulnerability context (Appendix K). However, the land use analysis does not provide a land use focused summary that identifies these compatibility pathways, states how each pathway is addressed in the SEPA record and cross-references the specific sections where the pathway is evaluated (Appendix H, Section 4.2.1, Consistency with Local Plans [PDF p. 13]). Where the Port relies on the ILA as evidence supporting a no-significant-impact conclusion, the FEIS should also identify how ILA Section 3.4 edge-property provisions are applied to NTP elements that occupy or adjoin edge properties, including standards addressing height, bulk and scale, glare and light spillover, screening, and visual effects on adjacent public and private property.

As presented, the absence of an explicit compatibility pathway summary and cross-references should not be the basis for concluding no significant land use compatibility impacts on surrounding communities. A targeted improvement would be to add a short "Land Use Compatibility and Indirect Effects" subsection in Chapter 4 that (1) identifies the key receptor areas (adjacent residential and park and open space), (2) lists the indirect compatibility pathways considered, (3) cross-references the appendix sections where each pathway is evaluated, and (4) briefly explains how those results support or qualify the land use significance conclusion.

1a. Post-2024 State Housing and TOD Requirements

Appendix H evaluates planned and future land use but does not address whether post-2024 state housing and transit-oriented development requirements materially affect the reasonably foreseeable planned land use condition in station areas near SEA. RCW 36.70A.840 requires qualifying cities to allow substantial residential and mixed-use capacity within rail station areas, including an average 3.5 FAR standard. This could affect planned intensity assumptions in station areas adjacent to or near SEA where airport-related effects are also present. The FEIS does not need to assume incompatibility parcel by parcel, and current state law contains specific commercial airport provisions in the middle-housing framework that limit automatic application. However, the FEIS should disclose whether these requirements change the planned intensity assumptions that inform the land use affected environment and compatibility context, particularly where increased residential capacity could overlap areas experiencing airport-related effects.

2. Cargo Development Intensity Shifts and Adjacent Compatibility

This deficiency is evidence that the significance methodology screens out intensity-driven compatibility effects by treating land use designation and plan consistency as a proxy for an effects-based evaluation. Cargo relocation can change interface conditions, including truck activity, hours of operation, lighting, and noise, without changing the underlying land use designation or its allowability under the ILA, and the land use narrative does not clearly show how those edge effects are bounded and evaluated.

Appendix H acknowledges that cargo development would change the use of some Port-owned parcels, including the cargo development elements C02 and C03 on land that is currently vacant (former residential), and that shifting cargo warehousing functions north of SR 518 would introduce additional truck traffic in those areas, with surface transportation impacts addressed separately. Appendix H identifies five intersections near the north of SR 518 area with Port-proposed mitigation measures (Appendix H, Section 4.2.1.2 [PDF p. 13]). However, the land use analysis does not clearly distinguish which project elements represent meaningful land use changes or intensity shifts (for example changes in truck activity, hours of operation, lighting, noise, and on-site circulation) that could affect compatibility at adjacent sensitive edges near residential uses north of SR 518.

Appendix H also does not provide a concise, land use focused summary describing how edge compatibility is evaluated when cargo and support functions shift location and intensity, nor does it provide a clear crosswalk to the specific SEPA sections where truck activity effects and related interface pathways (nuisance conditions, access and safety, and buffer performance) are analyzed. Without that bounding and cross-referencing, the conclusion of no significant land use compatibility impacts can read as resting primarily on plan consistency rather than an explicit evaluation of compatibility effects at the residential edge.

3. Tub Lake Vicinity Development and Open Space Compatibility

This deficiency is evidence that the significance methodology screens out open space adjacency effects by substituting a plan consistency finding for an effects-based evaluation of interface conditions. The land use documentation does not clearly identify the Tub Lake interface pathways considered, or where those pathways are analyzed and mitigated elsewhere in the SEPA record.

Appendix H concludes that the development in the vicinity of Tub Lake would be consistent with surrounding land uses and would not restrict the City of SeaTac's implementation of Parks, Recreation, and Open Space objectives 7B and 7C (Appendix H, Section 4.2.1.2 [PDF p. 13]; Section 3.2.2 [PDF p. 7]), and, therefore, finds the Action Alternatives consistent with the Envision SeaTac 2044 Comprehensive Plan. While this supports a plan consistency conclusion, it does not clearly document whether, or how, the SEPA record evaluates open space adjacency and interface effects relevant to Tub Lake, such as changes in buffer function, edge conditions, and public enjoyment associated with nearby airport-support development.

Appendix H does not describe a Tub Lake specific adjacency or interface screening approach, and it does not provide clear cross-references to where buffer treatments, edge design measures, or other "non-interference" evaluation is documented elsewhere in the SEPA record. Without an explicit Tub Lake interface pathway summary and cross-references, the record relies on plan consistency as a proxy for concluding there are no significant open space adjacency impacts.

A targeted improvement would be to add a Tub Lake adjacency subsection to Appendix H that explicitly identifies the open space interface pathways considered, cross-references where those pathways are analyzed and mitigated in the SEPA record and explains how those results support the no-significant-impact conclusion.

Scope, Phasing, and Cumulative Effects

These two deficiencies relate to how the DEIS bounds the land use significance conclusion over time and across the analysis horizon. The inverted-test methodology compounds here: by treating plan consistency and ILA allowability as dispositive, the DEIS does not need to clearly define what action it is evaluating or what regulatory assumptions it is relying on over what time period. Deficiencies 4 and 5 identify where the DEIS does not clearly distinguish between the adopted Near-Term Projects and potential future actions (including Future AAA context) or clearly state how ILA-based regulatory assumptions are treated over the analysis horizon. Clarifying these boundaries is necessary for readers to understand what the land use significance conclusion covers, and how any reasonably foreseeable future-phase actions are handled in cumulative effects.

4. Future AAA Context Versus Analyzed Action

This deficiency affects the defensibility of the land use significance determination because Appendix H misstates the operative ILA by treating Future AAA parcels as already exempt from applicable development standards, and

because the DEIS does not clearly distinguish between adopted AAA regulatory status and potential future AAA incorporation.

Appendix H also indicates that Future AAA utilization would occur only if the Port adopts the SAMP and commences development actions, which suggests a potential future-phase condition rather than an element of the near-term action as described.

Appendix H is organized around the NTPs evaluated in the EA, but it also describes parcels designated as "Future AAA," which "have the potential to be utilized for airport operations in the future," contingent on SAMP adoption and subsequent development actions (Appendix H, Section 3.2.1.1 and 3.2.1.2 [PDF p. 6]). Appendix H explains that parcels within the AAA and "Future AAA" may be exempt from certain development standards under the ILA framework, which underscores that these designations have practical implications for how future development could occur. Appendix H also indicates that Future AAA utilization would occur only if the Port adopts the SAMP and commences development actions, which suggests a potential future-phase condition rather than an element of the near-term action as described.

However, the land use documentation does not clearly state whether "Future AAA" is provided solely as contextual information for understanding the ILA framework and mapping, or whether it is being treated as part of the action's land use impact envelope for purposes of indirect and cumulative land use compatibility effects. This is a material scoping issue because the land use significance conclusion is framed around plan consistency and ILA allowability, but the documentation does not identify whether Future AAA parcels are within the scope of the land use conclusion or are discussed only to describe the ILA geography and airport planning framework. In addition, the current ILA is scheduled to expire on February 17, 2028, and the terms and continuity of any subsequent agreement are uncertain. The FEIS should avoid implying that current ILA-based exemptions or development standards will necessarily apply over the full analysis horizon, unless that assumption is explicitly stated and supported. At minimum, the FEIS should clarify that the land use conclusion is based on the adopted regulatory setting at the time of analysis and does not assume renewal of the ILA on the same terms.

The DEIS should clearly define scope and phasing boundaries for the land use conclusion, and, if future utilization of "Future AAA" parcels is considered reasonably foreseeable, it should cross-reference where combined effects over time are evaluated in the cumulative impacts analysis. If Future AAA is not part of the analyzed action, the FEIS should state that explicitly and should clarify that potential future development of Future AAA parcels would be subject to separate future decision-making and environmental review, as applicable. Without this clarification, the "no significant land use impacts" conclusion can read as being applied to an evolving program without a transparent explanation of what is, and is not, included in the analysis.

5. Interlocal Agreement (ILA) Role, Time Horizon, and Reliance Across the SEPA Record

This deficiency is evidence that the significance methodology relies on ILA allowability as durable constraint bounding indirect and cumulative compatibility effects without clearly stating that assumption or its limits. The DEIS does not consistently clarify whether ILA provisions are being used to describe the current regulatory setting only, or are being implicitly treated as applicable over the full analysis horizon.

Appendix H describes the ILA as the cooperative land use management framework for Port-owned property in SeaTac, including AAA designations, allowable uses, and the treatment of "edge properties," and it indicates that some parcels within the AAA, and parcels designated as "Future AAA," may be exempt from certain development standards under the ILA framework. In multiple locations, the land use documentation relies on ILA allowability, in combination with plan consistency, to support the "no significant land use impacts" conclusion.

Where the FEIS relies on ILA allowability to support a no-significant-impact conclusion, it should also address applicable ILA compatibility provisions, including edge-property provisions intended to reduce off-site edge effects.

However, the SEPA record does not consistently clarify whether references to the ILA are intended to describe the current regulatory setting only, or whether the analysis is implicitly relying on continued ILA terms and exemptions over the full analysis horizon, including for indirect, or cumulative, effects. This distinction matters because the current ILA is scheduled to expire on February 17, 2028, and the terms, continuity, and enforceability of any successor agreement are uncertain.

A targeted improvement is for the FEIS to add a short "ILA reliance and time horizon" statement to both Appendix H and Chapter 4 that: (1) states the ILA is part of the regulatory setting in effect at the time of analysis, (2) clarifies that the land use significance conclusion for the Proposed Action does not assume renewal of the ILA on the same terms beyond its current expiration date, and (3) identifies where any future-phase actions, if considered reasonably foreseeable, are evaluated in the cumulative impacts analysis.

Standards, Assumptions, and Consistency Across the SEPA Record

The deficiency relates to the governing legal framework the DEIS uses to define compatibility, and it connects directly to the inverted-test problem identified in Deficiency 1. Deficiency 6 identifies where the DEIS cites RCW 36.70.547 in framing land use compatibility frameworks the land use significance conclusion relies upon.

6. RCW 36.70.547 Applicability and Compatibility Standards

This deficiency is evidence that the legal hook for the airport-protective compatibility test in Chapter 4 does not appear applicable to SEA. RCW 36.70.547 does not appear applicable to SEA on its face: the statute is titled "General aviation airports – Siting of incompatible uses" and FAA expressly applies SEA as a commercial service airport. If the Port continues to rely on this statute to frame the land use significance analysis, the FEIS should identify the legal basis for doing so. Otherwise the reference should be removed. This matters beyond a citation cleanup: Chapter 4 appears to use RCW 36.70.547 to justify the airport-protective compatibility test identified in Deficiency 1, and if the legal basis for that framing does not apply to SEA, the compatibility test it supports is also without a clear legal foundation in the record.

Appendix H and Chapter 4 cite RCW 36.70.547 in describing Washington State Growth Management Act (GMA) provisions intended to discourage incompatible land uses adjacent to airports, and they characterize this provision as protecting airport development and operations from inconsistent or incompatible adjacent uses (Appendix H, Section 3, Planned and Future Land Use [PDF p. 5]). However, the land use documentation does not clearly explain the intent of the reference as applied to SEA, including whether the statute is being cited as a general policy context, as a specific legal applicability basis, or as a supporting rationale for the plan consistency and compatibility conclusions.

In addition, the land use discussion does not clearly identify which airport land use compatibility frameworks and standards are being relied upon for SEA beyond ILA allowability and local comprehensive plan policies. If the DEIS is using additional compatibility concepts, the record should name those frameworks explicitly and describe how they are applied, or cross-reference where they are applied elsewhere in the SEPA record. Clarifying both the role of RCW 36.70.547 and the specific compatibility frameworks relied upon would reduce confusion about governing standards.

Conclusions and Recommendations

Taken together, the six deficiencies documented in this memo reflect a significance methodology that does not clearly evaluate whether the Proposed Action causes adverse effects on surrounding land uses. The individual documentation and consistency gaps are symptoms of that underlying problem. Addressing them in the FEIS will require correcting the methodology, not only filling documentation gaps, and the recommendations below are framed accordingly.

The following targeted changes are recommended to improve clarity, traceability, and defensibility of the land use significance determination.

Deficiency 1: Land Use Significance Methodology

- Add a "Land Use Compatibility and Indirect Effects" subsection in Chapter 4 with a short cross-reference table identifying key receptor areas, indirect compatibility pathways, where each pathway is evaluated in the SEPA record, and how those results support or quality the land use significance conclusion.
- Identify which NTP elements occupy or directly adjoin ILA-defined edge properties and demonstrate how applicable ILA Section 3.4 edge provisions are satisfied.

Deficiency 1a: Post-2024 State Housing and TOD Requirements

- Evaluate whether RCW 36.70A.840 and related post-2024 state housing and TOD requirements materially alter the reasonably foreseeable planned land use condition used in Appendix H, particularly where increased residential capacity overlaps areas experiencing airport-related effects.

Deficiency 2: Cargo Development Intensity Shifts

- Provide a land use focused summary of cargo-related intensity indicators north of SR 518, identify adjacent sensitive receptors, and cross-reference where interface effects are evaluated and where minimization mitigation is identified in the SPEA record.

Deficiency 3: Tub Lake Open Space Adjacency

- Add a Tub Lake adjacency subsection to Appendix H identifying open space interface pathways, cross-referencing where design measures, minimization, or mitigation are documented in the SEPA record, and explaining how those results support the no-significant-finding conclusion.

Deficiency 4: Future AAA Mischaracterization and Scope Boundaries

- Correct the Appendix H misstatement that Future AAA parcels are exempt from ILA development standards.
- Identify the current AAA status of each affected NTP parcel and any NTP or subsequent reasonably foreseeable action that would require amendment of the AAA map.
- Clearly state whether Future AAA is provided as context only or is treated as reasonably foreseeable for purposes of cumulative land use compatibility effects and cross-reference the cumulative impacts analysis as applicable.

Deficiency 5: ILA Role and Time Horizon

- Add a short "ILA Reliance and Time Horizon" statement to both Appendix H and Chapter 4 clarifying that the ILA is part of the regulatory setting at the time of analysis, that the land use significance

conclusion does not assume renewal on the same terms beyond February 17, 2028, and identifying where future-phase actions are evaluated in the cumulative impacts analysis.

Deficiency 6: RCW 36.70.547 Applicability and Compatibility Standards

- RCW 36.70.547 does not appear applicable to SEA on its face. The Port should either identify the legal basis for continued reliance on this statute in framing land use significance or remove the reference from the FEIS land use discussion.
  Explicitly state the SEA-relevant compatibility frameworks and standards relied upon and distinguish regulatory requirements from policy context.

Acronym List

SAMP - Sustainable Airport Master Plan
SEA – Seattle-Tacoma International Airport
NTP – Near-Term Project
SEPA – State Environmental Policy Act
DEIS – Draft Environmental Impact Statement
ILA – Interlocal Agreement
AAA- Airport Activity Area
FEIS- Final Environmental Impact Statement
RCW – Revised Code of Washington
PSRC – Puget Sound Regional Council
MPP – Multicounty Planning Policy
GSA – General Study Area
SR – State Route
FAA – Federal Aviation Administration
USEPA – United States Environmental Protection Agency
WSDE – Washington State Department of Ecology
NAAQS – National Ambient Air Quality Standards
GMA – Growth Management Act

References

City of Burien. 2024. *Burien 2044 Comprehensive Plan.*
City of Des Moines. 2025. *Imagine Des Moines 2044.*
City of SeaTac. 1999. *SeaTac City Center Plan.*
City of SeaTac. 2015. *Angle Lake District Station Area Plan.*
City of SeaTac. 2024. *Envision SeaTac 2044.*
City of SeaTac. 2024. *SeaTac Parks Comprehensive Plan.*
City of Tukwila. 2024. *Tukwila 2024–2044 Comprehensive Plan.*
Port of Seattle, City of SeaTac. 2018. *Interlocal Agreement.*
Puget Sound Regional Council. 2020. *Vision 2050.*

APPENDIX A

Noise & Noise Compatible Land Use Review Memo

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Sound . Vibration . Air
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To:	Zack Shields, Senior Planner City of SeaTac Community and Economic Development 206.973.4850
From:	Michael Minor
Date:	July 31, 2026
Subject	Review of the 2025-26 SEA Part 150 Noise and Land Use Compatibility Study and Draft Noise Exposure Maps

Introduction

This memorandum was produced at the request of Perteet Inc, and the Cities of SeaTac, Des Moines, and Burien, Washington. The purpose of this review is to examine the analysis, methods and results provided in the SEPA Draft Environmental Impact Statement (DEIS) for the Port of Seattle's 31 near-term projects described in the Sustainable Airport Master Plan (SAMP) for the Seattle-Tacoma International Airport (SEA). Specifically, this review examined the DEIS Appendix J, Noise Exposure Map (NEM) Report for Seattle-Tacoma International Airport. In addition, we reviewed the current 14 CFR Part 150 Study and provide our recommendations below.

Main Study

Port of Seattle / Landrum & Brown, Incorporated. Sustainable Airport Master Plan – Near-Term Projects. *Noise Technical Report, 14 CFR Part 150 Study.* June 2026 Version.

Supporting

- Landrum & Brown / Port of Seattle. *Seattle-Tacoma International Airport Part 150 Noise Compatibility Study — Final, Chapter Six: Noise Compatibility Program.* October 2013.
- Port of Seattle / ESA / Landrum & Brown. *NEM Workshop Boards* — boards displayed at the SEA Part 150 NEM Public Workshops, Sept. 30, Oct. 2, and Oct. 4, 2025.
- Port of Seattle. *SEA Part 150 Study — Technical Review Committee (TRC) Meeting #6* presentation slides, June 8, 2026.
- Port of Seattle. SEA Part 150 Noise Study overview page. https://www.portseattle.org/page/sea-part-150-noise-study
- Port of Seattle. 2032 Noise Exposure Map interactive page. https://seapart150.com/2032-noise-exposure-map/
- Port of Seattle. SEA Part 150 Public Workshop Handout, October 2025. https://seapart150.com/wp-content/uploads/2025/10/SEA-Part-150-Workshop-Handout.pdf
- SEA Part 150 Study project website (documents, schedule, FAQs, comment portal). https://seapart150.com/

Note on Limitations of this Review.

Given the limited time to perform this review, there could be issues or concerns that were not identified and might be identified and presented at a later date. However, based on this initial analysis, Sea-Tac Airport should continue to work on the proposed changes and attempt to provide more noise abatement to reduce the increased size of the 65 dBA DNL, as is discussed in this review.

Important Factor to Consider

The noise level descriptor used for airport noise modeling is based on hourly energy average noise levels. The equivalent sound level (Leq) is the level of a constant sound for a specified period of time that has the same sound energy as an actual fluctuating noise over the same period of time. It is an energy average sound level. The DNL is a single number similar to the Leq; however, for the DNL, a 10 dB penalty is added to noise that occurs during the nighttime hours when most people are more sensitive to increased noise levels (10:00 pm to 7:00 am the following day).

Due to the 10 dB penalty, one nighttime event will have the same acoustical effect as 10 daytime events. Therefore, shifting ***one nighttime aircraft operation*** *from one runway to a different runway is the equivalent of* ***shifting 10 daytime aircraft****. Therefore, shifting nighttime operations will make a far more significant difference in the size and location of the 65 DNL than a similar shift of daytime operations. In many cases, nighttime operations will dominate the noise contours.*

General Summary

Appendix J presents evidence of a proposed substantial increase in noise impacts and reduced livability for a large part of the dense residential areas near the airport. Attachments 1 and 2 were developed to illustrate how the proposed action moves noise from aircraft operations from the runways 1 and 2 over to runway 3. This was compiled for the north end as the flow makes it easier to illustrate the changes, but similar illustrations can also be made for areas south of the airport, where the contours are clearly moved to the west from increased usage of runway 3. Attachment 3 is from the open house display and has the 2022 and 2032 contours showing again how this proposed action appears to result in a notable increase in flights on runway 3.

One finding that deserves significant public attention is that the 65 dBA DNL noise exposure is forecast to grow substantially in area and affected population between 2022 and 2032. This is a reversal of the shrinking trend that justified the last Noise Remedy Boundary from 2014. The number of structures within the 65 dBA DBNL is predicted to increase by 163%, while the population inside the 65 dBA DNL is set to increase by 170%.

Some of this increase is directly due to the increase of flights using the third runway, including an increase in nighttime use on runway 3. This will concentrate additional nighttime noise on communities under the third runway's approach path, which are the most vocal about existing impacts and, based on the previous contour, are not within the 65 dBA DNL.

This analysis and NEM provides documentation of a planned increase in use of runway 3 in direct contrast to previous planning and commitments made by the airport when the runway was approved. This new runway use will directly result in aircraft operating over a group of residences where frequent overflights were far less frequent. The increased operations on runway 3 are most visible in the change in the 75 dBA DNL contour in the north part of the airport, where it is easy to see the increased lobe to the north due to the increased use of the third runway. To illustrate this, I have added a snapshot of contours with a comparison. Request that the EIS include this information and call out the changes and why they are occurring. See attachments 1 through 3.

Finally, it is unclear the actual status of the ongoing mitigation plans proposed in 2014, and the re-testing of homes provided mitigation prior to 2013 to make certain the insulation is still meeting FAA requirements.

Final Recommendations:

1. The port should be required to complete all existing and outstanding noise mitigation measures before any changes in airport operations are approved. This would include providing mitigation for any and all residences, churches, schools and other noise sensitive properties located anywhere inside the existing and/or proposed 65 dBA DNL contour.
2. Verification of previous mitigation measures should be expanded to include all previously mitigated homes, regardless of age, and completed prior to proposing new airport operational changes.
3. As is normally required, abatement, or reducing noise from operations, should always be the preferred and first method of reducing or preventing impacts. Based on the size of the runway 3 contours, it is not clear that runway usage was even considered as a method to reduce the greatly increased DNL contours.
4. The Port should be required to provide detailed information related to any increase in the use of the third runway, as it appears to have a disproportional increase in operations, including an increase in nighttime operations under the proposed action. The FAA and the Port should also be required to consider alternatives to runway 3 use, and if the operational increase is warranted, provided the noise mitigation before the increase in operations on runway 3 are implemented.
5. The proposed project results in a 40% increase in impacted area, a 163% increase in number of households impacted, and a 171 % increase in number of people directly impacted by the project, the finding of no significance should be reconsidered. The only reason it was allowed to be issued is due to the availability of sound insulation as mitigation. However, the Port has not met previous requirements, see number 1 above.
6. Since the Port is still working on completing previous commitments for mitigation, some that could be from several years ago, and is reviewing the overall effectiveness and longevity of previous mitigation, the proposed increased use runway 3 as proposed should, at the least, be delayed or reconsidered and remain capped at current use until such time the Port can show any new runway 3 operations are required and can be properly mitigated.
7. Finally, the substantial geographic and population expansion documented through Part 150 should be considered in the Draft EIS's characterization of noise impacts, and the Draft EIS should not rely on future sound insulation as mitigation unless that mitigation is sufficiently specific, funded, timely, and reasonably assured of implementation.

Review of the SEA Part 150 Noise and Land Use Compatibility Study

To better examine the proposed action a comparison of the 2014 Study Part 150 and the 2025-2026 Draft Part 150 Study was prepared and summarized in Table 1. This table provides a summary of the changes to the 65 dBA DNL area, including a comparison of the overall increase in the DNL contours and the number of households with noise impacts under the proposed action.

Table1. Comparisons of Operations, DNL Area Houring and Population: 2018-2022-2032

Metric	2014 Study (2018 forecast)	2025–26 Draft (2022 forecast)	Percentage Change: 2018-2022	2025–26 Draft (2032 forecast)	Percentage Change: 2022-2023
Daytime Operations	N/A	337,336	N/A	399,074	+0.5%
Nighttime Operations	N/A	64,015	N/A	76,580	+19.6%
Run-Up Operations	N/A	477	N/A	566	+18.7%
65 dBA DNL Area	7.3 sq-miles	8.8 sq-miles	+20.5%	10.2 sq-miles	+15.9%
Housing in 65 dBA DNL	3,771	6.915	+83.4%	9,941	+43.8%
Population in 65 dBA DNL	9,712	18,410	+89.6%	26,302	+42.9%

Sources:

- 2025-26 Part 150 NEM for 2022, 2032
- NEM Workshop Boards (seapart150.com/wp-content/uploads/2025/10/NEM_Wkshp_Boards_8.5x11_web-rfs.pdf)
- *2014 Part 150 Study – Chapter 6 (Noise Compatibility Program)* (seapart150.com/wp-content/uploads/2025/05/Chapter-6_Noise-Compatibilty-Program.pdf)

N/A = Information not available at the time of this review.

Based on a review of these projections, the 2032 proposed action forecast shows the 65 dBA DNL population footprint nearly doubling relative to the 2022 baseline. Noting also that the 2022 baseline is 20.5% larger in area and nearly double (+83.4% increase) in housing units compared to the last study's 2018 forecast. The population number between 2022 and 2032 is projected to increase by 42.9%.

This increase reverses the multi-decade trend the 2014 study explicitly relied on for the final assumptions and noise mitigation measures. The 2014 study's entire rationale for the reduction in the noise contours was based on the phase-out of louder Stage 2 aircraft and updated operations. That trend of a declining noise in the greater area surrounding the airport has now not only reversed but is proposed to be substantially increased with the proposed action.

In general, a 20% increase or so in aircraft operations is resulting in a 170.8% increase in population impacts. This is a significant increase and makes it difficult to understand how this was classified as having no significant impacts, even with the availability of sound insulation for mitigation.

Noise Modeling Method and Modeling Inputs and Assumptions

As described below, there is some concern about how the land use and population projections in the FAA Part 150 work were performed. The land use and population figures used are from a 2020 Census block data and 2023 5-year estimate that was then applied to a 2032 forecast year. Using a 12-year-old population baseline to predict future noise impacts 10 years into the future is not likely to be accurate and should be reviewed with input from local area planners.

Note that this area is known as one of the fastest-growing parts of the Puget Sound region. Des Moines, Burien, SeaTac, and unincorporated King County near the airport have all seen substantial multifamily development over the last decade. Although the above methodology is approved by the FAA, if population growth continues at current rates the actual 2032 population inside the 65+ DNL contour could be substantially understated. Finally, it is clear that the reason for the increased number of noise impacts is directly related to increased usage of runway 3. This movement of noise sources to a different area not only increases the number of noise impacts, but also complicates land use planning for the cities in the vicinity of the airport.

Runway Usage and Flight Track Data

There are two concerns with the flight tracking and runway usage:

- **Aircraft Flow Conditions:** The study uses limed flight track data for determining the forecast. Runway/flow usage at Sea-Tac is driven heavily by wind direction and weather and is near a large body of water. As a result, the wind direction and weather, which varies greatly year by year and season, may not be accurately represented. A stagnant weather period or other complications during the selected period could cause an incorrect baseline for operations. Given the weather conditions, it would be preferred if a larger sample could be used to better represent the actual operations and flow conditions as these will greatly affect the DNL contours. Examining a larger sample of data taken from different seasons and weather conditions and providing a summary of not only the flight tracks, but also weather conditions and flow to show a more accurate view of operations, would yield a more reliable forecast.
- **Substantial Third Runway Usage:** The 2026 NCP program-management measures were to lower aircraft usage of the third runway through expanded preferential runway use. The program acknowledges that the third runway remains a persistent community noise concern, consistent with long-standing complaints from Des Moines, Burien, SeaTac and Highline-area residents since it opened in 2008. Based on the 2025-26 NEM, this was disregarded as the increase in impacts and the 65 dBA DNL is directly related to increased usage of the third runway and added noise impacts at an additional 6,170 residences when compared to 2014 results.
- **Run-Ups:** The Port needs to make and supply commitments on the location, frequency and time of day for any and all run-up operations. Current assumptions allow for flexibility that could affect some DNL contour areas. Although this is not likely to have a notable change in the contours and impacts will likely be similar to those presented, it may identify some areas where run-ups should be restricted.

Noise Abatement Measures – Options for Consideration

Noise abatement includes modifying the actual noise source. This includes changing runway usage, flight paths, landing and take-off slopes, and nighttime operational restrictions. The key issues identified under the 2022 and 2032 NEM's are due to the increasing operations on the third runway. First, routing flights during nighttime hours on the other two runways is likely to have the largest benefit for reducing the noise contours and corresponding noise levels in the Burien and Des Moines areas. As defined in the introduction, because nighttime operations carry the 10 dB penalty, even small percentage shifts in nighttime routing can matter more to the contour than much larger daytime shifts. In reviewing the contours, it is clear that increased usage of Runway 3 is responsible for the majority of the new noise impacts and the expanded 65 dBA DNL. Therefore, reducing the use of that runway will reduce the size of the 65 dBA DNL contour, and thereby also reduce noise impacts.

The Part 150 study should include a summary of the number of aircraft on each runway during the overnight and early morning hour of 10:00 pm and 7:00 am by runway, and how that distribution is changing with the proposed action. The attached graphics and the Port's own workshop boards show a clear increase in noise from the third runway, and it is confusing as to why, when the level of operations on runways 1 and 2 don't appear to increase by the same amount.

Finally, where possible, the older Stage 3 airframes used by the regional carriers should be restricted to runways 1 and 2 whenever possible, with only runways 1 and 2 during nighttime hours. Routing these louder aircraft toward the center of the existing 2018 noise contours instead of over those areas where the new impacts have been identified could help to reduce noise levels. Although this abatement measure may be difficult to implement and enforce, the substantial increase in the noise from runway 3 is directly responsible for an increase in the number of households and population of over 80% between 2018 and 2022, with an additional increase of over 40% between 2022 and 2032 (see Table 1 above for the exact numbers).

Noise Mitigation Measures

Noise mitigation is considered when noise abatement is not sufficient at reducing noise levels to within FAA regulations. The typical mitigation measure is to provide sound insulation to affected residences, schools, churches and other sensitive land uses. For example, the 2014 Part 150 Noise Control Program recommended sound insulation for several condominiums and apartments, with cost estimates of over $60 million. The table below is a summary of 2032 noise impacts at sites with DNL above 65 dBA, by land use type, taken directly from the Port's presentations.

Noise Sensitive Sites Exposed to DNL 65 and Higher

DNL Range	Total Area (Acres)	Housing Units [a]	Population [a]	Religious [b]	Schools [b]	Hospitals [b]	Historic Resources [c]	Libraries [b]	Nursing Homes [b]
65-70	4,053.8	9,315	24,624	23	12	2	0	2	42
70-75	1,568.1	626	1,678	0	0	0	0	0	3
75+	938.2	0	0	0	0	0	0	0	0
Total	**6,560.2**	**9,941**	**26,302**	**23**	**12**	**2**	**0**	**2**	**45**

Sources: SAMP NTP EA; Washington State Geospatial Portal; King County GIS Center, U.S. Census Bureau.
NOTES:
a. Housing units and population estimates derived from 2020 Census block level data and ACS 5-year Estimates Detailed Tables 2023.
b. Noise sensitive site data obtained from King County GIS Center.
c. Information published by the National Park Service regarding the National Register of Historic Places (NRHP) was referenced.

The next table illustrates the number of new sensitive land uses that will have new impact from the proposed action, again, from the Port's presentation.

Change in Noise Sensitive Sites Exposed to DNL 65 and Higher – 2022 to 2032

DNL Range	Total Area (Acres)	Housing Units [a]	Population [a]	Religious [b]	Schools [b]	Hospitals [b]	Historic Resources [c]	Libraries [b]	Nursing Homes [b]
65-70	592.0	2,529	6,563	3	3	0	0	0	13
70-75	197.8	497	1,329	0	0	0	0	0	2
75+	145.3	0	0	0	0	0	0	0	0
Total	**935.1**	**3,026**	**7,892**	**3**	**3**	**0**	**0**	**0**	**15**

Sources: SAMP NTP EA, Washington State Geospatial Portal, King County GIS Center, U.S. Census Bureau.
NOTES:
a. Housing units and population estimates derived from 2020 Census block level data and ACS 5-year Estimates Detailed Tables 2023.
b.

Similar noise mitigation requirements are provided in this 2025-26 Part 150 study, which is genuinely concerning because based on some information presented in the 2025 workshop materials, the Port reports that the construction of those previous mitigation measures were only started in 2025. If true, that means it took roughly 11–12 years between the 2014 approval of sound insulation and construction actually beginning. That gap is unacceptable and calls into question whether new mitigation measures proposed in this 2025-26 Part 150 study and noise control program are likely to be completed in a reasonable timeline given the growing affected population and large number of new impacts. A plan should be required to outline how the Port will implement the new program and a more condensed timeline for completion of the program should be required.

In addition, an active pilot test program to determine whether homes insulated before 1993 still meet the FAA's 45 dBA DNL interior noise threshold is underway. Results are currently pending on approximately 120 homes, and the results of this re-testing program are critical for implantation of any new sound insulation programs. A summary is below and some details are available from the Port at:

- $5 Million Approved to Pilot Noise Insulation Repair and Replacement for Near-Airport Communities | Port of Seattle

This program is necessary because insulation installed over 30 years ago will degrade over time, including worn-out weatherstripping, aging window seals, and HVAC wear. Also, at this time it is explicitly a pilot program, not a committed program, and eligibility is narrowly restricted to homes insulated before January 1, 1993. This means that anyone provided sound insulation over the 1993 – 2013 program is not currently covered by this repair/replace testing, even though many of those installations are also now 15 – 30 years old and likely not meting the 45 dBA interior DNL.

It is difficult to view as credible the Port's ability to complete this program in a timely manner, and therefore, the noise abatement measures provided should be maintained until such time as all potentially affected residences are fully mitigated and all previously tested homes are recertified.

Finally, the conclusions presented in the DEIS rely on the 2014 study's central and most consequential land-use action was shrinking the Noise Remedy Boundary to match the 2018 forecast contour based on continued phase-out of Stage 2 aircraft and falling operations. At that time, the 2018 forecast contour was believed to be permanently declining, but this is clearly not the case, and the cities deserve more reliable, prompt and long-lasting noise abatement from airport operations. At this time, it appears the Port has not only fallen short but has also failed to complete all existing noise mitigation measures agreed to many years ago.

Acronyms

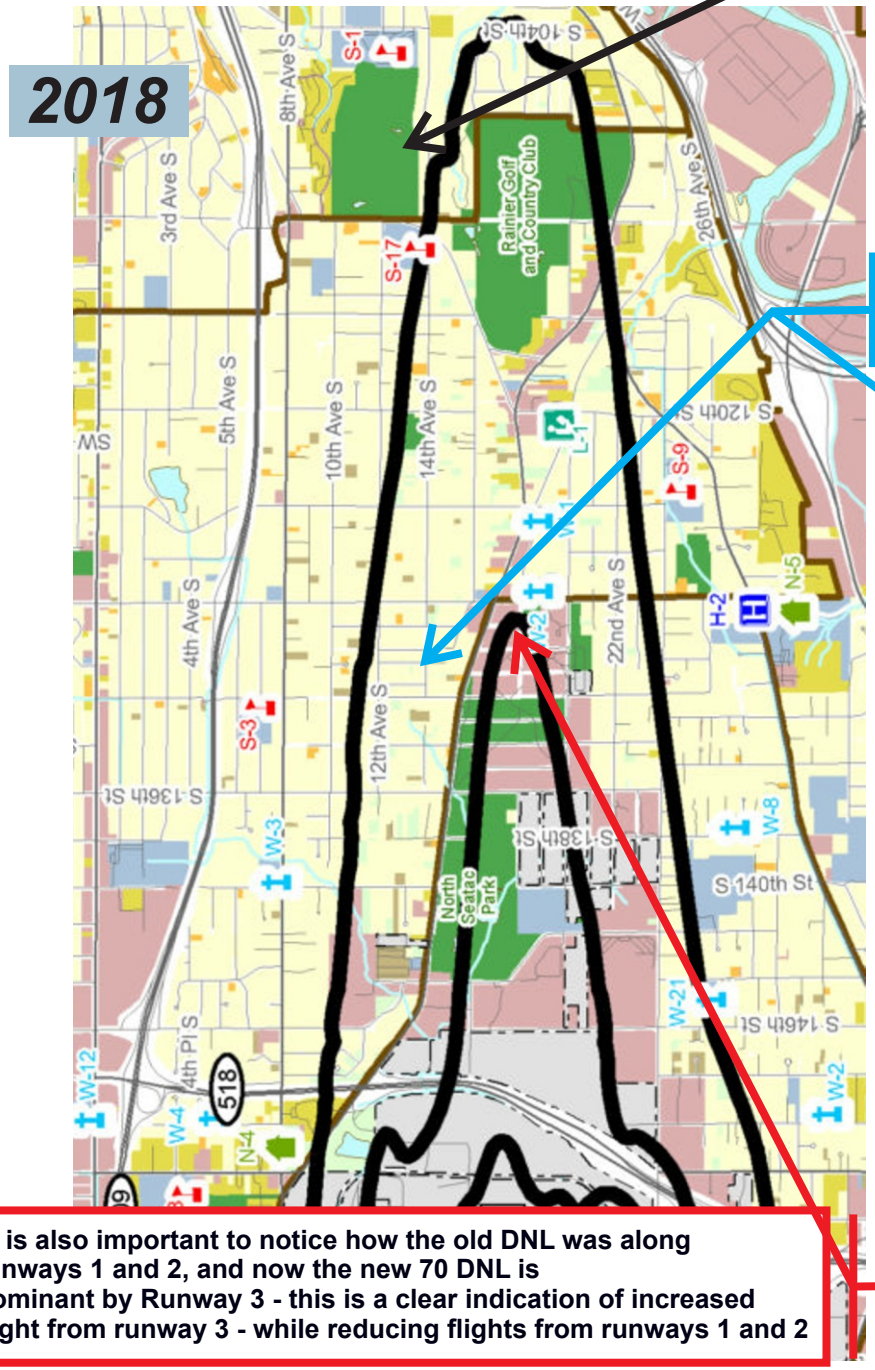
AEDT	**Aviation Environmental Design Tool**
CFR	**Code of Federal Regulations**
dB	**decibel**
dBA	**A-weighted decibel**
DBNL	**Decibel Noise Level**
DEIS	**Draft Environmental Impact Statement**
DNL	**Day/Night Noise Level**
ESA	**Environmental Sound Analysis**
FAA	**Federal Aviation Administration**
FAQ	**Frequently Asked Questions**
HVAC	**Heating, Ventilation & Air Conditioning**
Leq	**equivalent sound level**
N/A	**Information not available**
NCP	**Noise Compatibility Program**
NEM	**Noise Exposure Map**
SAMP	**Sustainable Airport Master Plan**
SEA	**Seattle-Tacoma International Airport**
SEPA	**State Environmental Policy Act**
TRC	**Technical Review Committee**

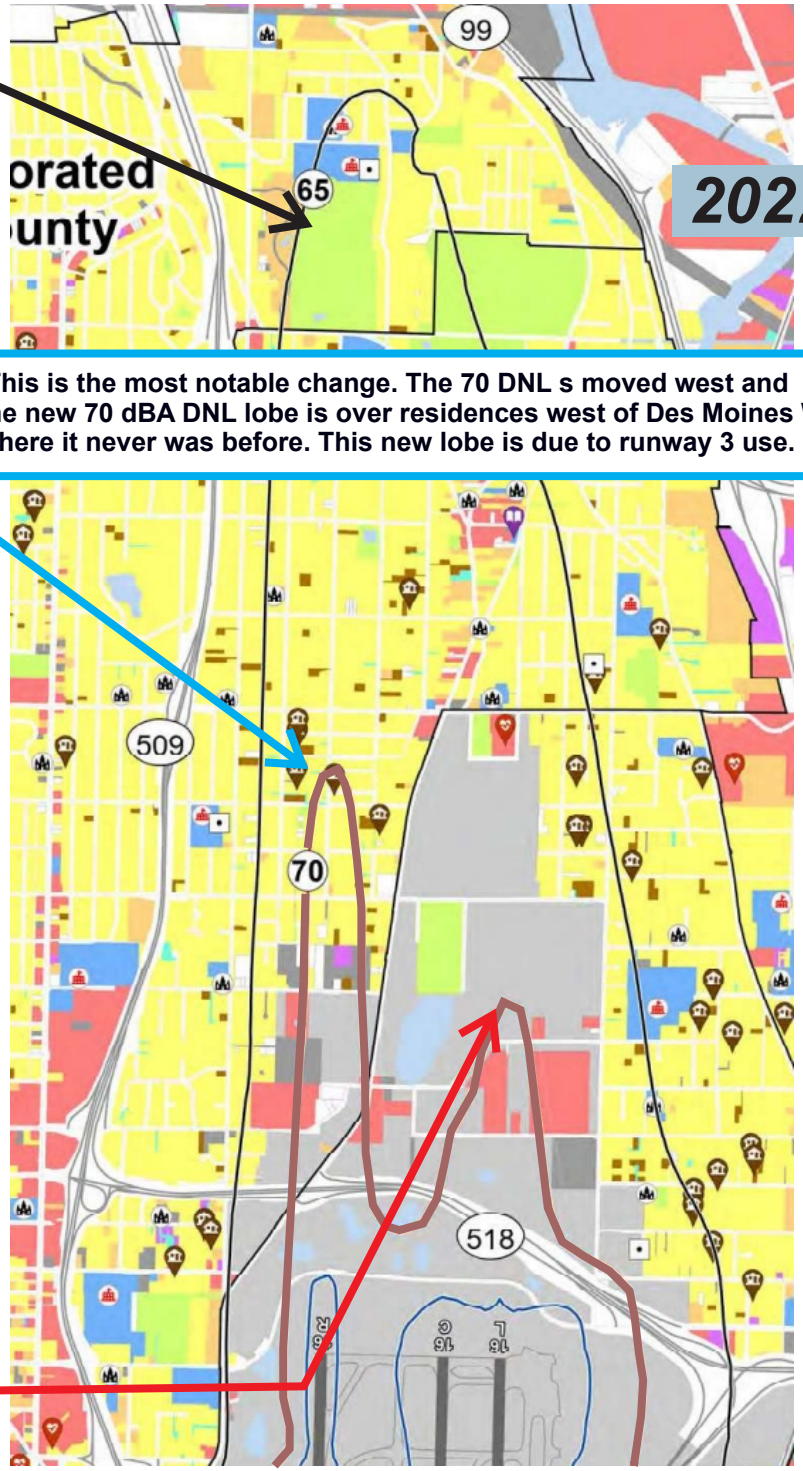
Attachment 1

Comparison of DNL: 2018 to 2022 North of Airport

Northern comparisons between 2018 and 2022 clearly shows a major increase in noise from the third runway.

Note how the 65 DNL moves west due to increased Runway 3 use and now is now over Green Acres Country Club





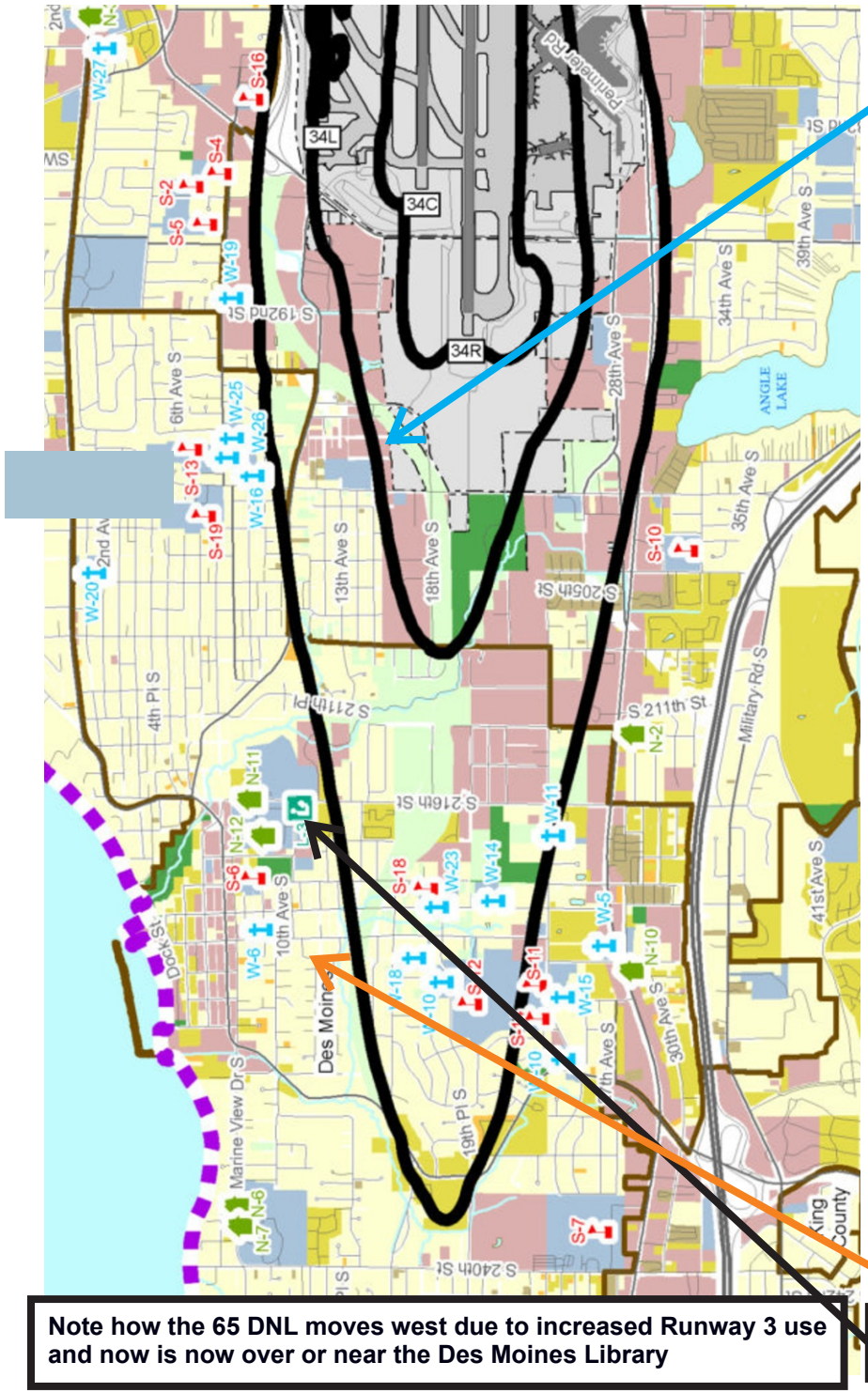
This is the most notable change. The 70 DNL s moved west and the new 70 dBA DNL lobe is over residences west of Des Moines Way where it never was before. This new lobe is due to runway 3 use.

It is also important to notice how the old DNL was along runways 1 and 2, and now the new 70 DNL is dominant by Runway 3 - this is a clear indication of increased flight from runway 3 - while reducing flights from runways 1 and 2

Attachment 2

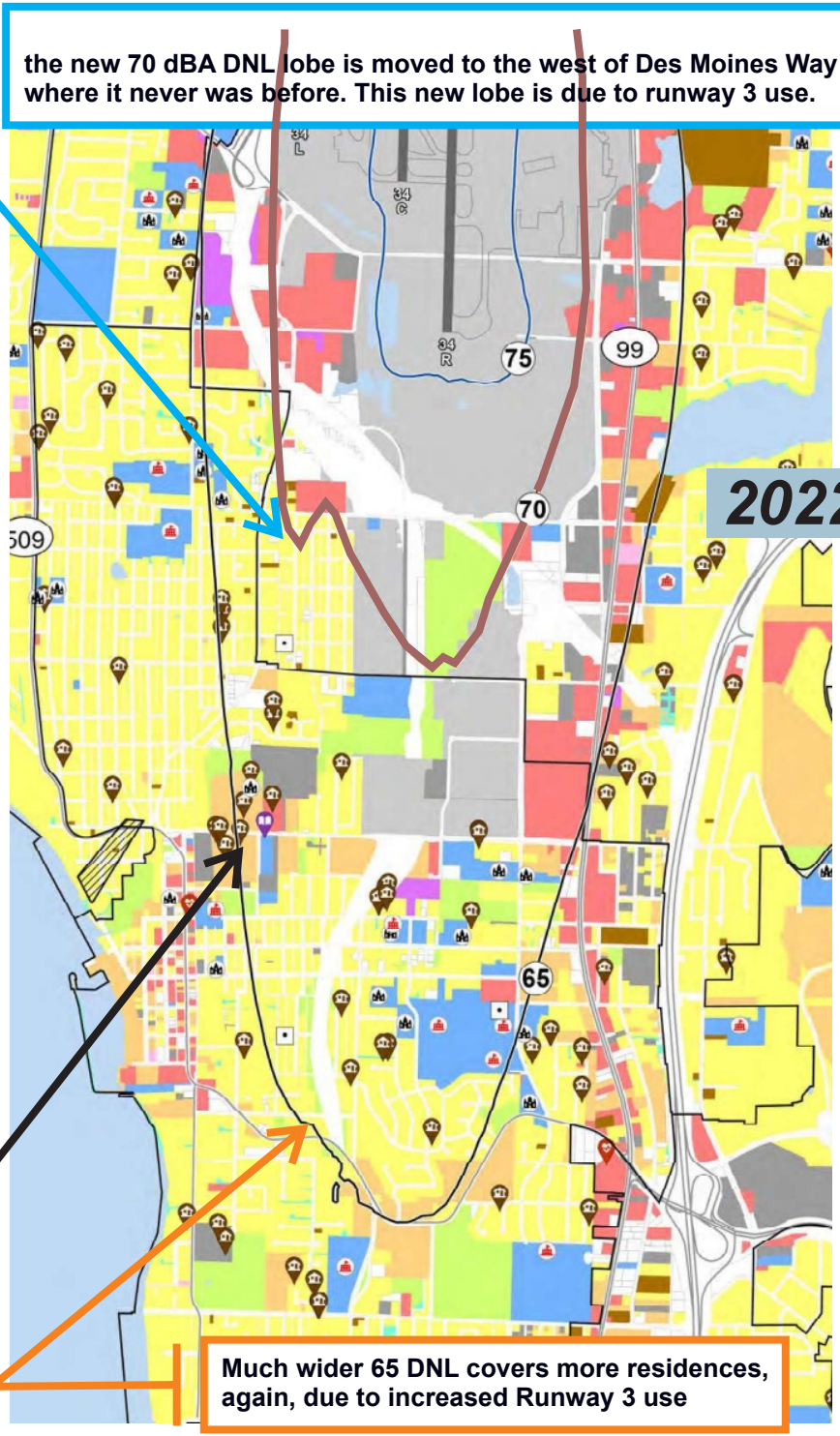
Comparison of DNL: 2018 to 2022 South of Airport

Southern comparisons between 2018 and 2022 clearly shows a major increase in noise from the third runway.



Note how the 65 DNL moves west due to increased Runway 3 use and now is now over or near the Des Moines Library

the new 70 dBA DNL lobe is moved to the west of Des Moines Way where it never was before. This new lobe is due to runway 3 use.



2022

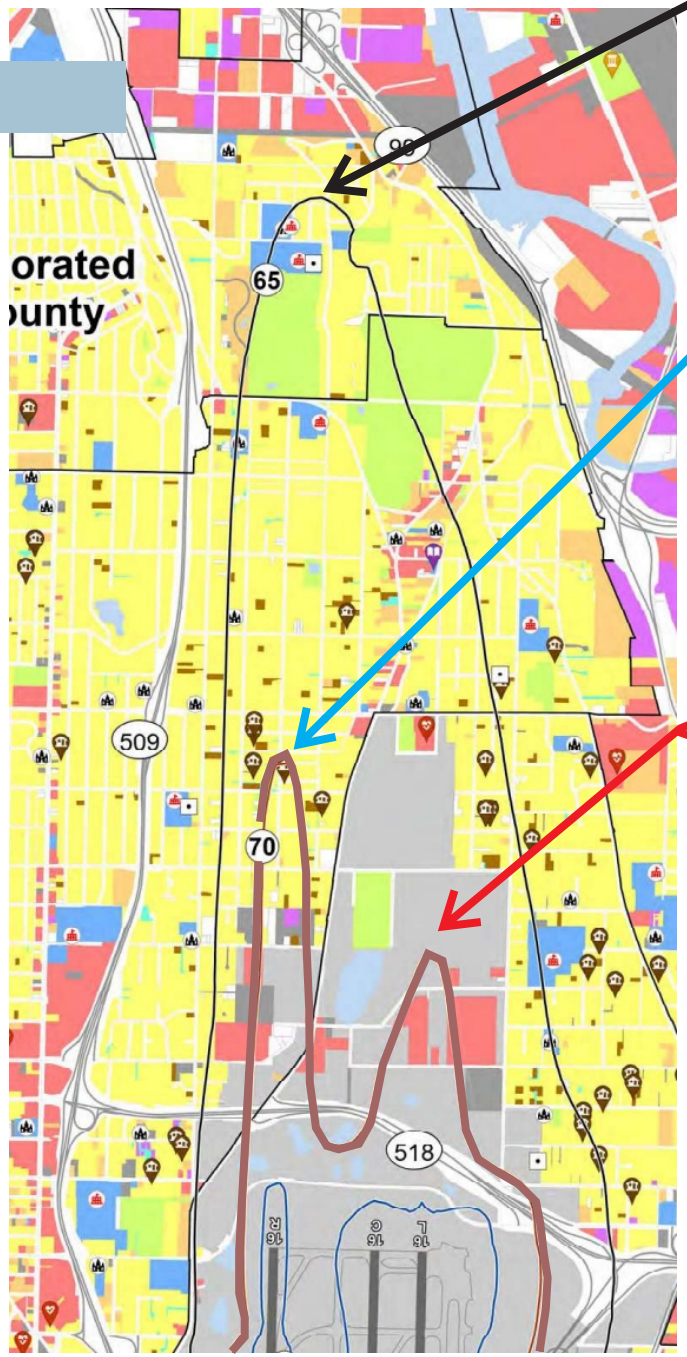
Much wider 65 DNL covers more residences, again, due to increased Runway 3 use

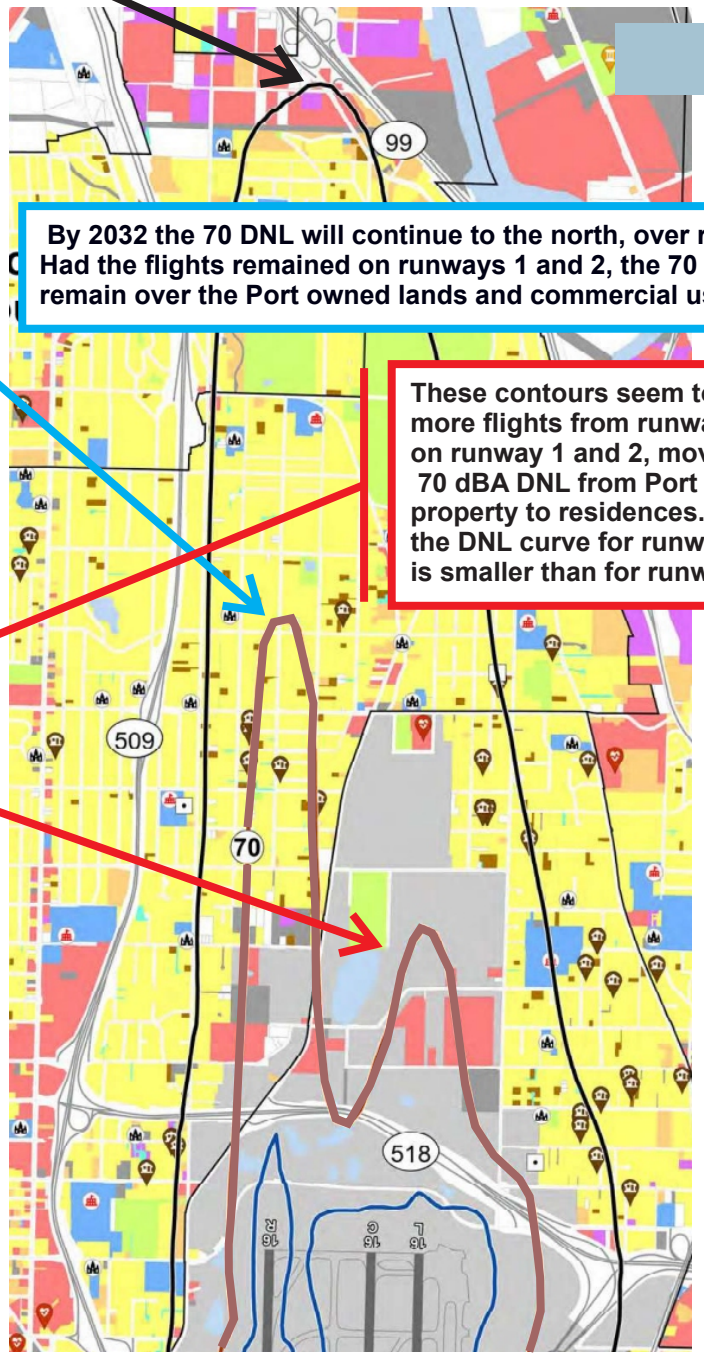
Attachment 3

Comparison of DNL: 2022 to 2032 North of Airport

Northern comparisons between 2022 and 2032 clearly shows a major increase in noise from the third runway.

By 2032 the new 65 DNL continuous to move west due to increased runway 3 use, and is wider and will include the Glen Acres apartments and more residential areas previously not impacted.





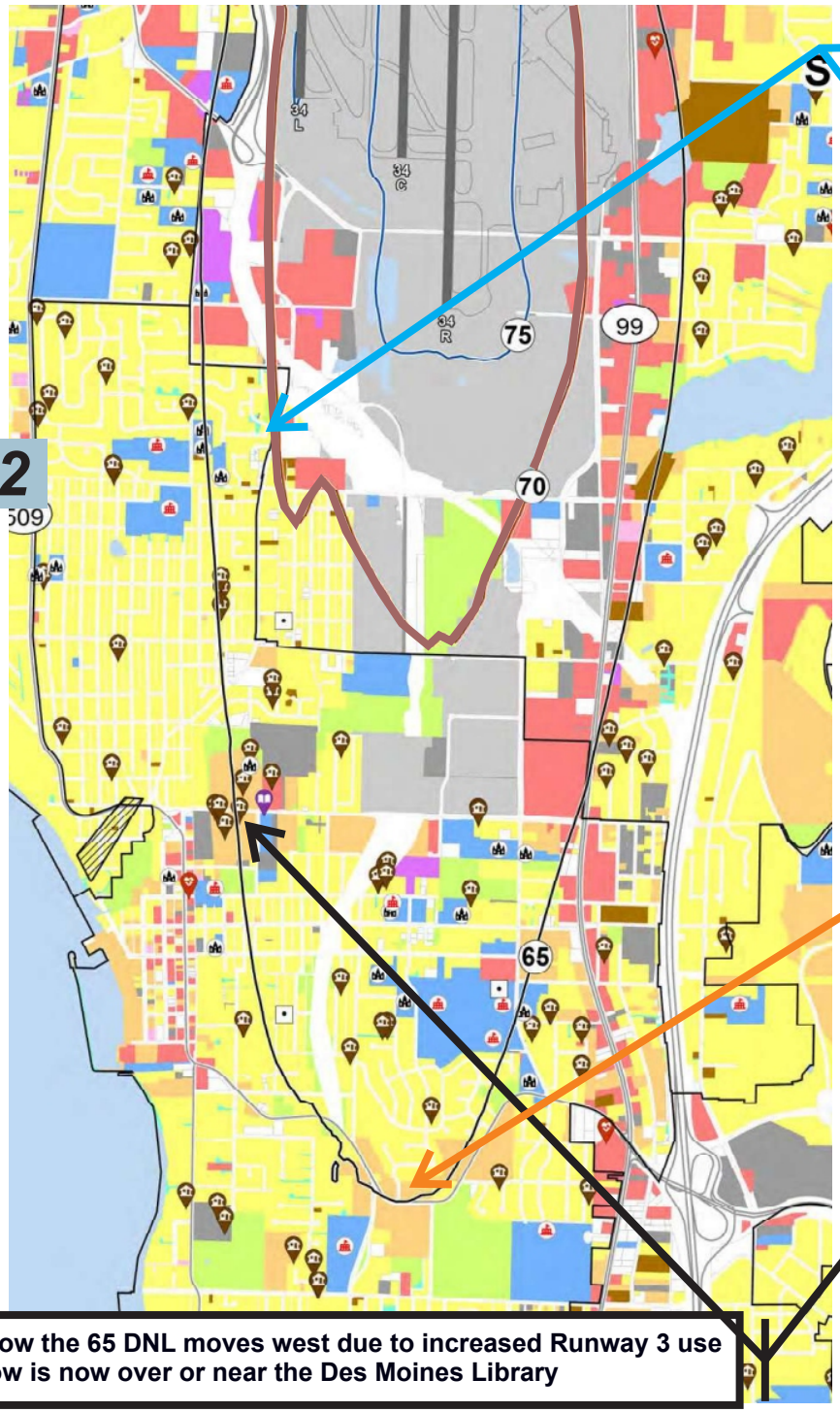
By 2032 the 70 DNL will continue to the north, over residential areas Had the flights remained on runways 1 and 2, the 70 dBA DNL would remain over the Port owned lands and commercial uses shown in gray

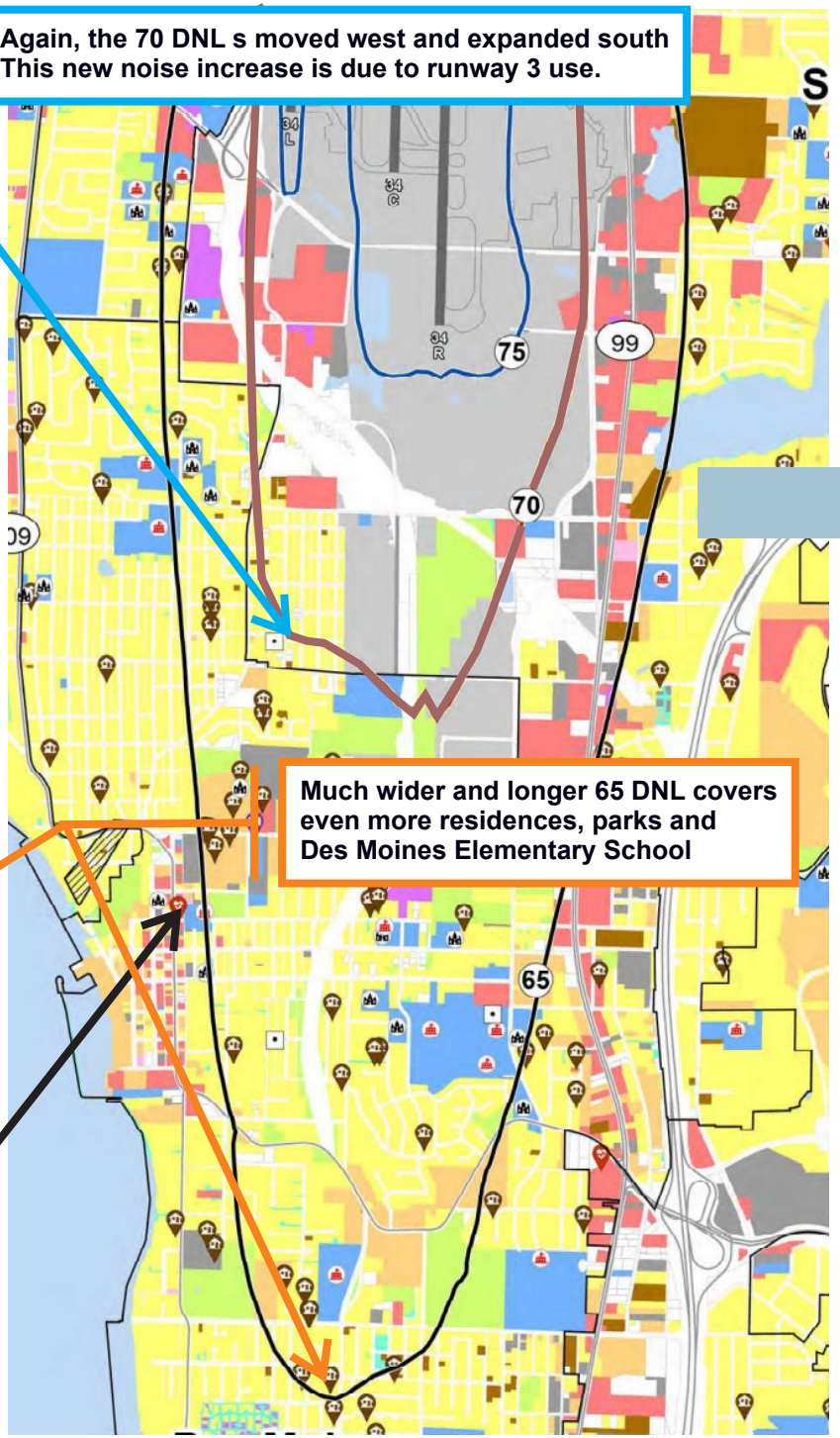
These contours seem to indicate more flights from runway 3 than on runway 1 and 2, moving the 70 dBA DNL from Port and commercial property to residences. The increase in the DNL curve for runways 1 and 2 is smaller than for runway 3

Attachment 4

Comparison of DNL: 2022 to 2032 South of Airport

Southern comparisons between 2022 and 2032 clearly shows a major increase in noise from the third runway.





Again, the 70 DNL s moved west and expanded south
This new noise increase is due to runway 3 use.

Much wider and longer 65 DNL covers even more residences, parks and Des Moines Elementary School

Note how the 65 DNL moves west due to increased Runway 3 use and now is now over or near the Des Moines Library

APPENDIX A

Surface Transportation Review Memo

MEMORANDUM

801 2nd Avenue, Suite 302, Seattle, WA 98104 | P 206.436.0515

To: Zack Shields, Senior Planner
City of SeaTac
Community and Economic Development
206.973.4850

From: Leo Xu, PE, Traffic Studies Team Leader
Perteet Inc.
346.336.4947

Re: Washington's State Environmental Policy Act (SEPA) Review of Sustainable Airport Master Plan (SAMP) Near Term Projects (NTPs) – Surface Transportation Technical Review

INTRODUCTION

The Port of Seattle's (Port) SAMP for the Seattle-Tacoma International Airport (SEA) identifies 31 NTPs to allow for current and future expansion of airport facilities. The NTPs include project elements associated with new terminal construction, ground transportation center, off-site cargo facilities, extension of airfield taxiways, and expansion of a fuel facility. Under SEPA, the Port completed a Draft Environmental Impact Statement (DEIS) for the proposed NTPs, and on May 22, 2026, the Port published its DEIS for public review and comment. The Port has adopted the National Environmental Policy Act (NEPA) documentation as well as provided additional analysis under SEPA.

This memorandum identifies problems related to the surface transportation elements in the DEIS for the SAMP NTPs and technical reports in Appendix L that render the DEIS inadequate for SEPA purposes. The review was conducted against Washington State Department of Transportation (WSDOT) Design Manual (Ch. 320, 1300), National Cooperative Highway Research Program (NCHRP) 765/255, Highway Capacity Manual (HCM) 6th Edition, Federal Highway Administration (FHWA) Crash Modification Factor (CMF) Clearinghouse, and SEPA requirements (Revised Code of Washington (RCW) 43.21C, Washington Administrative Code (WAC) 197-11).

Summary of Findings

The surface transportation elements in the DEIS and the documents found in Appendix L contain significant deficiencies in scope, disclosure, and mitigation commitments; and therefore, the Final Environmental Impact Statement (FEIS) will require revisions and additions to the current documentation. The principal deficiencies are summarized as follows.

- Temporal scope is limited to PM peak hours only – AM, weekend, and cargo peaks were not analyzed despite the Port's own modeling acknowledging congestion after 7 PM at locations, including SR 518 and airport-access ramp terminals.
- 2019 base-year calibration under-prediction (~25%) with blanket 1.25 scale factor not validated for geographic representativeness or failure-mode differentiation.
- Core technical documentation withheld from the administrative record – Synchro, SimTraffic, VISSIM, and HCS files stated as "available by request."

- Ramp-terminal delays are severe (e.g., #23: +344 s in 2032, +720 s in 2037) without adequate disclosure of queue lengths, spillback, or sensitivity.
- WSDOT-controlled intersections designated "no mitigation required" despite SEPA obligation to analyze independent of WSDOT's permit position.
- Category 3 intersection added delay masked by asymmetric signal timing optimization assumptions.
- Material mitigation terms deferred to post-SEPA Memorandum of Understanding (MOUs) rather than committed in the DEIS.
- No alternatives analysis comparing demand-side measures (Travel Demand Management (TDM), transit) against supply-side mitigations.
- No construction phasing analysis, no Construction Traffic Management Plan (CTMP) commitment, no emergency response assessment.
- No plan consistency determination with City of SeaTac Transportation Master Plan (TMP), the City of Burien TMP, or other local/regional plans.
- No cumulative impact analysis of longer-term SAMP beyond 2037.
- Pedestrian safety on International Boulevard (76 pedestrian collisions, 7 fatal, 8 serious) not addressed by Port mitigation.
- No Action (NA) alternative embeds airport demand growth, masking absolute operational levels.
- Transportation Network Company (TNC) trip-rate calibration not disclosed; off-Port warehouse cargo not addressed.
- Freight mobility, transit reliability, and emergency response not summarized at system level.

SURFACE TRANSPORTATION DEFICIENCIES FOUND IN THE SAMP DEIS

Temporal Scope: PM Peak Only

The analysis evaluates only the weekday PM peak hour (4-6 PM, Tue-Thu). Airport operations include AM departure (6-9 AM), early-morning cargo (3-6 AM), late-evening passenger activity (post-7 PM), and weekend peaks. The Port's own VISSIM methods memo acknowledges congestion after 7 PM at locations, including SR 518 and airport-access ramp terminals, yet this period is not analyzed.

An airport traffic analysis limited to the commuter PM peak hour window systematically fails to capture periods when airport-generated demand is high but regional congestion is lower – producing the worst-case conditions for airport-adjacent communities. The temporal narrowing structurally minimizes disclosed impacts.

The Port should add AM-peak, weekend-peak, and cargo-peak time periods to the FEIS, with results reported separately.

Base-Year Calibration Under-Prediction

The WSP Dynamic Traffic Assignment (DTA) model under-predicted observed 2019 volumes by approximately **25% on average**. A blanket 1.25 scale factor was applied under NCHRP 765 §4.2, but two critical issues were not addressed:

(a) **Failure-mode ambiguity**. The blanket factor does not distinguish between (i) systematic trip generation under-prediction, (ii) trip distribution failure to particular corridors, or (iii) mode share/time-of-day distribution failure. These three failure modes have different implications for future-year projections, and screenline-based validation cannot disentangle them:

- Systematic trip generation under-prediction – if the model generates too few trips overall, the 25% shortfall is a generalized property that applies across the entire study area not only at the screenline locations. A uniform 1.25 factor applied to the demand matrix is directionally correct for this failure mode, but the screenline data cannot confirm that the factor's magnitude is appropriate for non-screenline intersections. Screenlines are placed on major corridors where volumes are easiest to measure, not necessarily where under-prediction is worst. For future-year projections, a generalized trip-generation shortfall means all 108 intersections in the study area – not just the 23 with documented Cat-1 or Cat-2 impacts – may be under-predicted by a similar or greater proportion.
- Trip distribution failure to particular corridors – if the model correctly generates total trips but assigns them to the wrong corridors, the 25% screenline under-prediction is corridor-specific rather than generalized. A uniform 1.25 scaling would over-correct on corridors where the distribution is accurate and under-correct on corridors where it is not. For future-year projections, this means intersections on misassigned corridors could experience substantially more NTP-related growth than the model predicts, while other intersections may be overstated. The current screenline set cannot identify which corridors are under-assigned versus over-assigned, nor can it determine whether the airport-adjacent surface streets in SeaTac – many of which are not on screenlines – are receiving their proportional share of airport trips.
- Mode share/time-of-day distribution failure – if the model misallocates trips across travel modes or time-of-day periods the PM-peak screenline under-prediction reflects a temporal or modal misallocation rather than a total-demand problem. Scaling the entire PM-peak matrix by 1.25 does not fix the underlying misallocation and could distort off-peak or other-mode projections. For future-year projections, this failure mode is particularly consequential because airport demand grows proportionally more in off-peak periods (post-7 PM passenger activity, early-morning cargo operations) than in the standard PM commuter peak. If the 25% PM-peak shortfall is driven in whole or in part by time-of-day misallocation, the under-prediction in airport-relevant off-peak periods may be even larger than 25%.

If the 25% under-prediction applies broadly across the study area rather than being limited to the screenline locations – which the current documentation cannot rule out – the projected 2032/2037 impacts may be materially understated across the entire study area.

(b) **Geographic representativeness unknown**. It is not clear from the existing record whether the 2019 screenline locations are geographically representative of the 108-intersection study area or concentrated on principal airport access corridors. Under-prediction on residential and commercial surface streets in Burien, Des Moines, and SeaTac may differ in magnitude or even direction.

If the scaling methodology does not accurately capture demand distribution to community streets, every future-year impact conclusion in the document may be understated – not by a rounding error, but by up to 25%.

The Port should provide a NCHRP 765 §4.2 validation of the 1.25 scale factor; a sensitivity analysis at 1.25/1.30/1.35 for all Cat-1, Cat-2, and WSDOT ramp-terminal facilities; and a determination of screenline geographic representativeness.

Core Technical Documentation Withheld

Turning movement counts, Synchro Level of Service (LOS) reports, SimTraffic outputs, VISSIM model files, HCS results, freeway volume diagrams, and 2032/2037 intersection results are not included in Appendix L. They are stated to be "available by request."

SEPA's public-review process (WAC 197-11-410, 420, 510) requires that the environmental document contain sufficient information to permit meaningful public comment. Withholding core analytical documentation prevents independent verification of inputs and results, replication of model runs, and identification of methodological errors. "Available by request" is not a substitute for inclusion in the administrative record.

The Port should include all core model files and outputs in the administrative record as publicly accessible documents.

Ramp-Terminal Delays: Extreme Impacts Inadequately Disclosed

The DEIS characterizes the freeway impact as "no additional deficient freeway segments beyond No Action." This framing obscures the reality: the ramp terminals themselves are severely degraded, with 5-12 minutes of additional delay per vehicle as identified in Intersection #23.

Intersection #23 (SR 518 EB Ramps/Des Moines Memorial Drive) exhibits:

Year	No Action Delay	Proposed Action Delay	Incremental Delay
2032	124.0 s	468.1 s	+344.1 s (5.7 min)
2037	--	981.0 s	+719.6 s (12.0 min)

Delays of this magnitude produce queue spillback onto SR 518 mainline (acknowledged in the DEIS but not analyzed), increased idling emissions in adjacent residential areas, emergency response interference, and neighborhood cut-through traffic. The DEIS acknowledges potential off-ramp queue spillback to the gore point but does not quantify it or assess the safety implications. The "no additional deficient segments" framing is a technical truth that conceals a substantial community impact.

For all four ramp-terminal intersections, the Port should disclose post-mitigation absolute delay, 95th-percentile and maximum queue lengths, mainline spillback potential with mitigation, and sensitivity to SR 509 extension timing. The Port should also demonstrate that mitigation materially reduces the documented delays.

No Action Baseline Embeds Airport Demand

The No Action scenario includes the SAMP NTP Constrained Operating Growth Scenario (COGS) forecast, embedding airport-specific demand growth in the baseline. Because No Action already contains much of the regional aviation growth, the Proposed Action's incremental contribution appears small when measured as a delta. The DEIS then uses the fact that many intersections are already failing in No Action to characterize Proposed Action impacts as limited additions to an already-degraded baseline.

The "no significant residual impact" finding is based solely on incremental change against an inflated baseline. Absolute operational levels – what the intersections will actually experience under the Proposed Action – are never reported. The SEPA Responsible Official and the public cannot evaluate the actual operating conditions that will result.

The Port should report absolute LOS, delay, queue, and Vehicle-Miles-Traveled (VMT) under both alternatives in a SEPA-readable summary table.

WSDOT Intersections: No Mitigation Despite Degradation

Multiple WSDOT-controlled intersections (#23, #24, #33, #42) are identified where WSDOT "is not requiring mitigation" despite forecast degradation. The DEIS accepts this as the end of the matter.

SEPA (RCW 43.21C, WAC 197-11) does not exempt impacts at intersections controlled by other agencies. The Port's SEPA obligation to mitigate project-caused significant adverse impacts is independent of WSDOT's negotiating position. The WSDOT "not requiring mitigation" language reflects a WSDOT permit stance, not a SEPA determination. Accepting WSDOT's position as dispositive effectively allows another agency to veto the Port's SEPA mitigation obligations.

The Port should provide a binding commitment to mitigate at all four WSDOT facilities with mitigation design, timing, and funding sources, regardless of WSDOT's permit position.

Category 3: Added Delay Masked by Asymmetric Assumptions

Signal timing optimization is assumed only in the Proposed Action scenario, not in No Action. This asymmetric assumption makes the Proposed Action appear to have less incremental impact than it actually does. The 17 Cat-3 intersections experience added delay, queue increases, and idling but receive no mitigation because they technically "meet" mobility standards.

If signal timing optimization is assumed only in Proposed Action, the reported deltas understate the project's true incremental impact. Even when a mobility standard is technically met, added delay is a community impact – cut-through traffic, idling emissions, transit delay, emergency response access interference. Under SEPA, the question is whether the project causes significant adverse environmental impacts, not whether a mobility threshold is crossed.

The Port should clarify signal timing assumption (apply consistently to both scenarios, or document as a specific mitigation commitment with cost and trigger); provide qualitative community-impact discussion for Cat-3 intersections; and identify any warranting SEPA-specific mitigation.

Mitigation Commitments Deferred to Post-SEPA Negotiations

Chapter 4 acknowledges the Port and jurisdictions are still "in the process of formalizing the mitigation commitments" in MOUs. Material mitigation terms are deferred to future negotiations rather than committed in the environmental document. For Des Moines #93, the proposed mitigation is a proportionate-share payment (~$7,651/trip) – a funding mechanism, not a mitigation outcome.

SEPA requires that material mitigation measures be committed in the environmental document, not deferred to post-decision negotiations. A proportionate-share payment without a committed physical improvement and performance standard does not constitute mitigation – it constitutes a promise to fund something unspecific in the future. Without committed mitigation in the DEIS, the SEPA Responsible Official cannot evaluate whether the impacts are actually mitigated.

For all 51 impacted intersections (10 Cat-1, 18 Cat-2, 17 Cat-3, 6 Cat-4), the Port should provide committed physical improvement, performance standard (LOS/delay/queue), construction trigger, completion deadline, funding source, and monitoring/enforcement mechanisms.

Pedestrian Safety: International Boulevard

SeaTac Segment 3 (International Boulevard S, S 152nd-S 216th) records **76 pedestrian collisions over five years, 7 fatal and 8 serious** — the highest pedestrian-fatality count in the study area. Des Moines Segment 1 adds 3 fatal and 16 pedestrian collisions. The Port's mitigation does not include any improvement on International Boulevard itself.

Under SEPA, the environmental document must address impacts to pedestrian safety on high-injury corridors adjacent to the project area. The Port's Cat-1 mitigations at side-street intersections do not directly address the pedestrian crash problem on International Boulevard. The DEIS fails to explain how the project's traffic redistribution affects pedestrian exposure on this corridor.

The Port should explicitly address how Cat-1 mitigations (notably #48, 8th Avenue S/S 156th Street) provide collateral safety benefits on the adjacent SeaTac Segment 3 corridor.

CMF Documentation Incomplete

All 12 cited Crash Modification Factors are verified as accurate against the FHWA CMF Clearinghouse. However, star ratings, sample sizes, and study types are not documented in the DEIS.

The CMF star rating indicates the quality of the underlying research. Without this documentation, the SEPA record does not demonstrate that the safety claims rest on adequate evidence. If the safety effectiveness of any proposed mitigation is challenged, the DEIS lacks the supporting documentation to defend its CMF-based claims.

The Port should add CMF Clearinghouse star ratings, sample sizes, and study types; verify all ≥ 3 stars.

TNC Trip Rates and Off-Port Cargo

TNC/ride-share trip generation rates are not calibrated to post-2019 data. Off-Port warehouse and industrial growth generating truck trips on the same corridors are not addressed.

The ride-share market has evolved substantially since 2019. Uncalibrated trip rates may understate or mischaracterize the actual vehicle trips generated. Off-Port warehouse growth produces cumulative truck traffic on the same corridors analyzed in Appendix L.

The Port should provide TNC trip-rate statement with data-source citation consistent with the most recent available TNC/ride-share data; cumulative considerations note on off-Port warehouse growth.

MISSING SEPA-SPECIFIC ANALYSES

In addition to the deficiencies identified above, the DEIS and supplemental SEPA documentation is lacking in several areas described in the sections below.

Alternatives Analysis

Problem: No quantitative comparison of demand-side alternatives (travel demand management, transit enhancement) against supply-side mitigations has been prepared. SEPA requires evaluation of a reasonable range of alternatives, including demand-side and impact-reduction alternatives.

Required fix: Sketch-planning comparison of enhanced TDM (5% Single-Occupancy-Vehicle (SOV) reduction) and enhanced transit (20% mode share increase) vs. supply-side Cat-1 mitigations on VMT, LOS, cost, and implementation certainty.

Construction Phasing and Emergency Response

Problem: No construction-phase transportation analysis or Construction Traffic Management Plan commitment is included. No assessment of emergency response access impacts. Construction of 31 NTPs over a multi-year period will generate employee trips, truck trips, lane closures, and detours affecting local roadways used by fire and emergency services.

Required fix: Qualitative discussion of phasing, peak construction trips, haul routes, lane-closure management; Port commitment to prepare CTMP with the City before construction permit; commitment to coordinate with SeaTac Fire Department, South King Fire and Rescue, Valley Regional Fire Authority, and King County Fire District #2.

Freight Mobility

Problem: Appendix L addresses truck trips at individual NTPs and intersections, but lacks a system-level freight mobility analysis. The NTPs include two truck-heavy projects – C02/C03 (new cargo facilities east of 24th Avenue S) and S10 (new consolidated receiving and distribution center) – both generating significant heavy-vehicle traffic on 24th Avenue S, Air Cargo Road, and S 154th Street. While truck volumes are embedded in the

VISSIM and SimTraffic corridor models, no corridor-level freight mobility summary, travel-time reliability analysis, or truck-specific impact narrative is provided in the SEPA package.

Required fix: Add a one-page freight-mobility note to the FEIS summarizing: (a) truck-volume changes on SR 509, SR 518, S 154th Street, International Boulevard S, and Des Moines Memorial Drive for both 2032 and 2037; (b) VISSIM-derived corridor travel time and reliability results for truck-route corridors; (c) a qualitative assessment of safety implications at high-collision-rate intersections on the primary truck network (notably Intersection #27); and (d) a cumulative considerations note acknowledging off-Port warehouse and industrial growth as a contributor to corridor-level truck traffic.

Transit Reliability

Problem: Appendix L includes eight bus routes (King County Metro and Sound Transit) plus the Link 1-Line serving the terminal, and corridor-level VISSIM and SimTraffic models contain transit travel time data, but no system-wide transit reliability or travel-time summary is provided in the SEPA package. Transit route performance on International Boulevard S, Des Moines Memorial Drive, and SR 518 – corridors directly affected by NTP-generated congestion – is not characterized.

Required fix: Add a summary table of corridor-level transit travel time changes (2022 base year vs. 2037 Proposed Action) for the transit routes serving the study area: RapidRide A Line, ST 560, ST 574, KC Metro 180, KC Metro 122, and KC Metro 132. Include both average travel time change and reliability (95th-percentile travel time) where VISSIM data are available.

Plan Consistency

Problem: The Local Jurisdiction Coordination Summary documents coordination meetings with all four affected cities (SeaTac, Burien, Des Moines, Tukwila) and WSDOT, but does not include a formal plan-consistency determination against adopted local and regional plans. Several City of SeaTac Transportation Improvement Program (TIP) projects – including Proj #4, #6, #12, #14, and #22 – are incorporated as background improvements in the NEPA Future Conditions analysis, but these are not cross-referenced in the SEPA Safety Analysis or tied to the City of SeaTac's adopted TMP. The City of Burien's TMP and the adopted transportation plans of Des Moines and Tukwila are similarly not evaluated for consistency, nor are the other key local/regional plans.

Required fix: Append a Plan Consistency Matrix to the Local Jurisdiction Coordination Summary that addresses, at minimum: the City of SeaTac TMP, the City of Burien TMP, the adopted transportation plans of Des Moines and Tukwila, the Puget Sound Regional Council (PSRC) Regional Transportation Plan, the WSDOT Highway System Plan, the King County Metro Strategic Plan, and the Sound Transit Long-Range Plan. Cross-reference specific TIP project IDs incorporated in the NEPA analysis to demonstrate plan alignment.

Cumulative Impacts

Problem: The transportation analysis in Appendix L stops at the 2037 horizon year, which corresponds to full build-out of the 31 near-term projects if all 31 projects move forward. The Port's longer-term SAMP vision extends well beyond 2037, with additional passenger and cargo growth forecast for subsequent decades. No cumulative impact analysis is provided for transportation effects beyond the NTP horizon year.

Required fix: Add a SEPA cumulative impact sketch covering longer-term SAMP passenger and cargo forecasts, including: (a) sketch-planning trip generation for the longer-term buildout, (b) qualitative intersection LOS outcomes on the City's study intersections, and (c) a determination of whether the longer-term SAMP would introduce new intersection deficiencies beyond those already identified in the NTP analysis.

Sensitivity to Regional Projects

Problem: The "no significant residual impact" finding for multiple intersections depends on the completion of planned regional projects – most notably the SR 509 extension and the associated South Access Road (a four-lane southern airport connector linking the airfield to SR 509 at 24th Avenue S), but also other WSDOT and PSRC programmed improvements – that are outside the Port's direct control. The SR 509 extension and South Access Road have a history of schedule uncertainty – the South Access Road was placed on hold in 2020 due to funding constraints, with a revised target in the early-to-mid 2030s – and the DEIS provides no analysis of how a one-, two-, or three-year delay would affect intersection performance at WSDOT and city-controlled facilities during the NTP opening years (2032-2035). These projects are assumed in the No Action baseline and relied upon to maintain acceptable LOS at key intersections. If regional projects are delayed by even one to three years, pre-existing congestion worsens and NTP-attributable impacts compound at facilities that depend on those regional improvements. No Action scenario intersection LOS outcomes are not separately summarized for the City's intersections, making it impossible to assess the sensitivity of the conclusion to project timing.

Required fix: Add a one-page "Sensitivity to Planned Regional Projects" insert that: (a) lists the regional projects on which the no-significant-impact finding depends; (b) summarizes No Action scenario intersection LOS for the City's study intersections; and (c) states qualitatively the sensitivity of the conclusion to a one- to three-year delay in dependent regional projects.

Agency Coordination and ICE Status Gaps

Problem: The Local Jurisdiction Coordination Summary documents WSDOT weekly technical coordination meetings and formal meetings with all four neighboring jurisdictions during the 2023-2024 NEPA analysis period. However, the 2025-2026 follow-up coordination that led to the April 2026 SEPA Traffic Safety Analysis Summary is not similarly documented. More critically, the status of preliminary Intersection Control Evaluations (ICEs) for the four WSDOT-controlled facilities (#23, #24, #33, #42) – including date prepared, date submitted to WSDOT, WSDOT response, and current approval status – is not summarized in the SEPA administrative record.

Required fix: Add to the SEPA package a brief status table for each preliminary ICE at WSDOT facilities (#23, #24, #33, #42) showing: date prepared, date submitted to WSDOT, WSDOT response (approval, comments, pending), and current status. Update the Local Jurisdiction Coordination Summary to reflect 2025-2026 coordination activities.

Base-Year Documentation

Problem: The 2022 base year straddles the post-COVID traffic recovery period. The NEPA Future Conditions report uses the WSP DTA model's 2019 base year scaled to 2022, but the 2019→2022 post-COVID adjustment is not explicitly quantified or validated. No documentation is provided comparing 2022 counts against pre-COVID (2019) volumes or WSDOT permanent-counter trends to confirm that 2022 is a representative baseline.

It is also not stated whether 2022 is treated as a "normalized" year or a "still-recovering" year in the forecast methodology.

Required fix: Add a one-paragraph note to the NEPA Future Conditions report and the SEPA Safety Analysis explaining how 2022 base-year counts were evaluated against 2019 pre-COVID data and WSDOT permanent counter trends, and stating explicitly whether 2022 is treated as normalized or still-recovering for forecasting purposes.

Traffic Volume and Road Maintenance Implications

Problem: Appendix L reports transportation impacts almost exclusively through intersection-level LOS and delay metrics. It does not translate those congestion impacts into traffic volume metrics – such as average daily traffic (ADT), vehicle-miles traveled (VMT), and truck-miles traveled (TMT) – on the affected roadway network. No corridor-level or system-level VMT/ADT figures are provided for either the No Action or Proposed Action alternatives, and there is no breakout of passenger vehicles versus heavy trucks for any studied facility. As a result, the DEIS cannot be used to estimate road maintenance cost implications of the NTPs, even though pavement degradation and structural wear on local and regional roads are direct functions of cumulative vehicle volumes and truck loading (the fourth-power rule implies heavy-vehicle effects dominate). Historical VMT/ADT baselines are typically available from WSDOT (permanent traffic recorders and annual average daily traffic maps), the City of SeaTac Public Works, the City of Burien Public Works, and etc, but none are referenced or cross-validated in Appendix L. Without current-year volume baselines and projected future-year deltas by vehicle class, jurisdictions cannot establish a defensible dollar-per-road-mile multiplier for SAMP-related traffic growth.

Required fix: Add a traffic volume section to Appendix L reporting, at minimum: (a) Current (base-year) ADT and VMT for each studied corridor and intersection approach, broken out by vehicle class (passenger cars, single-unit trucks, combination trucks) where data are available; (b) Projected 2032 and 2037 ADT and VMT under both the No Action and Proposed Action alternatives, for the same facilities and vehicle-class breakout; (c) Delta VMT and delta ADT (Proposed Action minus No Action) by corridor, with passenger-vehicle and truck components separately identified. Identify data sources used for volume estimation (travel demand model outputs, WSDOT ATR stations, City count programs, King County traffic monitoring) and cross-reference these to the model calibration dataset. Include a qualitative road-maintenance impact discussion summarizing: (a) Which jurisdictional roads are most affected (ownership by City, County, State); (b) The relative contribution of passenger vehicles vs. heavy trucks to incremental pavement wear (referencing the fourth-power rule or standard AASHTO methodology); (c) Whether any existing pavement-management-plan condition data suggest accelerated deterioration risk. Ensure that the traffic volume breakout is consistent with any pavement-condition analysis being prepared for the SEPA review, and that maintenance-cost implications are addressed across the full EIS rather than siloed in Appendix L.

CONCLUSIONS AND RECOMMENDATIONS[1]

The surface transportation elements in the DEIS and documents found in Appendix L contains significant deficiencies in scope, disclosure, and mitigation commitments. The temporal scope is too narrow to capture the full impact profile. The base-year calibration under-prediction has not been validated. Core technical data is withheld from the administrative record. Ramp-terminal delays are extreme but inadequately disclosed. WSDOT intersections are left unmitigated despite SEPA obligations. Mitigation terms are deferred to post-SEPA negotiations. Pedestrian safety on the highest-fatality corridor in the study area is not addressed. The No Action baseline embeds airport demand growth, masking absolute conditions. Multiple SEPA-required analyses are lacking or absent; therefore, the action items in the next section are recommended in the FEIS. These deficiencies are not minor documentation gaps. They represent substantial failures in the DEIS's ability to support a SEPA finding of nonsignificance. The FEIS must correct all items identified in "Action Items" section before the environmental review can proceed.

Action Items

In the action items identified below, some of them require substantive re-analysis or material re-disclosure of the underlying traffic and safety data – not merely narrative addition – and are necessary to support a SEPA finding. And many of these action items are predominantly documentation, cross-reference, or SEPA-specific narrative additions that strengthen the evidentiary record.

ID	Action Item
#1	Add FHWA CMF Clearinghouse star ratings, sample sizes, and study types to the CMF table. Verify all ≥ 3 stars.
#2	Add explicit analysis addressing SeaTac 3 (International Boulevard) pedestrian safety data (76 pedestrian collisions, 7 fatal) and how Cat-1 mitigations (notably #48) provide collateral safety benefits on this corridor.
#3	Include full Synchro, SimTraffic, VISSIM, and HCS model files and outputs in the administrative record, accessible without individual request.
#4	For four ramp-terminal intersections (notably #23 SR 518 EB/DMMD): disclose post-mitigation absolute delay, 95th-percentile and maximum queue lengths, mainline spillback potential, and sensitivity to SR 509 extension timing. Demonstrate that mitigation materially reduces the documented 344 s (2032) and 720 s (2037) delays.
#5	For all 51 impacted intersections (10 Cat-1, 18 Cat-2, 17 Cat-3, 6 Cat-4): commit physical improvement, performance standard, construction trigger, completion deadline, funding source, and monitoring/enforcement mechanism in the FEIS. No deferral to post-SEPA MOUs.
#6	Binding commitment to mitigate project-caused impacts at four WSDOT facilities (#23, #24, #33, #42) with design, timing, and funding, regardless of WSDOT's permit position.
#7	Add NTP trip-generation summary with cross-reference to Att. C.
#8	Add note on 2022 base year and post-COVID validation against 2019 counts and WSDOT counter trends.
#9	Note that 2023-2025 collision trend should be re-evaluated in future SEPA updates.
#10	Cross-reference SeaTac TIP project IDs (Proj #4, #6, #12, #14, #22) in SEPA Safety Analysis.
#11	Add AM-peak, weekend-peak, and cargo-peak time periods to FEIS, reported separately. Coordinate with City and WSDOT.

[1] This review was completed under an accelerated schedule with limited time and resources and Perteet's findings and conclusions are based solely on information contained within the DEIS and its appendices, as well as readily available public data. Perteet makes no representations or warranties regarding the completeness or accuracy of the information provided in the DEIS, and this review should not be construed as a comprehensive or exhaustive technical audit. The observations and recommendations presented herein reflect professional judgment based on the information available at the time of the review and are subject to revision should additional information become available.

ID	Action Item
#12	Clarify signal timing optimization assumption (consistent across both scenarios, or documented as mitigation commitment); provide qualitative community-impact discussion for Cat-3; identify any warranting SEPA-specific mitigation.
#13	NCHRP 765 §4.2 validation of 1.25 scale factor: (a) determine whether under-prediction is generalized or screenline-specific; (b) sensitivity analysis at 1.25/1.30/1.35 for Cat-1, Cat-2, and WSDOT ramp-terminal facilities; (c) assess screenline geographic representativeness.
#14	Include status table for each preliminary ICE (date prepared, submitted, WSDOT response, current status).
#15	Add sensitivity insert listing dependent regional projects, No Action LOS for City's intersections, sensitivity to one- to three-year project delay.
#16	Add TNC trip-rate statement with data-source citation; cumulative considerations note on off-Port warehouse growth.
#17	Add sketch-planning comparison of enhanced TDM (5% SOV reduction) and enhanced transit (20% mode share increase) vs. supply-side Cat-1 mitigations on VMT, LOS, cost, and implementation certainty.
#18	Add one-page freight-mobility note on SR 509, SR 518, S 154th Street, International Boulevard S, DMMD plus VISSIM travel time/reliability results.
#19	Add Port commitment to coordinate construction phasing with SeaTac Fire, South King Fire and Rescue, Valley Regional Fire Authority.
#20	Add summary table of transit travel time changes (2022 base vs. 2037 PA) for RapidRide A, ST 560, ST 574, KC Metro 180, 122, 132.
#21	Add qualitative construction-phasing discussion: phasing, peak trips, haul routes, lane-closure management; Port commitment to prepare CTMP with City before construction permit.
#22	Add Plan Consistency Matrix addressing City of SeaTac TMP, City of Burien TMP, PSRC RTP, WSDOT HSP, KC Metro Strategic Plan, Sound Transit LRP, and other key local/regional transportation plans.
#23	Add SEPA cumulative impact sketch covering longer-term SAMP forecasts, trip generation, and qualitative LOS outcomes on City's intersections.
#24	Report absolute operational levels (LOS, delay, queue, VMT) under both alternatives in SEPA-readable summary table.
#25	Add VMT/ADT traffic volume section with base-year and 2032/2037 Proposed Action vs. No Action figures by corridor, broken out by passenger vehicles and heavy-truck class; identify data sources (WSDOT ATR, city counts, model outputs).
#26	Add qualitative road-maintenance impact discussion (jurisdictional ownership, passenger-vs-truck pavement wear per fourth-power rule, pavement-management-plan context).
#27	Note that EB SR 518 travel time increase of 1-2 min represents 25–50% of existing 2-6 min range.
#28	Add forward-looking statement on pedestrian volume growth and maintenance of pedestrian facilities in Cat-1 mitigations.
#29	Add table of Cat-4 (improves with NTPs) intersections to NEPA Future Conditions Report.
#30	Add explicit one-paragraph "SEPA Findings" statement to end of Safety Analysis Summary.
#31	Add "Current as of" date and sub-report version list to cover page of consolidated Appendix L.

LIST OF DOCUMENTS/DATA/MODELS REQUIRED

The following documents, datasets, models, and model outputs are required to complete a full and defensible SEPA-level technical review of Appendix L.

Core Technical Models and Source Files

#	Item	Purpose
1	Synchro model files (all study intersections, 2022 base + 2032 + 2037 Proposed Action/No Action, AM/PM peak)	Verify LOS, delay, and queue-length calculations; validate signal timing and mitigation assumptions.
2	SimTraffic model files (same scope)	Verify operational simulation of coordinated arterials, platooning, and Cat-3/Cat-2 intersection delay.
3	VISSIM model files (SR 518, SR 509, I-5 interchange area, plus any freeway/arterial VISSIM analyses)	Validate ramp-terminal delay, travel time, reliability, and spillback findings; verify freight and transit travel time outputs.
4	Highway Capacity Software (HCS) files (all ramp terminals, weaving sections, and freeway facilities)	Independent verification of HCM delay, LOS, and queue analysis for WSDOT ramp terminals.
5	Complete trip-generation model input/output dataset (Excel/CSV)	Re-validated trip-generation rates, land use assumptions, SOV/shared-ride/transit mode split, and TNC mode-share assumptions.
6	VISUM/EMME/regional travel demand model outputs (2022 base, 2032, 2037; No Action and Proposed Action)	Verify screenline volumes, traffic assignments, and the 1.25 scale factor calibration basis.

Calibration, Validation and Base-Year Data

#	Item	Purpose
7	2022 (or latest base-year) turning-movement count data for all study intersections	Validate base-year calibration and reasonableness of the 1.25 scale factor.
8	2019 pre-COVID turning-movement counts at a representative subset of intersections	Assess post-COVID demand recovery and support the 1.25 scale factor justification.
9	WSDOT ATR (Automatic Traffic Recorder) data for SR 518, SR 509, and I-5 ramps (2019, 2022, 2023, 2024/2025 latest)	Cross-validate base-year volumes and trend assumptions.
10	Calibration/validation report (screenline-by-screenline, intersection-by-intersection)	Document geographic representativeness of the 1.25 factor; identify failure modes.
11	NCHRP 765 §4.2 validation memorandum	Confirm whether the traffic study conforms to accepted forecast-validation practice.

Safety Data and Analysis

#	Item	Purpose
12	Full collision data extract (WSDOT + City of SeaTac PDO/fatal/injury) for the five-year study period at all study intersections and segments	Independently verify collision rates, severity indices, and pedestrian/bicyclist safety findings (e.g., International Blvd 76-collision claim).
13	City of SeaTac TIP project list with project IDs and descriptions (Proj #4, #6, #12, #14, #22 and others referenced)	Cross-reference TIP improvements with SEPA Safety Analysis and verify "background improvement" claims.
14	Pedestrian and bicycle count data at International Boulevard and other key crossings	Baseline for pedestrian safety evaluation and mitigation adequacy.

Local and Regional Plan Consistency Documents

#	Item	Purpose
15	City of SeaTac Transportation Master Plan (adopted, latest version)	Plan-consistency determination (required under SEPA WAC 197-11-330 to -380).
16	City of SeaTac Comprehensive Plan	Plan-consistency determination (land use, transportation element).
17	City of Burien Transportation Master Plan (adopted, latest version)	Plan-consistency determination for Burien-affected facilities.
18	City of Burien Comprehensive Plan	Plan-consistency determination.
19	City of Des Moines Transportation Master Plan/Comprehensive Plan	Plan-consistency determination for Des Moines-affected facilities.
20	City of Tukwila Transportation Master Plan/Comprehensive Plan	Plan-consistency determination for Tukwila-affected facilities.
21	PSRC Regional Transportation Plan (RTP), latest adopted version	Regional plan-consistency determination.
22	WSDOT Highway System Plan (HSP)	State highway system plan-consistency determination.
23	King County Metro Strategic Plan (long-range/service planning)	Transit plan-consistency determination.
24	Sound Transit Long-Range Plan (LRP) and ST3 system plan	Regional transit plan-consistency determination.

Transit, Freight and TNC Data

#	Item	Purpose
25	Transit travel-time and reliability data (RapidRide A, ST 560, ST 574, KC Metro 180, 122, 132) – base and future Proposed Action scenarios	Verify transit-impact claims and support mitigation analysis.
26	TNC trip-rate data source and calculation methodology	Validate airport TNC mode-share assumptions and trip contributions.
27	Freight/truck trip data (SR 509, SR 518, S 154th Street, International Boulevard S, DMMV access roads)	Verify freight mobility conclusions; support cumulative impact analysis.
28	Off-Port warehouse/industrial cargo trip estimates and growth projections	Cumulative impact analysis for longer-term SAMP and adjacent land use growth.

Cumulative Impacts and Alternative Analysis

#	Item	Purpose
29	Longer-term SAMP passenger and cargo growth forecasts (post-2037)	Cumulative impact assessment beyond the NTP horizon year.
30	Off-Port development/land use growth projections (SeaTac, Burien, Des Moines, Tukwila industrial/warehouse)	Cumulative traffic impact on study corridors.
31	TDM alternatives analysis (demand-side vs. supply-side mitigation comparison)	Evaluate whether No Action baseline overstates required capital mitigations.

Construction, Mitigation and Agency Coordination

#	Item	Purpose
32	Preliminary Interchange Justification Reports/ICE reports and WSDOT responses (all WSDOT ramp terminals)	Verify WSDOT "no mitigation required" determinations and status of each facility.
33	Signal timing optimization assumptions and methodology (base vs. proposed action vs. mitigation scenarios)	Assess whether Cat-3 delay results are masked by asymmetric optimization.
34	Construction phasing plan/Construction Traffic Management Plan (CTMP) framework	Evaluate construction-period impacts and SEPA compliance.
35	Emergency response/fire/EMS access impact analysis	Evaluate construction and operational impacts on emergency services (SeaTac Fire, South King Fire and Rescue, Valley Regional Fire Authority).
36	MOU commitment documents or term sheets for deferred mitigation items	Verify what mitigation is "committed" vs. "intended" for SEPA purposes.

Administrative Record and Coordination Documents

#	Item	Purpose
37	Local Jurisdiction Coordination Summary – full record (meeting minutes, correspondence, agency comments, Port responses)	Verify coordination adequacy and identify unresolved jurisdictional concerns.
38	Complete list of sub-reports, technical memorandum, and attachments comprising Appendix L, with version numbers and "current as of" dates	Confirm completeness of the administrative record and verify version consistency across sub-reports.
39	Corridor-level VMT, ADT, and TMT data (base year + 2032 + 2037; No Action and Proposed Action) with passenger-vehicle vs. heavy-truck breakout	Translate LOS/delay impacts into volume metrics for maintenance-cost estimation and cumulative impact analysis.
40	WSDOT ATR (permanent counter) data + annual average daily traffic (AADT) maps for SR 518, SR 509, I-5 ramps, and study arterials	Validate base-year volumes, provide historical VMT/ADT baseline for maintenance-cost correlation.
41	City of SeaTac Public Works traffic count and pavement-management data (ADT, truck percentages, pavement condition index by road segment)	Establish dollar-per-road-mile maintenance cost baseline for City streets affected by NTP traffic.
42	City of Burien Public Works/King County pavement-management and traffic volume data for affected facilities	Extend maintenance-cost correlation to Burien and County roads.

REFERENCES

Statutes and Regulations

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Technical Manuals and Standards

WSDOT Design Manual. Washington State Department of Transportation. Chapters 320 (Traffic Studies) and 1300 (Intersection Design). Olympia, WA: WSDOT.

National Cooperative Highway Research Program (NCHRP) Report 765 – Travel Demand Forecasting: Parameters and Common Practice. Transportation Research Board, 2014. Chapter 4.2 – Forecast Validation.

NCHRP Report 255 – Highway Traffic Data for Urbanized Area Project Development. Transportation Research Board, 1982.

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AASHTO Pavement Design Guide/Standard Specifications for Structural Design of Pavements. American Association of State Highway and Transportation Officials. (Referenced for fourth-power rule of pavement damage.)

NCHRP Report 420 – Traffic Volume Trends and Implications for Pavement Design. Transportation Research Board. (Background for VMT/ADT translation methodology.)

Plans and Policies

Port of Seattle Sustainable Airport Master Plan (SAMP). Port of Seattle, Seattle-Tacoma International Airport.

City of SeaTac Transportation Master Plan (TMP). City of SeaTac, Community and Economic Development Department. Adopted.

City of SeaTac Comprehensive Plan. City of SeaTac. Adopted.

City of SeaTac Transportation Improvement Program (TIP). City of SeaTac. Referenced projects: Proj #4, #6, #12, #14, #22.

City of Burien Transportation Master Plan. City of Burien. Adopted, latest version.

City of Burien Comprehensive Plan. City of Burien. Adopted.

City of Des Moines Transportation Master Plan/Comprehensive Plan. City of Des Moines.

City of Tukwila Transportation Master Plan/Comprehensive Plan. City of Tukwila.

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WSDOT Highway System Plan (HSP). Washington State Department of Transportation.

King County Metro Strategic Plan – Long-Range Service Plan. King County Metro, King County Department of Transportation.

Sound Transit Long-Range Plan (LRP) and ST3 System Plan. Central Puget Sound Regional Transit Authority (Sound Transit).

Washington Department of Health Environmental Health Disparities Index. Washington State Department of Health.

Environmental Documents (Port of Seattle SAMP NTP)

Sustainable Airport Master Plan (SAMP) Near-Term Projects (NTP) Draft Environmental Impact Statement (DEIS) – Appendix L: Surface Transportation. Port of Seattle. Published May 22, 2026. SEPA public review period: 60 days.

Appendix L – Traffic Safety Analysis Summary. April 2026.

Appendix L – NEPA Future Conditions Report. (Referenced for base-year and future-year traffic projections.)

Appendix L – Local Jurisdiction Coordination Summary. Port of Seattle.

Appendix L – Attachment C: Trip Generation Summary.

Federal Aviation Administration (FAA) Finding of No Significant Impact/Record of Decision (FONSI/ROD). September 26, 2025. NEPA review.

VISSIM Methods Memorandum (referenced as source of post-7 PM congestion acknowledgement). WSP/Port of Seattle.

Technical Models and Software

Synchro/SimTraffic (version referenced in Appendix L). Traffic signal timing and microsimulation software. Trafficware, LLC.

PTV VISSIM (version referenced in Appendix L). Microscopic traffic simulation software. PTV Group.

Highway Capacity Software (HCS) (version referenced in Appendix L). McTrans Center, University of Florida.

WSP DTA Model – Dynamic Traffic Assignment model for regional and corridor-level traffic analysis. WSP USA.

VISUM/EMME – Regional travel demand modeling software. PTV Group/Bentley Systems.

Data Sources

WSDOT Automatic Traffic Recorder (ATR) Stations – Permanent counter data for SR 518, SR 509, and I-5 ramps. Washington State Department of Transportation.

WSDOT Annual Average Daily Traffic (AADT) Maps. Washington State Department of Transportation.

City of SeaTac Public Works – Traffic Count Program and Pavement Management Data. Including ADT, truck percentages, and Pavement Condition Index (PCI) by road segment.

City of Burien Public Works – Pavement Management and Traffic Volume Data.

King County Department of Transportation – Pavement Management and Traffic Volume Data.

WSDOT Collision Data – City of SeaTac and study area collision records (5-year study period). WSDOT Highway Safety Information System.

City of SeaTac Police Department – Collision Records (PDO, fatal, injury).

Other Reports and Studies

Leland & Associates – Pavement Condition and Infrastructure Analysis Report (SEPA DEIS Comment Letter, revised June 2026). Leland & Associates, Inc. Referenced for road maintenance cost correlation methodology.

Preliminary Intersection Control Evaluation (ICE) Reports – WSDOT ramp terminals at Intersections #23, #24, #33, #42. WSP/WSDOT.

Westside Trail – Existing Conditions and Usage Data. Referenced for Intersection #27 adjacent multi-use facility.

APPENDIX A: ACRONYMS AND ABBREVIATIONS

The following acronyms and abbreviations are used in this review:

CMF	Crash Modification Factor
COGS	Constrained Operating Growth Scenario
CTMP	Construction Traffic Management Plan
DEIS	Draft Environmental Impact Statement
DTA	Dynamic Traffic Assignment
FEIS	Final Environmental Impact Statement
FHWA	Federal Highway Administration
HCM	Highway Capacity Manual
ICE(s)	Intersection Control Evaluation(s)
LOS	Level of Service
MOU(s)	Memorandum of Understanding(s)
NCHRP	National Cooperative Highway Research Program
NEPA	National Environmental Policy Act
NTP(s)	Near Term Project(s)
Port	The Port of Seattle
PSRC	Puget Sound Regional Council
RCW	Revised Code of Washington
SAMP	Sustainable Airport Master Plan
SEA	Seattle-Tacoma International Airport
SEPA	Washington's State Environmental Policy Act
SOV	Single-Occupancy-Vehicle
TDM	Travel Demand Management
TIP	Transportation Improvement Program
TMP	Transportation Master Plan
TNC	Transportation Network Company
VMT	Vehicle-Miles-Traveled
WAC	Washington Administrative Code
WSDOT	Washington State Department of Transportation

APPENDIX A

Hazardous Materials Review Memo

MEMORANDUM

801 2nd Avenue, Suite 302, Seattle, WA 98104 | P 206.436.0515

To: Zack Shields, Senior Planner
City of SeaTac
Community and Economic Development
206.973.4850

From: Theresa Holz, Senior Environmental Scientist
Perteet Inc.
708.307.5106

Re: SEPA Review of Sustainable Airport Master Plan (SAMP) Near Term Projects (NTPs) – Appendix F – Hazardous Materials and Solid Waste

INTRODUCTION

The Port of Seattle's (Port) Sustainable Airport Master Plan (SAMP) for the Seattle-Tacoma International Airport (SEA) identifies 31 near-term projects (NTPs) to allow for current and future expansion of airport facilities. The NTPs include project elements associated with new terminal construction, ground transportation center, off-site cargo facilities, extension of airfield taxiways, and expansion of a fuel facility. The following NTPs are expected to have hazardous materials concerns: Terminal and Facilities (inclusive of second terminal, elevated busway, support buildings); Airfield Updates, including taxiway extensions and layout reconfigurations; Ground Transportation and Roadways, including roadway realignments and parking infrastructure; Cargo Expansion, including off-site facilities; and Fuel and Utilities, including fuel farm expansion increasing fuel storage capacity and supportive infrastructure. Under Washington's State Environmental Policy Act (SEPA), the Port is required to complete a Draft Environmental Impact Statement (DEIS) for the proposed NTPs, and on May 22, 2026, the Port published its DEIS for public review and comment. This memorandum addresses deficiencies related to the hazardous materials elements in the DEIS Chapter 4.3.6 and technical reports found in Appendix F of the DEIS.

SUMMARY OF DEFICIENCIES AND RECOMMENDATIONS[1]

This memo identifies deficiencies in the DEIS showing that it cannot legitimately conclude that hazardous materials and contaminated site impacts would be insignificant. Identified deficiencies in the conceptual design of the analysis include uncharacterized contaminated sites, a non-comprehensive review of regulatory contaminated sites databases, insufficient analysis of fuel farm expansion and spill response requirements, inadequate delineation and remediation planning for PFAS contamination, and the absence of hazardous materials surveys for most buildings proposed for demolition. Additional identified deficiencies also contend that the DEIS improperly relies on future regulatory compliance as evidence of impact avoidance rather than providing project-specific mitigation plans and a clear significance framework. Recommendations include conducting additional site investigations and PFAS sampling, updating contaminated-site database reviews, completing hazardous

[1] This review was completed under an accelerated schedule with limited time and resources and Perteet's findings and conclusions are based solely on information contained within the DEIS and its appendices, as well as readily available public data. Perteet makes no representations or warranties regarding the completeness or accuracy of the information provided in the DEIS, and this review should not be construed as a comprehensive or exhaustive technical audit. The observations and recommendations presented herein reflect professional judgment based on the information available at the time of the review and are subject to revision should additional information become available.

materials surveys, providing detailed remediation and spill response plans, and clearly distinguishing regulatory compliance from mitigation when evaluating environmental impacts.

1.0 CONTAMINATED SITES AND REMEDIATION: INADEQUATE INFORMATION FOR NO IMPACT DETERMINATION

1.1 Deficiency and Concern

The DEIS Appendix F does not provide adequate characterization information for the contaminated sites identified in the regulatory database review to support the determination of no significant impact. Summaries of contaminated sites were lacking vital information that should be considered in determining risks and impacts, including contaminant types, plume size, volume, specific remediation activities, and worker health and safety considerations. Historical soil contamination from various sources (fuel spills, maintenance areas, old storage tanks, etc.) exists within the limits of disturbance (DEIS Appendix F, Section 4); the DEIS states that these will be handled via remediation plans and no risk remains. The DEIS conclusions of no significant impact lack adequate clarifying details to support the determinations.

Additionally, vague statements were made in the DEIS Appendix F, Section 4 and DEIS Chapter 4.3.6.3 for remediation at most/all of the identified contaminated sites within the limits of disturbance areas. The following statement is broadly used in remediation discussions for each site/area: "Due to the known presence of contamination, all material excavated from within this project area would be screened and tested as appropriate prior to disposal. Any material found to be contaminated and requiring removal would either be removed and disposed of in accordance with federal, state, and local requirements, encapsulated on-site to remove any human health or environmental exposure risk, or remediated below established cleanup levels." While this is standard language, it does not, by itself, address methods for screening, the specific training requirements for workers involved in excavating contaminated media, or the criteria that would be applied to identifying potentially contaminated media at each project location.

1.1.1 Recommendations

The Port should not be vague; it should provide greater detailed information for each area of potential contamination within the limits of disturbance, including contaminant types, plume size, volume, specific remediation activities, and worker health and safety considerations, to adequately support a conclusion of no significant impact. If the Port cannot provide this information, a Phase II ESA for the areas lacking information should be performed and the results disclosed. The Port should not state a conclusion of no significant impact without including and considering this type of vital information necessary to make an informed determination. The Port should also include project specific contaminated materials management stating the actual intent and not just listing out potential remediation options, i.e. excavation, site improvement, or encapsulation. These remediation options have significant differences and are typically pre-determined and have different impacts for the end use of the site in order to determine appropriate and applicable cleanup requirements. Additionally, further detail, or specific citation in the Construction General Requirements Manual or Construction Safety Manual, should also be included in how remediation activities will be kept within a site-specific footprint.

1.2 Deficiency and Concern

Site H-45 (Appendix F, Section 4.2.1 [PDF p. 28]) proceeds to a non-significance conclusion despite acknowledged absence of basic site characterization data. For Site H-45, a documented underground storage

tank fuel release, Appendix F states that "additional details on the extent of Site H-45 contamination are not available" and that "there has been no documented action regarding this incident since 2007," yet still proceeds to a conclusion of no significant impact. The Port lacks substantiating information to conclude that a known contamination site presents no significant impact when the fundamental characterization data (i.e. the extent of contamination, the media affected, the current site conditions) are expressly acknowledged to be unavailable, and when no regulatory action has been taken in nearly two decades. A contamination site with no documented action since 2007 and no available extent data is not a closed site; it is an uncharacterized site. Treating an uncharacterized site as presenting no significant impact is not a conservative conclusion, it is an assumption unsupported by any analytical basis, made in a community where excavation in contaminated soil poses direct worker health and stormwater pathway risks.

1.2.1 Recommendations

The Port should conduct a current Phase II Environmental Site Assessment for Site H-45, disclose the results, and revise the significance conclusion to reflect actual documented site conditions.

2.0 CONTAMINATED SITES REGULATORY DATABASE REVIEW

2.1 Deficiency and Concern

A comprehensive review of contaminated sites was not performed by the Port, and therefore additional sites and unidentified contaminants have the possibility to be encountered during construction disturbances. Appendix F of the DEIS only assessed contaminated sites through the Washington State Department of Ecology (Ecology) What's in my Neighborhood (WIMN) database and EPA's National Priorities List (NPL) Superfund sites; this is only a portion of what is identified for review under the SEPA checklist guidance and the FAA Order 1050.1F Environmental Impacts, Desk Reference. Also, the regulatory search for contaminated sites/zones was only performed in 2020, 2021, and 2023 (Appendix F, Section 1.0 [PDF p. 7]). By not reviewing up to date Ecology sites for over three years, sites of significance may have been missed by the Port and their associated impacts have been neither identified nor addressed.

2.2 Recommendations

The contaminated sites database research needs to be comprehensive. The Port should perform an exhaustive search for sites within the potential impact of NTPs compliant with the SEPA checklist and FAA Order 1050.1F. The review also needs to be current; that is, the Port needs to look at Ecology sites in 2026. Contaminated sites database research compliant with the SEPA checklist and Order 1050.1F Environmental Impacts, Desk Reference may reveal additional contaminated sites with the potential to impact the disturbance areas that are not identified in the Ecology database or EPA NPL. Any additional sites identified in the comprehensive database search through 2026 should be included in the Final EIS with adequate supporting details to determine potential impacts or risks.

3.0 POTENTIAL OVERSIGHT OF CONTAMINATED SITES TO BE CONSIDERED

3.1 Deficiency and Concern

The Port did not include discussion of any contaminated sites identified in the General Study Area that were not mapped within the disturbance area or provide an adequate acknowledgment for the exclusion of these sites

(DEIS Appendix F, Section 3.0, Table 2 and Exhibit 2), thus potentially excluding impacts from additional contamination. Table 3 and Exhibit 3 in the DEIS Appendix F (PDF p.16, 17, 19) only list Ecology WIMN sites with locations mapped within the limits of disturbance areas. Contaminated sites on Ecology's WIMN are mapped as a point feature but actual site boundaries very often extend to a larger area beyond the point feature. Sites mapped in the vicinity of but not directly within the boundaries of the disturbance areas may have contamination plumes that extend to the disturbance areas. There is no acknowledgement in the report that the contaminated sites listed outside the limit of disturbance areas (1) could still have delineations/plumes that are in close proximity and (2) could potentially overlap with the disturbance areas thereby contributing additional contamination. Any such sites need to be addressed in the Port's SEPA review.

3.2 Recommendations

The Port should include additional information on contaminated sites mapped in the vicinity of, but not directly within the disturbance areas. This information should provide adequate evidence (contaminant type, plume extent, previous remediations activities) to determine whether the conclusion that these sites do not extend on to the disturbance area is accurate.

4.0 EXPANSION OF AIRPORT'S FUEL FARM: INADEQUATE DETAILS FOR SPCC

4.1 Deficiency and Concern

Expanding fuel tank storage and relocating the de-icing tank both introduce the potential for hazardous spills or fires and may also trigger EPA Facility Response Plan (FRP) requirements in accordance with 40 CFR Part 112. DEIS Chapter 4.3.6.5 states that no significant impact to the spill prevention, planning and response plans have been identified. Appendix F Section 4.2.3 does not explicitly state what updates will be made to SeaTac's existing Spill Prevention, Control, and Countermeasures (SPCC) plan. This may be inadequate if the respective plans don't account for the significance of this activity, which cannot be determined as Sections 4.2.3 of Appendix F and Section 4.3.6.5 of Chapter 4 of the DEIS do not provide specific SPCC information or FRP evaluation. Without an analysis to determine whether the expansion still falls within SPCC requirements or if substantial harm criteria is met that requires the Port to comply with EPA FRP requirements, there could be a significant lack of comprehensive emergency response plan components and determinations for a worst-case discharge scenario.

4.2 Recommendations

The Port should provide what specific amendments will be made to the SPCC plan to account for additional secondary containment, spill response, and spill prevention. Additional information should be provided identifying what the total aggregate capacities will be for oil storage tanks and secondary containment, respectively. Specific safety documents should be cited to ensure adequate preparation for, and identification of, a worst-case discharge release and emergency response procedures. The Port should demonstrate and identify that an analysis was performed to determine whether the expansion still falls within SPCC requirements or if substantial harm criteria is met that requires the Port to comply with EPA Facility Response Plan requirements, which have more robust reporting for emergency response plans, practices and contingencies. The Port should also specify how this expansion could, or could not, be reasonably expected to discharge oil in quantities that may be harmful into navigable waters or adjoining shorelines, and what substantiates the determination.

5.0 PFAS: INADEQUATE DELINEATION OF PFAS CONTAMINATION & CONSIDERATION OF CURRENT REGULATIONS

5.1 Deficiency and Concern

The dearth of information concerning PFAS sites and regulations in the DEIS precludes the Port from making a legitimate determination of no significant impacts. The DEIS (Chapter 4, Section 4.3.6 and Appendix F, Section 4.2.1) identifies five PFAS-related sites — H-60, H-63, H-67, H-72, and H-73 — within the disturbance areas and states that construction would follow contaminated-soil handling specifications. However, Section 4.3.6 notes that PFAS regulations are "in development" and states the Port would comply with whatever regulations apply at the time of construction. Additionally, Appendix F, Section 3 notes 16 aqueous film-forming foam (AFFF) related areas and states that additional sampling would be conducted in these areas, indicating the extent of PFAS contamination in these areas has not been delineated.

This is deferred mitigation of an uncharacterized risk. The EPA has established screening levels and removal action levels (EPA, 2026) that identify cleanup requirements for PFAS-contaminated areas. Ecology also has published guidance for investigating and remediating PFAS contamination in Washington State and has established cleanup levels for PFAS-contaminated media (Ecology, 2026). The assertion that additional sampling "would be conducted" and remediation "would be completed" if required under regulations applicable at the time of construction is not a mitigation commitment — it is a placeholder that leaves the community without any assurance that PFAS contamination will be characterized, disclosed, or remediated before construction commences.

5.2 Recommendations

The Port should (1) Conduct and disclose PFAS sampling results for all five PFAS-related sites and all sixteen AFFF-related areas that have the potential to impact disturbance areas (i.e. any sites within approximately 500 feet of the disturbance areas), including soil, groundwater, and surface water as appropriate; (2) Assess PFAS migration pathways to receiving waters and community drinking water sources; (3) Apply current EPA and Washington State PFAS cleanup standards to evaluate remediation need rather than deferring to future regulatory developments; and (4) Commit to enforceable, funded PFAS remediation schedules with completion milestones before construction commences in PFAS-impacted areas.

6.0 LACK OF HAZARDOUS MATERIALS SURVEY FOR PROPOSED BUILDING DEMOLITIONS

6.1 Deficiency and Concern

The Port did not provide adequate evidence concerning the proposed demolition of existing buildings to support a legitimate determination of no significant impacts. The Port did not complete hazardous materials surveys for 8 out of 12 existing buildings proposed for demolition (DEIS Appendix F, Section 4.2.2) yet determines that the demolition of these buildings will have no significant hazardous materials impacts. This is contradictory to other statements made in Section 4.2.2 indicating that each of the existing buildings proposed for demolition has the potential to contain regulated building materials, including but not limited to asbestos-containing materials (ACM) (commonly found in floor and ceiling tiles, and insulation), lead paint, and mercury (commonly found in fluorescent light tubes and thermostats). The DEIS Appendix F neglects to consider potential hazardous materials

impacts that may be identified during the completion of hazardous materials surveys conducted at the buildings proposed for demolition.

The Port also neglected to identify the Puget Sound Clean Air Agency permit that is required prior to demolition of any building. This permit requires an AHERA survey to be completed and submitted for review prior to structure demolition.

6.2 Recommendations

The Port should complete hazardous materials surveys for existing buildings proposed for demolition. Following the completion of the hazardous materials survey, the Port should include specific survey findings to support the conclusion of no significant impact as well as develop building-specific demolition waste management plans disclosing the types, estimated quantities, and disposal pathways for hazardous building materials identified in the surveys.

7.0 THE SIGNIFICANCE FRAMEWORK IS INTERNALLY INCONSISTENT, CONFLATING REGULATORY COMPLIANCE WITH MITIGATION AND APPLYING AN UNDISCLOSED SIGNIFICANCE STANDARD

7.1 Deficiency and Concern

Section 4.3.6 of the DEIS Chapter 4 labels as "Mitigation" the following: compliance with MTCA cleanup levels, use of an Environmental Agent Work Plan, and adherence to construction manuals and requirements — framing regulatory compliance obligations as if they were project-specific mitigation measures. The section then concludes "no significant impacts" are anticipated largely on the basis that the Port would comply with applicable requirements.

This conflation of compliance with mitigation, and the use of anticipated compliance as the basis for a significance determination, is a foundational analytical error. Regulatory compliance is the minimum legal floor required of all projects — it is not mitigation and achieving it does not establish that impacts are insignificant. SEPA's significance determination under WAC 197-11-330 requires consideration of the context and intensity of the action's effects on the environment. A contamination site where known residual contamination remains, surveys have not been completed, and PFAS regulatory standards are still evolving cannot be adequately characterized through a compliance-based significance framework alone.

This internal inconsistency is compounded by the fact that other subsections within Section 4.3.6 of the DEIS Chapter 4— including solid waste and spill response — state "No mitigation is proposed" despite describing waste diversion programs and SPCC plans that appear to function as mitigation in practical effect. The document thus simultaneously labels compliance as mitigation in some subsections and disclaims mitigation entirely in others, without a coherent or disclosed significance standard governing either conclusion.

7.2 Recommendations

The Port should: (1) adopt and disclose a clear significance framework for hazardous materials and solid waste impacts that goes beyond regulatory compliance to evaluate the probability, magnitude, and community health consequences of hazardous materials releases under construction and operational conditions; and (2) distinguish clearly between regulatory compliance obligations and project-specific mitigation.

REFERENCES

Environmental Protection Agency. 2026. Regional Removal Management Levels for Chemical Contaminants. Available at: https://www.epa.gov/risk/regional-removal-management-levels-rmls-chemical-contaminants.

Washington Department of Ecology. 2026. CLARC Data Tables and Other Technical Information. Available at: https://ecology.wa.gov/regulations-permits/guidance-technical-assistance/contamination-cleanup-tools/clarc/data-tables.

APPENDIX A: ACRONYMS AND ABBREVIATIONS

The following acronyms and abbreviations are used in this review:

ACM	asbestos-containing materials
AFFF	aqueous film-forming foam
AHERA	Asbestos Hazard Emergency Response Act
Ecology	Washington State Department of Ecology
ESA	Environmental Site Assessment
DEIS	Draft Environmental Impact Statement
FRP	Facility Response Plan
MTCA	Model Toxics Control Act
NPL	National Priorities List
NTP	Near-term project
PFAS	per- and polyfluoroalkyl substances
Port	Port of Seattle
SAMP	Sustainable Airport Master Plan
SEA	Seattle-Tacoma International Airport
SEPA	State Environmental Policy Act
SPCC	Spill Prevention, Control, and Countermeasures
WIMN	What's in my Neighborhood (Ecology)

APPENDIX B: CONSOLIDATED DATA AND ANALYSIS REQUESTS TO THE PORT

This appendix consolidates the data and analysis requests identified throughout this review for ease of transmittal and tracking. Each entry cross-references the memorandum section in which the underlying issue is discussed and in which the supporting citations appear. Requests are stated here in summary form; the full basis for each is set out in the referenced section.

Section(s)	Data or Analysis Requested
1 (1.1, 1.1.1)	The Port should not be using vagueness and provide greater detailed information for each area of potential contamination within the limits of disturbance, including contaminant types, plume size, volume, specific remediation activities, and worker health and safety considerations, to adequately support a conclusion of no significant impact.
1 (1.2, 1.2.1)	The port should conduct a current Phase II Environmental Site Assessment for Site H-45, disclose the results, and revise the significance conclusion to reflect actual documented site conditions rather than the absence of available data.
2 (2.1, 2.2)	The Port should perform an exhaustive search for sites within the potential impact of NTPs compliant with the SEPA checklist and FAA Order 1050.1F. The review also needs to be current; that is, the Port needs to look at Ecology sites in 2026.
3 (3.1, 3.2)	The Port should include additional information on contaminated sites mapped in the vicinity of, but not directly within the disturbance areas. This information should provide adequate evidence (contaminant type, plume extent, previous remediations activities) to determine whether the conclusion that these sites do not extend on to the disturbance area is accurate.
4 (4.1, 4.2)	The Port should provide what specific amendments will be made to the SPCC plan to account for additional secondary containment, spill response, and spill prevention. The Port should also specify how this expansion could, or could not, be reasonably expected to discharge oil in quantities that may be harmful into navigable waters or adjoining shorelines, and what substantiates the determination.
5 (5.1, 5.2)	The Port should (1) Conduct and disclose PFAS sampling results for all five PFAS-related sites and all sixteen AFFF-related areas, including soil, groundwater, and surface water as appropriate; (2) Assess PFAS migration pathways to receiving waters and community drinking water sources; (3) Apply current EPA and Washington State PFAS cleanup standards to evaluate remediation need rather than deferring to future regulatory developments; and (4) Commit to enforceable, funded PFAS remediation schedules with completion milestones before construction commences in PFAS-impacted areas.
6 (6.1, 6.2)	The Port should complete hazardous materials surveys for existing buildings proposed for demolition. Following the completion of the hazardous materials survey, the Port should include specific survey findings to support the conclusion of no significant impact as well as develop building-specific demolition waste management plans disclosing the types, estimated quantities, and disposal pathways for hazardous building materials identified in the surveys.
7 (7.1, 7.2)	The Port should: (1) Adopt and disclose a clear significance framework for hazardous materials and solid waste impacts that goes beyond regulatory compliance to evaluate the probability, magnitude, and community health consequences of hazardous materials releases under construction and operational conditions; (2) Distinguish clearly between regulatory compliance obligations and project-specific mitigation.

APPENDIX A

Water Resources & Biological Resources Review Memo

MEMORANDUM

801 2nd Avenue, Suite 302, Seattle, WA 98104 | P 206.436.0515

To: Zack Shields, Senior Planner
City of SeaTac
Community and Economic Development
206.973.4850

From: Graeme Riggins, PWS, Environmental Scientist
Perteet Inc.
425.322.0270

Re: SEPA Review of Sustainable Airport Master Plan (SAMP) Near Term Projects (NTPs) – Review of Biological Resources and Water Resources Documentation

INTRODUCTION

The Port of Seattle's (Port) Sustainable Airport Master Plan (SAMP) for the Seattle-Tacoma International Airport identifies 31 near-term projects (NTPs) to allow for current and future expansion of airport facilities. The NTPs include project elements associated with new terminal construction, ground transportation center, off-site cargo facilities, extension of airfield taxiways, and expansion of a fuel facility. Under Washington's State Environmental Policy Act (SEPA), the Port is required to complete a Draft Environmental Impact Statement (DEIS) for the proposed NTPs, and on May 22, 2026, the Port published its DEIS for public review and comment.

Summary of Deficiencies and Recommendations

This memorandum identifies deficiencies related to biological resources and water resources included in the DEIS main document and attached technical reports found in Appendix D and Appendix M. Identified deficiencies include insufficient analysis of anticipated effects the proposed NTPs would have on federally protected species and Essential Fish Habitat (EFH), insufficient analysis of impacts to protected species and stormwater pollutant loading, and lack of enforceable wetland and stormwater quality mitigation commitments. Recommendations to correct the deficiencies include providing a more robust analysis of species impacts, enforceable mitigation commitments, and conservation measures to minimize adverse effects to protected species.

Water Resources and Biological Resources Documentation Reviewed

Perteet reviewed the biological resources and water resources sections of the DEIS. Documents reviewed included the following:

- Seattle-Tacoma International Airport SAMP NTP Wetland and Stream Delineation Report (Parametrix 2024a)
- SAMP Impacts Assessment for Aquatic Critical Areas Technical Memo (Parametrix 2024b)
- SAMP Impacts and Mitigation Summary and Proposed Permitting Approach (Parametrix 2024c)
- Impervious Area Impacts and Mitigation Measures (Gresham Smith 2024)
- NMFS and USFWS Biological Opinions
- FAA Biological Evaluation
- ESA and Sensitive Species Memo

In addition, the DEIS references other miscellaneous documentation, which was also reviewed, including:

- Excerpts from the Seattle-Tacoma International Airport Stormwater Management Manual (Port of Seattle 2017)
- Specifications for Temporary Erosions and Sediment Control Planning and Execution (Spec Section 01 57 13)
- Pollution Prevention, Planning, and Execution (Spec Section 01 57 23)
- Construction Water Management System (Spec Section 01 59 00)
- Phase 1 Groundwater Study Report (Aspect Consulting, 2008)
- 2015 Annual Event Groundwater Sampling Report (SLR, 2015)

The DEIS documentation review was compared against current guidance, regulations, and best available science, including but not limited to:

- US Army Corps of Engineers (USACE) Wetland Delineation Manual, per WAC 173-22-035
- Western Mountains, Valleys, and Coast Regional Supplement to USACE Wetland Delineation Manual
- 2023 Update of Ecology Wetland Rating for Western Washington
- WA Water Typing System per WAC 222-16-030
- The Endangered Species Act (ESA) of 1973 (16 United States Code [USC] 1531 et seq.), as amended.
- The Magnuson-Stevens Fishery Conservation and Management Act, as amended.

DEFICIENCIES FOUND IN THE DEIS DOCUMENTATION: WATER RESOURCES AND BIOLOGICAL RESOURCES

Mitigation and Performance Standards are Not Specific and Deferred Until After SEPA Review

The DEIS states that impacts to wetlands, streams, and associated buffers would be mitigated through avoidance and minimization during design, restoration of temporary disturbance areas, implementation of stormwater BMPs, and development of a compensatory mitigation plan during the subsequent permitting phase. Permanent impacts requiring mitigation include approximately 0.79 acre of wetlands, 2.66 acres of wetland buffer, less than 0.02 acre of stream, and 0.12 acre of stream buffer. While the DEIS identifies potential compensatory mitigation opportunities on Port-owned properties and presents mitigation ratios, it does not include a conceptual mitigation plan, identify specific mitigation sites, establish performance standards, or commit to a particular ongoing compensatory mitigation approach. Consequently, the effectiveness of the proposed mitigation and demonstration of no net loss of wetland and stream functions cannot be evaluated during SEPA review.

While the DEIS presents mitigation ratios and associated acreage calculations, ratios alone do not demonstrate adequate compensation for wetland and stream impacts. The document does not identify the selected mitigation mechanism, site locations, performance standards, or monitoring requirements necessary to determine whether the proposed compensatory mitigation would achieve no net loss of wetland and aquatic resource functions. Consequently, the adequacy of the proposed mitigation cannot be fully evaluated by decision-makers or the public.

Pollution-Generating Impervious Surface (PGIS) Impacts and Impacts to Downstream Aquatic Life Not Mitigated

The DEIS also proposes changes to taxiway configuration, expansion of the fuel farm, improvements to the westside campus, and additional cargo and parking facilities north of SR 518 would increase impervious surfaces within the project's drainage subbasins by approximately 74.43 acres. These increases are not evenly distributed, with five subbasins experiencing comparatively disproportionate impacts. Table 1 shows the net increases of impervious surfaces and associated estimated 100-year peak runoff rates for the five most heavily affected subbasins.

Table 1. Increase of Impervious Surfaces and Peak Runoff Rates Across the Most Affected Subbasins.

Subbasin	Net Increase Impervious Surfaces (Acres)	Estimated Percent Increase of 100 Year Peak Runoff
SDW2	8.54	61%
SDW1B	15.84	49%
SDE4	34.18	24%
SDN2/3/4	9.72	21%
New Development North of SR 518	37.59	82%

The proposed increase of impervious surfaces is expected to both increase stormwater runoff and adversely impact the quality of that runoff if left unmitigated. The DEIS does not provide sufficient information to determine whether proposed mitigation would adequately protect downstream aquatic environments because it lacks enforceable, performance-based standards.

Although the DEIS generally commits to implementation of BMPs, stormwater controls, restoration of temporary impacts, and future compensatory mitigation, it does not establish measurable success criteria, monitoring thresholds, compliance metrics, corrective action requirements, or adaptive management triggers. Without these commitments, the effectiveness of the proposed mitigation measures cannot be meaningfully evaluated during SEPA review. The FEIS should include performance-based standards for stormwater treatment, wetland and stream mitigation, monitoring, reporting, and adaptive management sufficient to demonstrate protection of water quality, aquatic habitat, and no-net-loss of aquatic resource functions.

The Port identifies BMPs it already implements to address stormwater runoff and wastewater quality discharge that are "likely" to reduce emerging contaminants but does not provide or propose performance standards, removal efficiency targets, or monitoring commitments for these emerging contaminants. Although the Port has committed to making improvements, additional NTP-specific source controls will likely be necessary to mitigate other potential water quality impacts in the IWS. However, these specific measures have not yet been determined; they will be evaluated and selected during the design of the individual NTPs.

The DEIS notes that the Port has seven different sites within its ownership that are suitable for compensatory mitigation, six within the airport property, that total over 150 acres and have the potential for more than 40 acres of wetland re-establishment. The Port does not directly comment on the suitability of these sites but does cite a Mitigation Site Opportunity Assessment prepared by Anchor QEA in 2019. The Anchor QEA 2019 report was not available for review during Perteet's review of SEPA documentation. Specific locations of these sites were not provided, and it is not clear if mitigation needs would be split between sites or how many of those sites would be utilized.

The Impacts and Mitigation Measures Memo provides the backbone for a conceptual mitigation plan but does not provide a clear method of mitigation or standards of performance, stating that the specifics of the mitigation would be developed concurrent with progression of design for elements of the proposed NTPs. With no standard of performance, it is impossible to measure the progress of any mitigation efforts and the project cannot be held accountable to the "no net loss" policy established by the Corps and Ecology.

DEIS Does Not Account for Incremental Pollutant Loading into Listed Waterbodies

Miller, Walker, and Des Moines Creek Systems are listed on Ecology's 303(d) list for multiple parameters that can have deleterious effects on aquatic ecosystems. Both lower Walker and Miller Creeks are Category 5 impaired waters listed for bacteria, dissolved oxygen, and temperature, while Des Moines Creek is listed for bacteria, copper, dissolved oxygen, and temperature. If existing ponds are expanded and not sufficiently shaded, the proposed projects will exacerbate existing Category 5 impaired waters.

Additional volumes of wastewater and stormwater from new and replaced PGIS discharged to these already impaired streams will only further reduce their water quality. The DEIS does not perform a loading-based analysis of the proposed NTPs' incremental pollutant contributions and how they interact with the degraded baseline of water quality in these streams.

Treated stormwater is still expected to contain low levels of pollutants and surges in runoff from storm events could exceed what the stormwater systems are capable of handling, resulting in possible discharge of untreated runoff. This will result in low levels of pollutants released into streams, waterways, and to Puget Sound, over time causing chronic exposure to low levels of pollutants.

The significance conclusion for water quality within the DEIS relies on regulatory compliance, particularly NPDES permit coverage and adherence to Ecology stormwater manual standards, as representative of environmental protection. While regulatory compliance is laudable, if accomplished, it is not enough by itself to address the concerns associated with impaired waters and documented presence of protected species.

The DEIS does indicate whether or not all new and replaced surfacing will be mitigated by the proposed stormwater improvements. Removed or otherwise demolished surfacing are generally not allowed to be credited to meet stormwater thresholds. The DEIS notes expansion of existing ponds but does not note which standards the ponds currently achieve. Proposed impacts that utilize existing infrastructure must bring the existing infrastructure up to the current standards or proposed new and separate BMPs.

The Proposed NTPs are Likely to Adversely Affect ESA-Listed Salmonids, Rockfish, Southern Resident Killer Whale, and Essential Fish Habitat

The Biological Evaluation prepared by the FAA consistently understates the potential effects of the proposed NTPs on aquatic species. Two of the primary reasons consistently given for May Affect, Not Likely to Adversely Affect (NLAA) determinations are that there is not enough information available to conclude that the ongoing discharge of low levels of contaminants, such as 6PPD-quinone, within treated stormwater discharged to the Puget Sound could adversely affect protected species or their habitat and that the potential effects to protected species cannot be meaningfully measured. Both reasons are problematic as they point to a lack of information as rationale for less restrictive determinations, whereas caution should warrant a higher determination for these species when information on contaminants is lacking.

NMFS disagreed with the NLAA determinations proposed by the FAA providing the rationale that contaminants within the stormwater runoff and wastewater discharge would lead to a decrease in water quality within Puget Sound, resulting in chronic exposure of low levels of contaminants to listed species and their prey which, through bioaccumulation, is expected to result in some level of change to behavior and development, injury, and fatality of listed species. The USFWS also states within the provided biological opinion that it does not concur with the NLAA determinations, even after receiving information to support the NLAA determination for bull trout and its critical habitat.

CONCLUSIONS AND RECOMMENDATIONS[1]

The DEIS's recommendations for the proposed stormwater treatment and runoff controls for the NTPs are preliminary and conceptual; detailed layouts and final sizing to meet current local, state, and federal stormwater requirements have not yet been developed. There is some element of risk to this approach as it is currently undetermined to what extent the conceptual mitigation measures will be feasible and if they will mitigate impacts to the extent assumed in the DEIS. It is recommended that all stormwater and IWS facilities be designed to meet current regulatory standards and address emerging contaminants such as 6PPD/6PPD-quinone.

A cumulative impacts analysis of the NTPs was not conducted as part of this DEIS. It also appears that, in general, each NTP is planned to be designed and permitted separately. This permitting approach may further obscure what the cumulative impacts of the NTPs and their associated stormwater control measures could be, especially in consideration of the broader provisions of the SAMP. A comprehensive evaluation of cumulative impacts should be performed under the SEPA EIS.

The Wetlands and Stream Report indicates that the hydrology of several wetlands is supported by stormwater runoff contributions, including Wetland A, Wetland 5, Wetland 6, Wetlands 4/7/8/9, Wetland 11, Wetland R15, Wetland A20, Wetlands A14a/A14b, Wetland E1, and Wetland 52A. Stormwater discharge also contributes to the hydrology of Stream A. It will be important to understand the extent to which the stormwater inputs to existing streams and wetlands will change as a result of the proposed NTPs and what the associated impacts of such changes may be. A more detailed analysis, including a hydroperiod analysis for the affected wetlands, is recommended.

It is also recommended that a more detailed analysis of the off-airport and downstream impacts of the proposed NTPs be conducted to characterize the anticipated individual and cumulative impacts of the NTPs (and pending SAMP implementation) on municipal stormwater conveyance, detention, and treatment systems; as well as streams, wetlands, adjacent floodplains, and receiving waters.

The following recommendations are made to address specific deficiencies in the stormwater and aquatic resources analysis and request that each be corrected in the Final EIS:

[1] This review was completed under an accelerated schedule with limited time and resources and Perteet's findings and conclusions are based solely on information contained within the DEIS and its appendices, as well as readily available public data. Perteet makes no representations or warranties regarding the completeness or accuracy of the information provided in the DEIS, and this review should not be construed as a comprehensive or exhaustive technical audit. The observations and recommendations presented herein reflect professional judgment based on the information available at the time of the review and are subject to revision should additional information become available.

Deficiencies in Pollutant Loading Analysis:

1. **Analysis of TMDL Loading:** Conduct an assessment of the proposed NTPs' incremental pollutant loads and how they are connected to appropriate TMDL allocations and water quality conditions within Miller Creek, Walker Creek, and Des Moines Creek. The provided analysis does not evaluate if additional loading from new impervious surface is consistent with existing water quality standards in 303(d)-listed waterbodies within the project footprint.
2. **6PPD-Quinone Performance Standards:** Develop site-specific performance standards and monitoring requirements for 6PPD-quinone.
3. **First-Flush and Large-Storm Event Analysis:** Provide analysis of stormwater quality and quantity conditions during first-flush events and storms exceeding the 50-year design storm event. Provide estimates for the frequency and volume of anticipated untreated overflows over the project's operational life.

Deficiencies in Mitigation Commitments:

1. **Stormwater Mitigation Commitments:** Specific, enforceable, performance-based stormwater control commitments should be made as conditions of SEPA approval. Detention volumes, treatment standards, removal efficiency targets, monitoring parameters, maintenance obligations, and adaptive management triggers.
2. **Wetland Mitigation Commitments:** A conceptual mitigation plan for wetland impacts should be prepared, complete with a clear method of mitigation (re-establishment, enhancement, restoration, creation), location (in-lieu fee, mitigation bank, on-site, etc.), and performance standards to ensure “no net-loss” of wetland functions.

Deficiencies in Biological Evaluation:

1. **Conservation Measures for Protected Aquatic Species and EFH:** Coordinate with NMFS and USFWS to develop and commit to site-specific conservation measures necessary to meet NLAA determinations for Federally Protected species and EFH and include those measures in the SEPA record.

REFERENCES

50 CFR 402.02. Interagency Cooperation—Endangered Species Act of 1973, as Amended, Definitions: "Effects of the action." Available at: https://www.ecfr.gov/current/title-50/part-402/section-402.02#p-402.02.

50 FR 660.75. Essential Fish Habitat (EFH) for Pacific Coast Groundfish. Available at: https://www.ecfr.gov/current/title-50/section-660.75.

Aspect Consulting. 2008. Seattle-Tacoma International Airport Phase 1 Groundwater Study Report.

Gresham Smith. 2024. Impervious Area Impacts and Mitigation Measures Supplemental Information for Environmental Assessment Seattle-Tacoma International Airport Sustainable Airport Master Plan.

Parametrix. 2024a. Seattle-Tacoma International Airport Sustainable Airport Master Plan (SAMP) Near Term Projects Wetland and Streams Report.

Parametrix. 2024b. Sustainable Airport Master Plan (SAMP) Impacts Assessment for Aquatic Critical Areas Technical Memorandum.

Parametrix. 2024c. SAMP Project Impacts and Mitigation Summary and Proposed Permitting Approach.

Port of Seattle. 2017. Seattle-Tacoma International Airport Stormwater Management Manual.

SLR. 2015. 2015 Annual Event Groundwater Sampling Report.

APPENDIX A: ACRONYMS AND ABBREVIATIONS

The following acronyms and abbreviations are used in this review:

BMP	Best Management Practice
DEIS	Draft Environmental Impact Statement
EFH	Essential Fish Habitat
ESA	Endangered Species Act
FAA	Federal Aviation Administration
NLAA	May Affect, Not Likely to Adversely Affect
NMFS	National Marine Fisheries Service
NTP	Near-Term Project
PGIS	Pollution-Generating Impervious Surfaces
SAMP	Sustainable Airport Master Plan
SEPA	State Environmental Policy Act
TMDL	Total Maximum Daily Load
USACE	US Army Corps of Engineers
USC	US Code
USFWS	US Fish and Wildlife Service
WAC	Washington Administrative Code

APPENDIX A

Air Quality Review Memo (Sunpro Services, LLC)

AIR QUALITY REVIEW

Seattle-Tacoma International Airport

Draft Environmental Impact Statement (DEIS)

Prepared For:	**Document Reviewed**	**Review Date**
PERTEET	SEA SAMP NTP DEIS May 2026	June-July 2026

Sunpro Services LLC (Sunpro) reviewed the air quality-related sections of the Draft Environmental Impact Statement (DEIS) prepared by the Port of Seattle for the Seattle-Tacoma International Airport (SEA) Sustainable Airport Master Plan (SAMP) Near-Term Projects (NTPs), published in May 2026, and other draft documents prepared by the Tri-City team of the cities of SeaTac, Des Moines, and Burien. Specifically, Sunpro's review focused on the NEPA Air Quality and Greenhouse Gas Report (Appendix C), the SEPA Air Quality and Human Health Risk Assessment Technical Report (Appendix C), and the relevant impact and mitigation discussions contained in Chapter 4 of the DEIS, which together evaluate construction and operational air quality impacts associated with the 31 NTPs proposed for implementation at SEA. This review was undertaken to assess the adequacy and completeness of the air quality analysis presented in the DEIS, including the evaluation of criteria pollutants, greenhouse gas emissions, and human health risks to communities in the vicinity of the Airport.

This review was completed under an accelerated schedule with limited time and resources. As such, Sunpro's findings and conclusions are based solely on information contained within the DEIS and its appendices, as well as readily available public data. Sunpro makes no representations or warranties regarding the completeness or accuracy of the information provided in the DEIS, and this review should not be construed as a comprehensive or exhaustive technical audit. The observations and recommendations presented herein reflect Sunpro's professional judgment based on the information available at the time of the review and are subject to revision should additional information become available.

1 NO ACTION ALTERNATIVE: INFLATED BASELINE & DEFINITIONAL DEFECTS

The No Action Alternative (NAA) in this DEIS is constructed in a manner that artificially elevates the comparison baseline, thereby compressing the apparent incremental impact of the Proposed Action and making the project appear less impactful than it truly is.

1.1 The NAA Is Not Truly "No Action"

The DEIS defines the NAA to include: (a) future passenger and aircraft operations growth through 2037, (b) projects that have recently been constructed or will be constructed by 2037, and (c) continued infrastructure changes to the airport.

> *Source: Appendix C, Air Quality & GHG Technical Report, Sec. 1.2, p. 5 — "The No Action Alternative would include no physical improvements to the Airport, but includes projects that have recently been constructed, or will be constructed by 2037."*

Review Notes:

- The NAA assumes 466,900 aircraft operations in 2032 and 474,874 in 2037 — representing substantial ongoing growth even under "no action." This embedded growth minimizes the delta between alternatives.[1]
- Emissions from the 2032 NAA already total 4,447 tons/yr CO and 2,923 tons/yr NOx. Framing the Proposed Action's ~110 tons/yr CO and ~70 tons/yr NOx increase as a small increment obscures the cumulative pollution burden on surrounding communities.
- Projects committed to independently of the NTPs (Section 2.4 of DEIS) are folded into the NAA, pre-loading infrastructure benefits into the baseline that should be attributed as mitigation to the action alternatives.
- Under standard NEPA/SEPA practice, the NAA should represent a more static condition (roughly existing operations with modest continuation). Embedding an aggressive growth trajectory into the NAA inflates the baseline against which impacts are measured. Far from the roughly existing operations that a genuine "no action" baseline requires, the Port has assumed a future of substantial expansion — a trajectory that is not a modest continuation at all. That inflated baseline shrinks the apparent delta between alternatives and understates the true incremental impacts of the Proposed Action.

1.2 The 2022 Baseline Year Creates a Post-COVID Distortion

The existing conditions analysis uses 2022 as the baseline year. This is the COVID-19 recovery period, during which aircraft operations, GSE use, and vehicle trips were artificially suppressed compared to normal airport activity. The Port's rationale is stated at DEIS Chapter 3, Section 3.2.3 (p. 3-1): "The year 2022 was chosen for the NEPA EA because it was the last full year for which a complete inventory of annual statistical data was available… For the SEPA DEIS, the Port has continued to use the year 2022 because conditions have not substantially changed in subsequent years." This assertion is directly contradicted by publicly available FAA ATADS data: SEA recorded only 401,351 total aircraft operations in 2022 — 10.9% below the 2019 pre-pandemic peak of 450,487 — and had recovered to 434,321 operations by 2024, an 8.2% increase over the DEIS baseline year. At the DEIS's own aircraft NOx rate (approximately 2,081 tons/yr for 401,351 operations), the 2024 operations level would imply roughly 170–229 additional tons/yr of aircraft NOx that are absent from the existing-conditions emissions

[1] DEIS Ch. 4, Sec. 4.2, p. 4-2 (Table 4.2-1): No Action operations: 466,900 (2032) / 474,874 (2037); Table 4.3.1-7, p. 4-8: 2032 NAA CO = 4,447 tons/yr, NOx = 2,923 tons/yr.

inventory — a gap larger than the entire projected NOx increase from the Proposed Action in 2032 (~61 tons/yr net operational increase). The 2022 baseline therefore understates both the existing community pollution burden and the true trajectory against which the NAA is being compared.[2]

- The Port's assertion that "conditions have not substantially changed" since 2022 is unsubstantiated and should be supported with actual 2023 and 2024 ATADS operations and emissions data, both of which were publicly available before the SEPA DEIS was published in May 2026. 2023 and 2024 are more representative than 2022 for two reasons: (1) they are not COVID-19 recovery-period data, so they reflect current, not suppressed, operations; and (2) applying the Port's own selection standard from DEIS Ch. 3, Sec. 3.2.3, p. 3-1 — using 'the last full year for which a complete inventory of annual statistical data was available' — 2024 is now that year, not 2022. Request the Port to provide a comparative emissions inventory for 2022, 2023, and 2024 as a FEIS supplement, and to use the most recent available full year as the existing-conditions baseline.
- The DEIS uses 2022 as the existing conditions baseline year — a COVID-19 recovery period during which aircraft operations at SEA were 10.9% below the 2019 pre-pandemic peak — and the Port's assertion that "conditions have not substantially changed" since 2022 is directly contradicted by FAA ATADS data showing operations recovered to 434,321 by 2024, an 8.2% increase over the baseline year. At the DEIS's own aircraft NOx emission rate, this operational gap implies approximately 170–229 additional tons/yr of aircraft NOx absent from the existing-conditions inventory — a magnitude larger than the entire projected NOx increase from the Proposed Action in 2032. Furthermore, inflating the No Action Alternative by embedding substantial operational growth (466,900 operations in 2032; 474,874 in 2037) and independently committed infrastructure projects into the baseline minimizes the incremental impact of the Proposed Action by making the NTPs appear less impactful than a properly constructed static baseline would reflect. The appropriate baseline for a May 2026 SEPA EIS is 2023 or 2024, and the Port should be required to provide a comparative emissions inventory for 2022, 2023, and 2024 as a FEIS supplement using the most recent available full year as the existing-conditions reference point[3].

1.3 Passenger-Driven vs. Operations-Driven Modeling

The DEIS uses the Port's own "Constrained Operating Growth Scenarios" as its traffic input. These scenarios should be independently verified to confirm they do not arbitrarily cap growth in the NAA while projecting maximum growth in the action alternatives.

- Request the full Constrained Operating Growth Scenario documentation (Appendix A) to verify NAA operational assumptions are not suppressed relative to Proposed Action assumptions.

[2] DEIS Ch. 3, Sec. 3.2.3, p. 3-1: "The year 2022 was chosen for the NEPA EA because it was the last full year for which a complete inventory of annual statistical data was available... For the SEPA EIS, the Port has continued to use the year 2022 because conditions have not substantially changed in subsequent years."
[3] DEIS Ch. 3, Sec. 3.2.3, p. 3-1; Ch. 4, Table 4.3.1-7, p. 4-8

2 DISPERSION MODELING: OUTDATED TOOLS & METHODOLOGICAL GAPS

The Draft EIS's dispersion modeling contains multiple technical deficiencies that systematically underestimate ambient pollutant concentrations at sensitive receptors surrounding the airport.

2.1 Model Version Discrepancy — AEDT 3f vs. 3g

The DEIS acknowledges using AEDT Version 3f for the core NEPA analysis (December 2023 release) while noting that AEDT Version 3g results are included in Appendix C. This creates a fundamental inconsistency: the primary analysis tables in Chapter 4 are built on an older model version.

> *Source: Chapter 4, Section 4.3.1 — "AEDT version 3f and MOVES version 4 were used for the NEPA analysis and are reflected in the results shown below. Updated results using AEDT Version 3g and MOVES model version 5 are included in the Air Quality and Human Health Risk Assessment Technical Report in Appendix C."*

- The primary analysis tables in Chapter 4 should use the most current model versions. Relegating updated results to an appendix while presenting older-version results in the main body of a May 2026 DEIS is a substantive methodological flaw.[4]
- Request that the FEIS utlilize tables derived from the most current AEDT and MOVES versions.
- Ask whether any emissions inventory differences between AEDT 3f and 3g are material and document which version was used for dispersion modeling (AERMOD) inputs.

2.2 Construction-Period Dispersion Modeling: 1-Hour NO2 Approaches the NAAQS Under a Non-Conservative In-Stack Ratio Assumption

While DEIS Chapter 4 presents only construction emissions inventories, the SEPA Air Quality and Human Health Risk Assessment Technical Report in Appendix C does include construction-period dispersion modeling (Sec. 2.4.1 and Table 2.14, pp. 2-31–2-32). That modeling reports a peak total 1-hour NO2 concentration of 185 µg/m³ during construction against the 188 µg/m³ NAAQS — 98 percent of the standard — and the result depends on OLM processing using an NOx/NO2 in-stack ratio (ISR) of 0.15, substantially below EPA's default ISR of 0.5 (EPA, Memorandum, Applicability of Appendix W Modeling Guidance for the AERMOD Dispersion Modeling System, Mar. 1, 2011) where source-specific data are unavailable.[5]

- Construction equipment exhaust (diesel PM2.5 and NOx) peaks in 2028-2029 per the DEIS. During these peak years, nearby schools, daycares, and residential areas in SeaTac will experience elevated short-term exposures; as modeled, only 3 µg/m³ of headroom to the 1-hour NO2 NAAQS remains during this period.
- Request source-specific justification for the 0.15 ISR, a sensitivity analysis using EPA's default ISR of 0.5, and receptor-level 1-hour NO2 design values for peak construction

[4] DEIS Ch. 4, Sec. 4.3.1, p. 4-3: "AEDT version 3f and MOVES version 4 were used for the NEPA analysis and are reflected in the results shown below. Updated results using AEDT Version 3g and MOVES model version 5 are included in the Air Quality and Human Health Risk Assessment Technical Report in Appendix C."

[5] DEIS Ch. 4, Sec. 4.3.1, pp. 4-4–4-5 (Tables 4.3.1-1 / 4.3.1-2): Peak construction NOx occurs in 2028, peak CO in 2029. Construction-period dispersion modeling is presented in App. C, Final Air Quality and Human Health Risk Assessment Technical Report, Sec. 2.4.1 and Table 2.14, pp. 2-31–2-32 (peak total 1-hour NO2 = 185 µg/m³ vs. 188 µg/m³ NAAQS; OLM processing with NOx/NO2 ISR = 0.15 per Table 2.14, n. b).

years at identified sensitive receptor locations, to demonstrate that the no-exceedance conclusion is not an artifact of the ISR assumption.

2.3 Receptor Grid Coverage & Off-Airport Community Exposure

The DEIS states that "the highest modeled pollutant concentrations are localized near operational hotspots, such as taxiways and idling zones, but decrease with distance from the airport boundaries." However, there is no specific documentation of sensitive receptor locations included in the modeling grid.[6]

- The SeaTac-Sunset Park PM2.5 monitoring station (installed 2024, operational spring 2025) is the only near-airport monitoring station mentioned. Its data is acknowledged but not integrated into the significance determination because it lacks sufficient historical data for NAAQS comparison.
- Request confirmation that the receptor grid for dispersion modeling includes off-airport sensitive receptors: residential areas in SeaTac, Burien, Des Moines, and Tukwila; schools and childcare facilities within 1-2 miles of the airport fence line; healthcare facilities and senior housing; and parks and outdoor recreational areas.
- Appendix C (AQ & HHRA Tech. Rpt., Sec. 2.1.4.6, pp. 2-16–2-17) documents 25-meter receptor spacing within 150 meters of sources, graduating to a 100-meter area grid extending 3,000 meters from the Airport; however, neither the DEIS chapters nor the Technical Report identifies which sensitive receptor locations coincide with modeled receptors. Request the receptor coordinate files for independent verification.

2.4 Background Concentration Data

The dispersion modeling uses background PM2.5 concentrations of 4.56 µg/m³ annual average and 10.8 µg/m³ 24-hour (rounded to 4.6 and 11 µg/m³ in the DEIS Chapter 4 concentration tables). These are based on the Seattle-Beacon Hill monitoring station (DEIS Ch. 3, Sec. 3.3.1.3, p. 3-13) rather than the newly installed SeaTac-Sunset Park monitor.

- The SeaTac-Sunset Park monitor — described by the DEIS itself as “representative of population exposure near the airport environment” — already shows materially higher PM2.5 concentrations than the Beacon Hill values used as background. DEIS Exhibit 3.3.1-2 discloses a maximum observed 24-hour PM2.5 of 16.3 µg/m³ at SeaTac-Sunset Park across 301 days of quality-assured data. The Beacon Hill 24-hour background used in the dispersion model is 10.8 µg/m³. Applying the Port’s own conservative convention — using the highest monitored value as the background design input — to the SeaTac-Sunset Park data would raise the 24-hour PM2.5 total concentration from the 12 µg/m³ reported in the DEIS to approximately 17.3 µg/m³. That figure represents 69% of PSCAA’s 25 µg/m³ health goal for daily PM2.5, and 49% of the NAAQS — leaving far narrower headroom than the DEIS implies. The DEIS’s three-year minimum data threshold for monitor selection is a Port protocol choice, not a regulatory mandate: EPA’s AERMOD Implementation Guide (EPA-454/B-19-027, 2019) requires use of the most “representative” monitor, not the most temporally complete one. The Port should

[6] DEIS Ch. 4, Sec. 4.3.1, pp. 4-9–4-10 (Tables 4.3.1-9 / 4.3.1-10): Operational dispersion results for 2032 and 2037. No documentation of sensitive receptor locations (schools, daycares, residences) included in the modeling grid within the main chapter text; receptor grid methodology is documented at App. C, AQ & HHRA Tech. Rpt., Sec. 2.1.4.6, pp. 2-16–2-17.

provide a sensitivity analysis using SeaTac-Sunset Park as background and commit to updating the analysis with a full year of that station's data before construction commences.[7]

- Note: The PSCAA's own health goal for PM2.5 (25 µg/m³ daily) is more protective than the NAAQS (35 µg/m³). Using the NAAQS as the sole comparator understates risk to the most sensitive populations.

2.5 Meteorological Data – Upper Air Station Representativeness

The DEIS air quality and human health risk assessment utilized AERMOD as the primary air dispersion model, consistent with FAA and EPA guidance. Surface meteorological data were sourced from the Seattle-Tacoma International Airport Automated Surface Observing System (ASOS), while upper-air sounding data were obtained from Quillayute Airport (KUIL) in Forks, Washington, located more than 100 miles northwest of SEA on the outer Olympic Peninsula coast[8]. The DEIS justifies this selection on the basis that Quillayute is the nearest long-term National Weather Service upper-air station with complete, quality-assured data suitable for regulatory dispersion modeling in western Washington, and that its coastal, marine-influenced conditions are more representative of the project area than alternative inland stations such as Salem, Oregon or Spokane, Washington[9].

While this justification is acknowledged and the use of Quillayute is conventional for Puget Sound AERMOD applications, the fully marine environment at Quillayute differs meaningfully from the Puget Sound lowland setting of the Airport, with its complex terrain, coastal influences, and seasonal wind patterns. The morning sounding from this station directly controls the convective mixing heights AERMOD uses to simulate daytime vertical dispersion,[10] and upper-air data that are not fully representative of the project area can affect modeled mixing heights, atmospheric stability classifications, and ultimately the predicted pollutant concentrations at receptor locations — shifting results in either direction. Yet the DEIS uncertainty discussion acknowledges only in general terms that AERMOD is sensitive to meteorological inputs and does not quantify how results respond to the upper-air data selection.[11]

The Port should further document and substantiate the representativeness of the Quillayute upper-air data for the SEA project area in its response to comments, including a sensitivity analysis of the upper-air station choice and an evaluation of site-specific prognostic meteorological data (e.g., WRF output processed through EPA's Mesoscale Model Interface, MMIF), an approach explicitly permitted under EPA's Guideline on Air Quality Models[5] that

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[7] DEIS Ch. 3, Sec. 3.3.1.3, pp. 3-12–3-14: Background PM2.5 annual = 4.6 µg/m³, 24-hr = 10.8 µg/m³ (Beacon Hill station). SeaTac-Sunset Park max observed 24-hr PM2.5 = 16.3 µg/m³ shown at Exhibit 3.3.1-2, p. 3-14; station excluded because < 3 years of complete data.

[8] Final Air Quality and Human Health Risk Assessment Technical Report, Section 2.1.4.4 (Meteorological Preprocessing), pp. 2-9 to 2-10 (identifying SEA ASOS surface data, WBAN Station No. 24233, and Quillayute Airport upper-air data, KUIL/USM00072797, for January 1, 2020 – December 31, 2024).

[9] Id. at p. 2-9 (stating Quillayute "is the nearest long-term National Weather Service upper-air station with complete, quality-assured data suitable for regulatory dispersion modeling in western Washington" and noting Salem, OR and Spokane, WA were rejected as less representative)

[10] Id. at p. 2-9 (acknowledging that "upper-air meteorological data are used to define temperature profiles, atmospheric stability, and mixing heights that govern vertical dispersion and plume rise")

[11] Id. at HHRA Tech Report Section 3.3.4 (Concentration Estimate Uncertainty), p. 3-20 (stating AERMOD "performance is highly sensitive to the quality and resolution of meteorological data" without evaluating the upper-air station selection specifically).

would provide vertical temperature profiles representative of conditions at SEA rather than the outer coast. Absent this, the representativeness of the modeled concentrations underlying both the NAAQS comparisons and the health risk estimates cannot be fully verified.

Related issue — mixing height parameter. Distinct from the AERMET-derived mixing heights discussed above, Appendix C separately fixes the mixing height governing the vertical scope of the aircraft emissions inventory at 3,084 feet above field elevation — the ceiling of the AEDT Climb Below Mixing Height and Descend Below Mixing Height modes (App. C, AQ & GHG Rpt., Sec. 5.1.2 and n.18; App. C, HHRA, p. 2-6) — on the strength of a single citation to EPA Office of Air Programs Publication AP-101 (Holzworth, January 1972). The adopted figure is the midpoint of that publication's reported Seattle diurnal range (705–1,175 m), applied uniformly to every operation, season, hour, and analysis year, notwithstanding that the cited source itself reports a range spanning some 1,540 feet. The record contains no site-specific determination of the mixing height at SEA, no validation of the 1972 climatology against contemporary observations, and no disclosure of how the inventory or resulting concentrations would change under a different value. The inconsistency is notable: for the dispersion analysis the Port expressly selected "the most recent five-year period" available (2020–2024, processed with AERMINUTE v15272 and AERSURFACE v24142; App. C, HHRA, pp. 2-9 to 2-10), yet applied no comparable currency standard to the mixing height figure. A threshold parameter defining the scope of the entire aircraft emissions analysis is therefore asserted rather than demonstrated. The Port should disclose the years and station of record underlying the AP-101 Seattle values, validate the figure against contemporary site-specific data, and quantify the sensitivity of the inventory and modeled concentrations to alternative values, including the morning and afternoon values reported in the same source and the 3,000-foot default at 40 CFR 93.153(c)(2)(xxii).

2.6 Rural vs. Urban Dispersion Coefficient Designation: Conclusory Justification and No Sensitivity Analysis

The dispersion analysis applies rural dispersion coefficients throughout, based on an Auer land-use determination that the 3-kilometer study radius is composed of less than 50 percent urban-indicating land use categories (App. C, HHRA, Sec. 2.1.4.3, pp. 2-8 to 2-9).

- The determination is conclusory: no quantitative tabulation of land use by Auer category is disclosed — the report references only the regional zoning map at HHRA Figure 1.1 — and the HHRA's own characterization of the surrounding area as "predominantly suburban" places the designation at the margin of the classification framework. The rural determination cannot be independently verified from the information disclosed.
- 40 CFR Part 51, Appendix W, Sec. 7.2.1.1 provides two acceptable procedures for the urban/rural determination — land use classification and population density. The DEIS does not address the population-density procedure, under which the densely developed communities surrounding SEA (SeaTac, Burien, Des Moines, Tukwila) would plausibly support an urban designation. Selecting the procedure that yields the rural result without addressing the alternative is a disclosure gap.
- The rural/urban selection materially influences AERMOD's boundary-layer treatment and predicted concentrations, and EPA guidance does not establish that either designation is uniformly conservative. Any claim that the selected designation is protective of the analysis conclusions must therefore be supported by modeling results rather than assumption.
- Request that the FEIS (1) disclose the quantitative Auer land-use tabulation supporting the rural determination, (2) address the population-density procedure under Appendix W

Sec. 7.2.1.1, and (3) include a rural/urban sensitivity analysis disclosing the resulting concentration differences at sensitive receptors, so that decision-makers can evaluate whether the significance conclusions are robust to reasonable alternative modeling assumptions.

3 POLLUTANT EXCLUSIONS

The DEIS systematically excludes or minimizes several categories of pollutants that pose the greatest documented health risks to communities adjacent to commercial airports.

3.1 Ultrafine Particles (UFPs): Exclusion Is Problematic in this SEPA analysis

The DEIS excludes UFPs from analysis, citing lack of federal regulation and inconclusive science. However, this exclusion is increasingly at odds with state-of-the-science literature and SEPA's broader mandate.

> *Source: AppC Air Quality Report — "no analysis or discussion of UFPs was included in the NEPA evaluation" because UFPs "are not specifically listed as a criteria pollutant, air toxic, or HAP."*

- WHO[12], the Health Effects Institute[13], and numerous peer-reviewed studies have established associations between UFP exposure near airports and cardiovascular, pulmonary, and neurological effects[14]. Several major airport EISs completed in 2024-2025 (see last bullet item below) now include UFP characterization.
- The 2023 PSCAA Tacoma and Seattle Air Toxics Trends Report is referenced but UFP monitoring from that report should be specifically cited. PSCAA has conducted some UFP monitoring in the Puget Sound region.[15]
- Under SEPA, the Port as lead agency has authority and obligation to analyze "probable significant adverse environmental impacts" even for unregulated pollutants. WAC 197-11-330 does not limit SEPA analysis to federally regulated pollutants.
- Request that the DEIS be supplemented with a UFP characterization study or, at minimum, a review of published UFP concentration data from comparable airports (e.g., LAX, BOS, SFO, SEA monitoring studies) to characterize the reasonably foreseeable UFP exposure burden on surrounding communities.

3.2 Hazardous Air Pollutants (HAPs): Threshold Classification

The DEIS declines to prepare a HAPs inventory on the grounds that the Proposed Action is not "major" (defined as a new airport, new runway, or major runway extension). However, the SAMP NTPs represent one of the largest infrastructure investments in SEA's history.

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[12] World Health Organization (2021). WHO Global Air Quality Guidelines: Particulate Matter (PM2.5 and PM10), Ozone, Nitrogen Dioxide, Sulfur Dioxide and Carbon Monoxide. Geneva: WHO

[13] HEI Review Panel on Ultrafine Particles (2013). Understanding the Health Effects of Ambient Ultrafine Particles. HEI Perspectives 3. Boston, MA: Health Effects Institute.

[14] Bendtsen KM, Bengtsen E, Saber AT, Vogel U (2021). "A review of health effects associated with exposure to jet engine emissions in and around airports." Environmental Health 20:10

[15] App. C (Air Quality & GHG Report), Sec. on UFPs: "since UFPs are not specifically listed as a criteria pollutant, air toxic, or HAP, no analysis or discussion of UFPs was included in the NEPA evaluation." See also DEIS Ch. 4, Sec. 4.3.1, pp. 4-11–4-12 for SEPA UFP discussion.

- The FAA Aviation Emissions and Air Quality Handbook Version 3 Update 1 identifies three triggers for considering a HAPs emissions inventory: the action is "major"; the action is located in a nonattainment or maintenance area; and/or a criteria air pollutant emissions inventory is also prepared. Appendix C (March 2024, Sec. 4.2.1.1, p. 10) addresses only the first two triggers and never addresses the third, despite a criteria pollutant inventory having been prepared for this action. This omission alone warrants preparation of a HAPs inventory in the FEIS.
- The NTPs include new terminal facilities, expanded concourses, new cargo facilities, new fuel storage, and new GSE infrastructure. The cumulative footprint and operational significance of these NTPs may meet the functional definition of a “major” action even if it does not include a new runway.
- The three HAPs identified as “of concern” in the SEPA HHRA (1,3-butadiene, diesel particulate matter, formaldehyde) are highly carcinogenic compounds in aircraft and diesel exhaust; these are not inconsequential pollutants. The fact that HHRA cancer risks are “below 1E-05” does not mean they are zero — it means up to 1 in 100,000 exposed individuals may develop cancer from incremental exposure.[16]
- The HHRA discloses maximum cumulative cancer risks by receptor population (5E-06 for the lifetime resident and adult off-site worker; App. C, HHRA Table 3.7, p. 3-16). Request receptor-level risk results, including the nearest residential receptor to the airport, and a HAPs emissions inventory reconciled with the HHRA’s TAP-of-concern list.

3.3 Lead (Pb): Omission from the Criteria Pollutant Emissions Inventory

Lead is one of the six criteria pollutants for which the EPA has established NAAQS (DEIS Ch. 3, Table 3.3.1-3, p. 3-9), yet the DEIS operational and construction emissions inventories omit Pb entirely, limiting the criteria pollutant inventory to CO, NO2, PM10, PM2.5, and SO2 (App. C, Air Quality & GHG Report, Sec. 4.2, p. 9).

- Appendix C excludes Pb on the stated grounds that the area is in attainment for lead, that "Avgas (the only aviation fuel containing lead) fueling ceased at SEA in 2018," and that the Proposed Action involves no potentially significant source of lead emissions (App. C, Air Quality & GHG Report, Sec. 4.2, p. 9). This rationale conflates where fuel is purchased with where it is burned. The cessation of Avgas dispensing at SEA does not eliminate lead combustion at SEA: piston-engine general aviation aircraft fueled at other airports conduct complete landing and takeoff cycles at SEA.
- The DEIS’s own fleet mix data confirm continuing piston-engine activity: hundreds of annual piston operations in the Existing (2022) Condition (e.g., Cessna 172, Cessna 152/182, Cirrus SR22, Piper PA-28) and continuing piston operations in all 2032 and 2037 forecast scenarios (App. C, Air Quality & GHG Report, Attachment 1, Tables 1-1 through 1-5).
- The HHRA component of Appendix C confirms that quantifiable lead emissions occur at SEA: it identifies "combustion of leaded aviation gasoline used in piston-engine aircraft" and trace lead in Jet A as airport lead sources (App. C, HHRA, p. 2-3), and estimates Pb

[16] App. C (Air Quality & GHG Report), Sec. 4.2.1.1, p. 10: HAPs inventory not prepared because the Proposed Action is not a "major" action (new airport, new runway, or major runway extension) and is not located in a nonattainment or maintenance area, per the FAA Aviation Emissions and Air Quality Handbook Version 3 Update 1; the Handbook's third trigger (a criteria air pollutant emissions inventory is also prepared) is not addressed. See also App. C (HHRA): 1,3-butadiene, diesel PM, and formaldehyde identified as TAPs of concern; cumulative cancer risks below 1E-05 threshold (maximum 5E-06; HHRA Table 3.7, p. 3-16).

emissions using a fuel-based approach with a Pb-to-SO2 ratio of 0.56 for 100LL-fueled piston aircraft and an 11 ppb trace fraction for Jet A (App. C, HHRA, p. 2-16). The lead emissions data necessary to complete the criteria pollutant inventory therefore already exist within the Port's own analysis, yet annual Pb emissions in tons per year are disclosed nowhere in the DEIS.

- Request that the FEIS (1) include Pb in the operational and construction emissions inventories for all analysis scenarios, consistent with the fuel-burn methodology already applied in the HHRA; (2) correct the inaccurate "fueling ceased" rationale; and (3) disclose the annual piston-engine operations counts and 100LL fuel-consumption assumptions underlying the HHRA's Pb estimates so that reviewing agencies and the public can independently verify the conclusion of de minimis impact.

3.4 Ozone: No Hotspot Analysis Despite Precursor Increases

The DEIS projects increase of 70-225 tons/yr NOx and 8-20 tons/yr VOCs[17] under the Proposed Action. These are substantial ozone precursor increases in a region that was formerly a nonattainment area for ozone.

- The DEIS relies on the region's current ozone attainment status to avoid hotspot modeling but does not assess whether the incremental NOx/VOC increases could jeopardize continued attainment or increase ozone precursor loading in ways that affect maintenance of the standard.
- With climate change projections showing increased temperatures and more stagnation events in the Puget Sound, ozone formation risks may increase during the project's operational life (through 2037+). This is not addressed.
- The Port should make sure that the FEIS includes a qualitative discussion consistent with the climate evaluation methodology reinstated at DEIS Ch. 3, Sec. 3.3.3, p. 3-31 — of how increased temperatures and atmospheric stagnation frequency projected for the Puget Sound region could affect ozone precursor (NOx/VOC) dispersion and the region's ability to maintain compliance with the ozone NAAQS through the NTP operational horizon (2037 and beyond).

3.5 Nitrogen Dioxide (NO2): Near-Field Hotspot Potential

The dispersion modeling shows NO2 incremental concentrations of 21-22 µg/m³ near aircraft ground operations in both 2032 and 2037. Background NO2 is already at 79 µg/m³ — combined totals of 100-101 µg/m³ consume more than half the available headroom under, though they remain below, the 1-hour NAAQS of 188 µg/m³.

- The annual NO2 NAAQS is 100 µg/m³. The modeled annual total of 23-24 µg/m³ appears well below this standard — but the 1-hour peak concentrations of 100-101 µg/m³ represent a 54% utilization of the 1-hour standard headroom. Under high-traffic, low-wind, atmospheric stability conditions not captured by model averages, NO2 peaks may approach or exceed this standard. Notably, the construction-period modeling in Appendix C reports a peak total 1-hour NO2 concentration of 185 µg/m³ — 98 percent of the NAAQS (see Construction-Period Dispersion Modeling discussion above). The Technical Report processed 1-hour NO2 to the design-value form using five years of meteorological data (App. C, AQ & HHRA Tech. Rpt., pp. 2-18–2-19), so the remaining

[17] Table 4.3.1-7, May 2026 DEIS, p 4-8

deficiency is disclosure of receptor-level results and the supporting OLM in-stack ratio documentation.

- Request receptor-level 1-hour NO2 design values in the form of the NAAQS (the 98th percentile of the daily maximum 1-hour concentrations), the spatial extent of near-standard concentrations, and complete OLM/ISR documentation.[18]

4 SIGNIFICANCE THRESHOLDS: UNDER SEPA

The DEIS's approach to significance determination is inadequate under SEPA. It relies exclusively on NAAQS exceedance as the metric of significance — a standard designed for regional air quality management, not for evaluating community-level health impacts of specific infrastructure projects.

4.1 NAAQS Exceedance Is a Necessary But Not Sufficient Significance Test

The NEPA significance test (FAA Order 1050.1F) is limited to NAAQS exceedance. SEPA's significance standard under WAC 197-11-330 is broader: it requires evaluation of the probability, severity, reversibility, and geographic extent of adverse impacts, including impacts to sensitive populations.

> *Source: Chapter 4, Section 4.3.1, p. 4-3 — "For the SEPA EIS, significance was determined by comparing the total of the modeled Proposed Action-related emissions plus the background concentrations to the NAAQS."*

- The DEIS imports the FAA's NAAQS-only significance threshold directly into its SEPA analysis without independent application of SEPA's multi-factor significance criteria. This is legally deficient.
- SEPA significance factors (WAC 197-11-330[3]) include: degree to which proposal affects public health; whether the proposal involves unique or ecologically sensitive areas; whether effects are highly uncertain; and probability of adverse impacts. None of these are addressed through NAAQS comparison alone.[19]
- The PSCAA's own PM2.5 health goal (25 µg/m³ 24-hour) — which is more protective than the NAAQS (35 µg/m³) — is acknowledged in the DEIS but not used as a significance threshold, despite being an adopted local agency policy (a voluntary PSCAA policy goal).[20]
- The DEIS imports the FAA's NAAQS-only significance threshold directly into its SEPA air quality significance determination without independent application of SEPA's multi-factor significance criteria under WAC 197-11-330(3), which requires consideration of factors including the degree to which the proposal affects public health, whether effects are

[18] DEIS Ch. 4, Sec. 4.3.1, p. 4-10 (Table 4.3.1-10): 2037 NO2 incremental = 22 µg/m³; background = 79 µg/m³; total = 101 µg/m³ vs. 1-hr NAAQS of 188 µg/m³. Note: the 1-hour NO2 NAAQS form is the 98th percentile of the daily maximum 1-hour concentrations (the 99th percentile applies to 1-hour SO2); modeled NO2 was processed to this design-value form per App. C, AQ & HHRA Tech. Rpt., pp. 2-18–2-19.

[19] DEIS Ch. 4, Sec. 4.3.1.1, p. 4-3: "For the SEPA EIS, significance was determined by comparing the total of the modeled Proposed Action-related emissions plus the background concentrations to the NAAQS." See also pp. 4-11 (no localized NAAQS exceedances found).

[20] DEIS Ch. 3, Sec. 3.3.1.2, p. 3-8, nn. 1–2, citing PSCAA, 2022 Air Quality Data Summary, Dec. 2023

highly uncertain, and the probability of adverse impacts on sensitive populations — none of which are addressed through NAAQS comparison alone. Request that the Port provide a supplemental SEPA significance analysis for air quality that expressly applies each WAC 197-11-330(3) factor, particularly with respect to environmental justice communities in SeaTac, Burien, and Des Moines that already carry above-average pollution burden[21].

4.2 HHRA Cumulative Risk Threshold Is Less Protective Than Washington's Own Screening Basis and Does Not Reflect Local Burden

The HHRA uses a 1-in-100,000 cancer risk threshold (1E-05) and hazard index of 1.0 as significance thresholds. The HHRA screens individual toxic air pollutants against Washington State ASILs, which are based on a 1E-06 target cancer risk (App. C, HHRA Sec. 3, p. 3-4), but interprets cumulative cancer risks against a less protective 1E-05 decision threshold structured as a second-tier review under WAC 173-460 (pp. 3-12–3-13). Neither threshold accounts for the cumulative cancer burden already borne by communities near SEA.

- SeaTac, Burien, and portions of Tukwila are designated environmental justice communities with above-average pollution burden, below-average income, and above-average rates of asthma and respiratory disease. Adding incremental cancer risk to already-burdened communities requires a more protective significance threshold.
- California's CARB and several major airport EISs use 1-in-1,000,000 (1E-06) as a more protective cancer risk threshold for EJ communities. The FEIS should explain why this more protective threshold was not applied.[22]

4.3 Cumulative Pollution Burden Not Reflected in Significance Determination

The air quality significance analysis does not incorporate existing baseline pollution burden from the airport (i.e., existing emissions on top of background from regional sources) when evaluating whether the incremental increase is significant.

- The existing airport already generates over 4,400 tons/yr of CO and nearly 3,000 tons/yr NOx per the DEIS emissions inventories. Adding another 110-263 tons/yr CO and 70-226 tons/yr NOx must be evaluated in the context of this already-heavy baseline emission load on the same communities.[23]
- Request that the FEIS include a cumulative air quality analysis that quantifies total ambient concentrations from all airport-related sources (not just the incremental increase from the Proposed Action) relative to regulatory thresholds.

[21] DEIS Ch. 4, Sec. 4.3.1.1, p. 4-3: "For the SEPA EIS, significance was determined by comparing the total of the modeled Proposed Action-related emissions plus the background concentrations to the NAAQS." WAC 197-11-330(3) multi-factor significance criteria not applied. PSCAA 25 µg/m³ PM2.5 health goal acknowledged but not used as significance threshold (DEIS Ch. 3, Sec. 3.3.1.2, p. 3-8, nn. 1–2; App. C, AQ & GHG Report, p. 8, n. 7).

[22] App. C (HHRA): Cumulative cancer risks interpreted using 1E-05 threshold (1 in 100,000); results for all receptors below this threshold. See also Ch. 4 text, pp. 4-11–4-12 referencing HHRA results.

[23] DEIS Ch. 4, Table 4.3.1-7, p. 4-8: 2032 Proposed Action total CO = ~4,557 tons/yr, NOx = ~2,993 tons/yr (vs. 2032 NAA: CO = 4,447, NOx = 2,923 tons/yr). Ch. 4, Sec. 4.3.1.4, p. 4-14: "No mitigation is proposed."

5 GHG & CLIMATE ANALYSIS: IMPROPERLY STRIPPED; SEPA REQUIRES RESTORATION

The climate and GHG analysis in the DEIS contains a significant procedural and substantive defect: the qualitative climate analysis that was present in the NEPA Draft EA was removed from the NEPA Final EA following federal regulatory changes under the Trump Administration's EO 14154. The SEPA DEIS adopted the same stripped analysis.[24]

5.1 SEPA Is Not Bound by Federal Regulatory Rollbacks

Source: Appendix C (Air Quality & GHG Technical Report), n.1; see also DEIS Chapter 4, Section 4.3.3, pp. 4-20–4-21 — "After the publication of the Draft EA, EO 13990 was revoked. In addition, CEQ revoked its regulations... As a result of these changes, all references to climate and the qualitative climate evaluation... has been removed from this Technical Report."

- Washington's SEPA regulations are state law — not dependent on federal CEQ guidance. The revocation of EO 13990 and CEQ's NEPA regulations does not alter the Port's obligations under Chapter 43.21C RCW and WAC 197-11.
- The Port's own 2011 SEPA Resolution (Commission Resolution 3650) establishes seven specific factors for evaluating GHG significance under SEPA, including: whether the proposal significantly contributes to GHG concentrations; the extent to which emissions have been mitigated; and whether the proposal conflicts with applicable laws for reducing GHG emissions. These factors are not adequately addressed in the DEIS.
- Washington State's Climate Commitment Act (CCA) and Clean Fuels Program establish binding emissions reduction obligations. The DEIS does not evaluate consistency with these state requirements.

5.2 GHG Magnitude Requires Substantive Significance Discussion

The 2037 Proposed Action generates approximately 7.83 million MT CO2e per year in total Scope 1-3 emissions. The net GHG increment of the 2032 Proposed Action over the No Action Alternative is 152,703 MT CO_2e (+2.1%). The 2037 increment is 539,569 MT CO_2e (+7.4%). Aircraft Scope 3 emissions comprise 93.4% of 2037 Proposed Action total (7,312,315 of 7,832,269 MT CO_2e) (cited in Ch. 4, Section 4.3.3).

Emissions Source	2032 No Action (MT CO_2e/yr)	2032 Proposed Action (MT CO_2e/yr)	2037 No Action (MT CO_2e/yr)	2037 Proposed Action (MT CO_2e/yr)
Scope 1 — Direct Emissions (Port-Controlled)				
Port-Owned Airfield Vehicles / Equipment	4,330	4,411	4,404	4,728
Natural Gas Boilers and Heaters	17,648	24,896	17,648	24,896

[24] App. C (Air Quality & GHG Report), n.1; see also DEIS Ch. 4, Sec. 4.3.3, pp. 4-20–4-21: "After the publication of the Draft EA, EO 13990 was revoked. In addition, CEQ revoked its regulations... As a result of these changes, all references to climate and the qualitative climate evaluation... has been removed from this Technical Report."

Emissions Source	2032 No Action (MT CO_2e/yr)	2032 Proposed Action (MT CO_2e/yr)	2037 No Action (MT CO_2e/yr)	2037 Proposed Action (MT CO_2e/yr)
Diesel Generators	328	552	328	552
Fuel Farm Tanks	0	0	0	0
Total — Scope 1	**22,306**	**29,859**	**22,380**	**30,176**
Scope 2 — Indirect Emissions (Port Electricity)				
Port of Seattle Electricity Consumption	2,463	3,434	2,463	3,434
Total — Scope 2	**2,463**	**3,434**	**2,463**	**3,434**
Scope 3 — Indirect Emissions (Non-Port-Controlled)				
Aircraft (fuel dispensed, LTOs, APUs, Run-Ups)	6,695,771	6,821,325	6,810,125	7,312,315
Tenant-Owned GSE	32,737	33,338	33,347	35,751
Tenant Electricity Consumption	330	468	330	468
Airside Deliveries	509	518	492	529
Roadways	412,923	421,461	416,820	441,606
Parking Facilities	6,858	7,714	6,742	7,990
Total — Scope 3	**7,149,127**	**7,284,825**	**7,267,857**	**7,798,659**
GRAND TOTAL (MT CO_2e/yr)	**7,173,897**	**7,318,118**	**7,292,700**	**7,832,269**
Increase vs. No Action Alternative	—	**+152,703 (+2.1%)**	—	**+539,569 (+7.4%)**

All figures are drawn directly from DEIS Tables 4.3.3-3 through 4.3.3-7 (Chapter 4, May 2026 DEIS) and Appendix C (App. C GHG Report, Tables 28–34). The net increment of the Proposed Action over the No Action Alternative is shown on the last row.

- The DEIS's own response to Resolution 3650 Factor 3 states only "No mitigation is proposed" (DEIS Chapter 4, Table 4.3.3-11, p. 4-35)[25] without any analysis of economic or technical feasibility — which is precisely what Factor 3 requires the Port to evaluate, not simply declare. Resolution 3650 further states that "additional mitigation measures may be required to the extent attributable to the identified adverse impacts," and while the DEIS discloses a 7.4% GHG increase (+539,569 MT CO_2e) in 2037 (DEIS Chapter 4, Section 4.3.3, p. 4-29), it concludes that the increase "is not anticipated to result in a significant adverse impact on climate" (Sec. 4.3.3.3, p. 4-31) while providing no explanation of why feasible measures such as SAF blending requirements or GSE electrification mandates were rejected.
- The Port's voluntary goal of net-zero Scope 1 and 2 emissions by 2040 is mentioned as a minimization measure, but this goal does not address Scope 3 emissions (aircraft fuel combustion), which constitute over 93% of total airport GHG emissions.
- The 10% SAF (Sustainable Aviation Fuel) blend goal by 2028 is aspirational, not enforceable. It should be made binding mitigation if the DEIS is to rely on it.

[25] DEIS Ch. 4, Sec. 4.3.3.1, pp. 4-21–4-22: Port SEPA Resolution 3650 (2011) seven-factor GHG significance test cited in full. GHG tables: Tables 4.3.3-1 through 4.3.3-8, pp. 4-23–4-28. "No mitigation is proposed" stated at Sec. 4.3.3.4, p. 4-31, and in the Factor 3 response, Table 4.3.3-11, p. 4-35.

5.3 Comparison to Other Airport Expansions

Other airports have adopted concrete, quantified GHG and emissions-reduction commitments — through binding regulation, enforceable EIR (Environmental Impact Report) mitigation, and voluntary design standards — illustrating that mechanisms beyond a blanket "no mitigation is proposed" conclusion are available and in use at comparable facilities:

- Port Authority of New York and New Jersey (JFK, LaGuardia, Newark) — Zero-Emission Airside Vehicle (ZEAV) Rule (adopted 2022; Ch. XIX, Airport Rules and Regulations): a binding regulatory mandate requiring transition of ground support equipment to zero-emission models by 2030, phased by equipment category and backed by mandatory fleet reporting.[26]
- South Coast Air Quality Management District 2021 MOU with five South Coast-region airports, including LAX: sets binding fleet-average ground support equipment emission-factor targets (NOx+HC of 1.8 g/bhp-hr by January 1, 2023; 1.0 g/bhp-hr by January 1, 2031), enforced through the MOU's monitoring and reporting program.[27]
- LAX Landside Access Modernization Program (LAMP) Final EIR (2017): includes a binding Mitigation Monitoring and Reporting Program (MMRP) with enforceable project design features — including solar power provision and EV charging infrastructure at new facilities — tracked through required annual public reporting.[28]
- LAX Airfield and Terminal Modernization Project EIR (2024): unlike the SEA DEIS, this EIR discloses GHG emissions as a significant and unavoidable impact rather than concluding no significant adverse effect — demonstrating that a “not significant” GHG finding is not the only defensible outcome for an airport capital program of comparable scale.[29]
- San Francisco International Airport, Harvey Milk Terminal 1 ($2.4B, completed 2024): the airport sponsor voluntarily adopted an all-electric, Zero Net Energy-track design, including a 2.5 MW rooftop photovoltaic system supplying roughly 15% of terminal energy demand, achieving LEED v4 Platinum. This was a voluntary sponsor commitment, not an EIS/EIR-imposed condition — illustrating that airport sponsors are capable of far more ambitious design-stage GHG commitments without a regulatory mandate.[30]

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[26] Port Authority of New York and New Jersey, Zero-Emission Airside Vehicle (ZEAV) Rule, Ch. XIX, Airport Rules and Regulations (adopted 2022), requiring transition of ground support equipment at JFK, LaGuardia, and Newark to zero-emission models by 2030. See ZEAV Technical Workgroup, Final Technical Report (July 23, 2024): https://www.panynj.gov/content/dam/airports/pdfs/final-TWG-technical-report-2024.pdf.

[27] South Coast Air Quality Management District, 2021 Memorandum of Understanding with five South Coast-region airports (including LAX), MOU Measure No. 1 – GSE Emissions Reduction Policy: binding fleet-average NOx+HC emission-factor targets of 1.8 g/bhp-hr by January 1, 2023 and 1.0 g/bhp-hr by January 1, 2031. See https://www.aqmd.gov/docs/default-source/planning/fbmsm-docs/lax-mou-2021-measure-1-summary.pdf.

[28] Los Angeles World Airports, LAX Landside Access Modernization Program (LAMP) Final EIR (2017) and Mitigation Monitoring and Reporting Program (MMRP), including enforceable solar power and EV charging infrastructure design features. See LAMP Final EIR: https://www.lawa.org/lawa-our-lax/environmental-documents/current-projects/lamp-deir; 2022 MMRP Annual Progress Report: https://www.lawa.org/sites/lawa/files/documents/2022%20LAMP%20MMRP%20Report_Final.pdf.

[29] Los Angeles World Airports, Airfield and Terminal Modernization Project Final EIR (2024), which identifies GHG emissions as a significant and unavoidable impact rather than concluding no significant adverse effect. Summary: https://cityclerk.lacity.org/onlinedocs/2024/24-0876_misc_4_10-07-25.pdf.

[30] San Francisco International Airport, Harvey Milk Terminal 1 (HMT1) Redevelopment ($2.4B, completed 2024): all-electric, Zero Net Energy-track design with a 2.5 MW rooftop PV system supplying ~15% of terminal energy demand;

6 OPERATIONAL MITIGATION

The DEIS's declaration that "no mitigation is proposed" for air quality or GHG cannot be reconciled with the available facts and information. Under SEPA, the lead agency must propose mitigation for all identified probable significant adverse impacts. Even where significance is disputed, best practices in EIS preparation require identification of feasible mitigation measures.

6.1 Construction-Phase Mitigation Is Inadequate

The only mitigation proposed for the construction phase is adherence to FAA AC 150/5370-10H Standard Specifications. This is a prescriptive construction quality standard, not an emissions-reduction commitment.[31]

- Require the Port to adopt an Enhanced Construction Emissions Control Plan (CECP) with: (a) Tier 4 Final or equivalent diesel equipment requirements for all non-road construction equipment; (b) anti-idling requirements for construction vehicles; (c) real-time air quality monitoring at fence-line locations during peak construction activity; (d) a community notification protocol when PM2.5 or NO2 concentrations exceed local health advisory thresholds.
- Require that the CECP be incorporated into all construction contracts as an enforceable requirement, not a voluntary best management practice.

6.2 Operational Mitigation That Should Be Required

The following operational mitigation measures are technically feasible, financially proportionate, and adopted by comparable airports:

- Gate Electrification (400Hz Ground Power): Full deployment of pre-conditioned air and ground power at all gates, with requirements for airlines to use ground power rather than APUs (Auxiliary Power Unit). The Port references this in its Scope 3 strategy but has not committed to a timeline or enforcement mechanism.
- GSE Electrification: Require all new GSE purchased or leased for airport operations to be zero-emission. Set a fleet transition target of 100% zero-emission GSE by 2032 or 2037.
- Electric Vehicle (EV) Infrastructure: Require a minimum percentage of new parking capacity to include EV charging infrastructure to reduce on-airport vehicle emissions.
- SAF Blending Commitments: Convert the aspirational 10% SAF blend by 2028 goal into an enforceable contractual commitment with airlines as a condition of gate lease agreements.
- Idle Reduction Programs: Implement and enforce aircraft taxi-out time reduction programs, single-engine taxi procedures, and APU use restrictions during ground holds.

achieved LEED v4 Platinum, WELL Platinum, and Fitwel certification via SFO's voluntary ZERO (Zero Energy and Resilient Outcomes) design program — not an EIS/EIR-imposed mitigation condition. See "Sustainable Inside and Out," Airport World: https://airport-world.com/sustainable-inside-and-out/.

[31] DEIS Ch. 4, Sec. 4.3.1.4, p. 4-14: "Minimization measures and best management practices (BMPs) would be used to minimize air quality impacts during construction. The Port would adhere to FAA AC 150/5370-10H, Standard Specifications for Construction of Airports. [Mitigation:] No mitigation is proposed."

- Near-Airport Land Use Buffer: Work with cities of SeaTac, Burien, and Des Moines to establish a coordinated buffer zone where sensitive land uses (schools, daycares, residential) are restricted from further expansion within 500m of the airport fence.
- Under WAC 197-11-660, the Port must include all practical mitigation measures in the DEIS. “No mitigation proposed” for an airport expansion generating thousands of tons/yr of additional emissions does not meet this standard.

7 ENVIRONMENTAL JUSTICE: ANALYSIS & PROTECTIVE MEASURES

The DEIS acknowledges that communities surrounding SEA are environmental justice communities, with per capita income ($39,089 in the GSA) well below King County ($74,100) and the state ($53,744). Despite this explicit recognition, the EJ analysis does not result in enhanced protections.[32]

7.1 EJ Analysis Was Stripped from NEPA Final EA

Source: Chapter 3 footnote — "Environmental justice (EJ) was evaluated in the NEPA Draft EA but was removed from the Final EA to reflect federal regulatory changes."

- Although the DEIS restores an EJ analysis (that federal deregulation had removed from the NEPA Final EA) as a SEPA supplement, this restored analysis reaches the same "no disproportionate and adverse impact" conclusion as the underlying resource-by-resource impact findings (DEIS Ch. 4, Sec. 4.3.11, p. 4-73) and does not result in any EJ-specific mitigation measure or a different significance determination for any resource area — the EJ analysis confirms existing conclusions rather than changing them. Critically for air quality, the EJ finding of no adverse health effect to environmental justice populations rests directly on the conclusion that the Action Alternatives would not cause an exceedance of the health-based NAAQS and would not significantly increase acute non-cancer or cumulative cancer risk (DEIS Ch. 4, Sec. 4.3.11, p. 4-78). Because those no-exceedance and no-significant-risk determinations are themselves outputs of the AERMOD dispersion and human health risk modeling, the representativeness of the model's meteorological inputs — including the Quillayute upper-air data discussed above — is not a purely technical detail but a direct underpinning of the EJ conclusion. If the upper-air data bias the modeled mixing heights and thereby understate ground-level concentrations at nearby receptors, the margin supporting both the NAAQS compliance finding and the EJ determination could be narrower than presented. This makes the requested sensitivity analysis and evaluation of site-specific prognostic meteorological data a legitimate and material concern rather than an academic one, particularly given that the affected receptors are located in communities the DEIS itself identifies as overburdened environmental justice populations.
- Under SEPA and Washington’s commitment to environmental justice (RCW 70A.02.005, enacted 2021), the state has independent authority and obligation to require enhanced protections for communities disproportionately burdened by environmental impacts. The DEIS does not engage with this state-law EJ framework.

[32] DEIS Ch. 3, Sec. 3.3.12, p. 3-92; Table 3.3.12-3, p. 3-93: GSA per capita income = $39,089 vs. King County $74,100 and WA State $53,744. Ch. 3, Sec. 3.3.12, p. 3-92, n. 37: "Environmental justice (EJ) was evaluated in the NEPA Draft EA but was removed from the Final EA to reflect federal regulatory changes."

7.2 Project Area Specific Cumulative Burden Not Quantified

The EJ analysis identifies the GSA as a low-income, minority community but does not quantify the cumulative pollution burden these communities already bear from all sources (airport, roadways, industrial) before adding the NTP increment.[33]

- The DEIS uses the WADOH EHD map and the Port's Equity Index to assess community vulnerability and environmental-burden factors (DEIS Ch. 4, Sec. 4.3.11, p. 4-73), and states that these factors "capture the cumulative effect of other projects" in lieu of a separate cumulative EJ analysis (DEIS Ch. 5, Sec. 5.4, p. 5-17). While the EHD map includes environmental-exposure and environmental-effects categories, its outputs are relative statewide percentile rankings rather than a project-area-specific quantification of pre-existing ambient pollution burden and are therefore not an adequate substitute for a localized cumulative-burden metric. Request that the Port supplement the FEIS with an EJScreen-style quantification of pre-existing ambient pollution burden — not solely vulnerability rankings — in SeaTac and the surrounding receptor communities.

8 ADDITIONAL QUESTIONS FOR PUBLIC COMMENT & REVIEW

The following additional issues warrant formal comment:

8.1 Monitoring & Adaptive Management

- Is there a binding post-construction air quality monitoring plan? The SeaTac-Sunset Park PM2.5 monitor is acknowledged but no commitment is made to use its data for adaptive management or to trigger mitigation if thresholds are exceeded.
- Does the FEIS commit to reporting annual emissions inventory updates during the construction phase and first five years of operation? Or is there no post-ROD air quality accountability?
- Are fence-line monitoring commitments required for SO2 (given diesel generator and fuel farm SOx emissions of 37-54 tons/yr)?

8.2 Sulfur Dioxide (SO2) Analysis

- The DEIS reports SOx emissions increases of 20-34 tons/yr under the Proposed Action vs. NAA. Diesel generators alone generate 37-54 tons/yr SOx. This is a significant near-source emission.
- The 1-hour SO2 concentration of 127 µg/m³ is 64% of the NAAQS (197 µg/m³) — closer to the standard than any other modeled pollutant. The Technical Report states the modeling followed the 99th-percentile design-value form for 1-hour SO2 (App. C, AQ & HHRA Tech. Rpt., pp. 2-19–2-20); request receptor-level 1-hour SO2 design values together with the background pairing assumptions, and reconcile the 1-hour SO2 standard reported as 198 µg/m³ in Table 2.14 with the 197 µg/m³ reported in the operational tables.

[33] DEIS Ch. 5 (Cumulative Impacts): Cumulative air quality burden analysis does not incorporate existing airport baseline emissions against regional background when evaluating EJ population exposure. Ch. 3, Sec. 3.3.12.2, pp. 3-92 ff.: EJ analysis identifies GSA as low-income/minority community but does not quantify pre-existing multi-source pollution burden.

8.3 Phased Construction & Cumulative Interim-Year Impacts

- The construction phase spans 2025-2032. Cumulative criteria pollutant emissions during this overlap period (construction + growing operations) are not comprehensively analyzed as a combined scenario.
- The DEIS notes that peak construction NOx occurs in 2028 and peak CO in 2029, but these peaks are not assessed in combination with projected operational emissions in those same years.

8.4 Cargo Facility Expansion

- The SAMP NTPs include new or expanded cargo facilities. Cargo operations generate intensive diesel truck traffic and diesel-powered cargo equipment. Are cargo-specific ground transportation emission increases fully captured in the motor vehicle emission analysis?
- Request cargo vehicle trip generation data and independent air quality analysis of cargo expansion separately from passenger terminal operations.

APPENDIX A: ACRONYMS AND ABBREVIATIONS

The following acronyms and abbreviations are used in this review.

Acronym	Definition
100LL	100 Low Lead (leaded aviation gasoline)
AEDT	Aviation Environmental Design Tool
AERMOD	AMS/EPA Regulatory Model (atmospheric dispersion model)
APU	Auxiliary Power Unit
ASIL	Acceptable Source Impact Level (Washington State)
ASOS	Automated Surface Observing System
ATADS	Air Traffic Activity Data System (FAA)
CARB	California Air Resources Board
CCA	Climate Commitment Act (Washington State)
CECP	Construction Emissions Control Plan
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CO2e	Carbon Dioxide Equivalent
DEIS	Draft Environmental Impact Statement
EA	Environmental Assessment
EHD	Environmental Health Disparities (WADOH map)
EIR	Environmental Impact Report (CEQA analog to EIS)
EIS	Environmental Impact Statement
EJ	Environmental Justice
EJScreen	EPA Environmental Justice Screening and Mapping Tool
EO	Executive Order
EPA / USEPA	United States Environmental Protection Agency
EV	Electric Vehicle
FAA	Federal Aviation Administration
FEIS	Final Environmental Impact Statement
GHG	Greenhouse Gas
GSA	General Study Area
GSE	Ground Support Equipment
HAP	Hazardous Air Pollutant
HHRA	Human Health Risk Assessment
ISR	In-Stack Ratio (NOx/NO2)
KUIL	Quillayute Airport (ICAO identifier)
LAMP	Landside Access Modernization Program (LAX)
LEED	Leadership in Energy and Environmental Design (USGBC certification)
LTO	Landing and Takeoff (cycle)
MOVES	Motor Vehicle Emission Simulator (EPA)
MMIF	Mesoscale Model Interface Program
MMRP	Mitigation Monitoring and Reporting Program
MT	Metric Tons
NAA	No Action Alternative
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act

Acronym	Definition
NO2	Nitrogen Dioxide
NOx	Nitrogen Oxides
NTP	Near-Term Projects
OLM	Ozone Limiting Method
Pb	Lead
PM10	Particulate Matter (10 micrometers or less in diameter)
PM2.5	Fine Particulate Matter (2.5 micrometers or less in diameter)
PSCAA	Puget Sound Clean Air Agency
PV	Photovoltaic
RCW	Revised Code of Washington
ROD	Record of Decision
SAF	Sustainable Aviation Fuel
SAMP	Sustainable Airport Master Plan
SEA	Seattle-Tacoma International Airport
SEPA	State Environmental Policy Act (Washington State)
SO2	Sulfur Dioxide
SOx	Sulfur Oxides
TAP	Toxic Air Pollutant
UFP	Ultrafine Particle
VOC	Volatile Organic Compound
WAC	Washington Administrative Code
WADOH	Washington State Department of Health
WHO	World Health Organization
WRF	Weather Research and Forecasting
ZEAV	Zero-Emission Airside Vehicle

APPENDIX B: CONSOLIDATED DATA AND ANALYSIS REQUESTS TO THE PORT

This appendix consolidates the data and analysis requests identified throughout this review for ease of transmittal and tracking. Each entry cross-references the memorandum section in which the underlying issue is discussed and in which the supporting citations appear. Requests are stated here in summary form; the full basis for each is set out in the referenced section. Mitigation measures and enforceable commitments sought from the Port are addressed separately in Section 6 and are not repeated here.

Ref.	Section	Data or Analysis Requested
B-1	1.2	Comparative emissions inventory for calendar years 2022, 2023, and 2024, provided as a FEIS supplement, with the most recent available full year adopted as the existing-conditions baseline.
B-2	1.3	Full Constrained Operating Growth Scenario documentation (DEIS Appendix A), to permit verification that No Action Alternative operational assumptions are not suppressed relative to Proposed Action assumptions.
B-3	2.1	Emissions inventory tables in the FEIS derived from the current AEDT 3g and MOVES5 model versions; a statement whether the AEDT 3f-to-3g inventory differences are material; and documentation identifying which model version supplied the AERMOD dispersion inputs.
B-4	2.2	Source-specific justification for the 0.15 NOx/NO2 in-stack ratio; a sensitivity analysis applying EPA's 0.5 default ISR; and receptor-level 1-hour NO2 design values for the peak construction years at identified sensitive receptor locations.
B-5	2.3	Confirmation that the dispersion receptor grid includes off-airport sensitive receptors: residential areas in SeaTac, Burien, Des Moines, and Tukwila; schools and childcare facilities within 1–2 miles of the fence line; healthcare facilities and senior housing; and parks and outdoor recreational areas.
B-6	2.3	Receptor coordinate files used in the dispersion modeling, for independent verification of which sensitive receptor locations coincide with modeled receptors.
B-7	2.4	Sensitivity analysis using the SeaTac-Sunset Park monitor as the PM2.5 background, and a commitment to update the analysis with a full year of that station's data before construction commences.
B-8	2.5	Documentation substantiating the representativeness of the Quillayute (KUIL) upper-air data for the SEA project area; a sensitivity analysis of the upper-air station selection; and an evaluation of site-specific prognostic meteorological data (WRF processed through EPA's MMIF).
B-9	2.5	Full basis for the 3,084-foot AEDT mixing height, including the years of upper-air record and the station underlying the AP-101 Seattle values; validation against contemporary site-specific observations; and a sensitivity analysis of the emissions inventory and modeled

Ref.	Section	Data or Analysis Requested
		concentrations to alternative mixing height values, including the 705 m and 1,175 m values from the same source and the 3,000-foot default at 40 CFR 93.153(c)(2)(xxii).
B-10	2.6	Quantitative Auer land-use tabulation supporting the rural dispersion coefficient determination; treatment of the population-density procedure under 40 CFR Part 51, Appendix W, Sec. 7.2.1.1; and a rural/urban sensitivity analysis disclosing resulting concentration differences at sensitive receptors.
B-11	3.1	Ultrafine particle characterization study or, at minimum, a review of published UFP concentration data from comparable airports, sufficient to characterize the reasonably foreseeable UFP exposure burden on surrounding communities.
B-12	3.2	Receptor-level cumulative risk results, including results for the nearest residential receptor to the Airport, and a HAPs emissions inventory reconciled with the HHRA's toxic-air-pollutant-of-concern list.
B-13	3.3	Inclusion of lead in the operational and construction emissions inventories for all analysis scenarios using the fuel-burn methodology already applied in the HHRA; correction of the "fueling ceased" rationale; and disclosure of the annual piston-engine operations counts and 100LL fuel-consumption assumptions underlying the HHRA's Pb estimates.
B-14	3.4	Qualitative discussion, consistent with the climate evaluation methodology at DEIS Ch. 3, Sec. 3.3.3, of how projected temperature increases and atmospheric stagnation frequency in the Puget Sound region could affect ozone precursor dispersion and continued maintenance of the ozone NAAQS through 2037 and beyond.
B-15	3.5	Receptor-level 1-hour NO2 design values in the form of the standard (98th percentile of the annual distribution of daily maximum 1-hour concentrations); the spatial extent of near-standard concentrations; and complete OLM and in-stack ratio input documentation.
B-16	4.1	Supplemental SEPA significance analysis for air quality expressly applying each WAC 197-11-330(3) factor, with particular attention to environmental justice communities in SeaTac, Burien, and Des Moines.
B-17	4.2	Written explanation of why the more protective 1E-06 cumulative cancer risk threshold was not applied to sensitive receptors and environmental justice communities in proximity to SEA.
B-18	4.3	Cumulative air quality analysis quantifying total ambient concentrations attributable to all airport-related sources — not solely the incremental increase from the Proposed Action — relative to applicable regulatory thresholds.
B-19	7.2	EJScreen-style quantification of pre-existing ambient pollution burden, rather than statewide vulnerability percentile rankings alone, for SeaTac and the surrounding receptor communities.
B-20	8.1	Binding post-construction air quality monitoring plan; commitment to use SeaTac-Sunset Park monitoring data for adaptive management and mitigation triggers; commitment to annual emissions inventory updates

Ref.	Section	Data or Analysis Requested
		during construction and the first five years of operation; and fence-line monitoring commitments for SO2.
B-21	8.2	Receptor-level 1-hour SO2 design values together with the background pairing assumptions, and reconciliation of the 1-hour SO2 standard reported as 198 µg/m³ in Table 2.14 with the 197 µg/m³ reported in the operational tables.
B-22	8.3	Combined construction-plus-operational emissions analysis for the overlapping 2025–2032 period, including assessment of peak construction NOx (2028) and peak construction CO (2029) in combination with projected operational emissions in those same years.
B-23	8.4	Cargo vehicle trip generation data and an independent air quality analysis of cargo facility expansion, evaluated separately from passenger terminal operations.

APPENDIX A

Economic, Fiscal, & Socioeconomic Review Memo (Leland)

SeaTac Sustainable Airport Master Plan SEPA DEIS

Date	June 26, 2026
To	Zack Shields, City of SeaTac; Liz Stead, City of Burien; Rebecca Deming, City of Des Moines
CC	Adam Crispin, Perteet, Inc.
From	Ted Kamp, Jennifer Shuch, & Andrew Oliver, Leland Consulting Group
Subject	Technical Memorandum: Economic, Fiscal, and Socioeconomic Impacts

The Port of Seattle is currently going through Washington's State Environmental Policy Act (SEPA) process for SeaTac Airport's (SEA) Sustainable Airport Master Plan (SAMP). The Draft Environmental Impact Statement (DEIS) for the SAMP was released in May 2026, with comments due July 21, 2026. The Cities of Burien, Des Moines, and SeaTac, which are directly adjacent to the Airport, are currently reviewing the DEIS to ensure that the analysis and any mitigations or minimizations named in the DEIS account for the impacts to their communities. The cities hired Leland Consulting Group as part of a multi-disciplinary team to review the DEIS and identify any areas where the Port fails to adequately analyze and address potential harms to their communities. As urban economists, the Leland team's focus is primarily related to the ongoing fiscal implications of the SAMP's near term projects (NTPs) as well as projects that have already broken ground without adequate analysis of cumulative impacts.

Key Takeaways

- **By incorporating projects completed between 2018 and 2026 into the No-Action baseline, the DEIS obscures the cumulative contribution of those projects to current community conditions and compresses the measured incremental difference between the No-Action and Action Alternatives.** While SEPA does not require a static existing-condition scenario, this approach means the true impacts to the cities near the airport — including Burien, Des Moines, and SeaTac — are not sufficiently analyzed.
- **The Cumulative Impacts section of the SEPA DEIS (Chapter 5) does not contain a robust analysis of the cumulative impacts of past projects that have not gone through a SEPA DEIS process.** Despite listing projects that have resulted in increased airport operations resulting in noise, traffic, and strains on local emergency services in adjacent cities, Chapter 5 does not acknowledge that these projects have resulted in conditions that require mitigation. The evaluation of these impacts is cursory, lacking documentation of how the Port arrived at these conclusions. Adequate analysis of cumulative impacts should address facility improvements made since the last major impact analyses were conducted in 2012-14 (*at least* including those completed since the 2018 commencement of SAMP scoping). Although the SEPA DEIS finds that there is no impact to land use in adjacent cities because the SAMP NTPs do not include expansion beyond the Airport Activity Area (AAA), this does not adequately account for the cumulative impacts of one-off projects included in the No-Action alternative. **The airport's noise contours, flight paths, and effects on transportation networks extend beyond the borders of SeaTac Airport itself and have significant influence on land use and planning in all three jurisdictions**. The Airport's activities impact compliance with state requirements for middle housing in residential zones and transit-oriented development, as well as the ability of the three cities to meet housing and employment targets.

- There is significant academic literature pointing to the direct effect that noise has on property values. However, **the SEPA DEIS does not adequately assess the fiscal impacts of its expanded noise contour**. In addition, the No-Action Alternative includes the cumulative effects of projects completed between 2018 and 2026, which are already impacting the cities and their residents by reducing property values for homes and other sensitive uses within the 65+ DNL noise contour. Although the SEPA DEIS identifies the number of homes and other uses that will be sound proofed over the next decade, it does not address how future soundproofing of homes and other sensitive buildings such as schools will be paid for, nor does it discuss whether that soundproofing will address impacts to property values. Leland's preliminary analysis of residential parcels within the 2022 and 2032 noise contours estimates approximately $240,000 in annual property tax revenue already foregone by the three cities due to cumulative noise-based value depression, with an additional $35,600 in annual revenue lost specifically attributable to SAMP-related contour expansion — neither of which is addressed in the DEIS.
- **The mitigations for surface transportation listed in the SEPA DEIS address traffic at specific intersections, but do not account for the ongoing maintenance costs** related to increased traffic (particularly freight traffic) on roads as a result of increased airport activity. Ongoing road maintenance costs have already accelerated significantly in the cities in part due to increased airport activity driven by previous projects that have not adequately been analyzed cumulatively.
- **The SEPA DEIS Public Services and Utilities section does not include an analysis of impacts to local public schools, nor does it address the harms caused by previous "Port Package" soundproofing initiatives**. Noise from the Airport can have significant effects on learning and soundproofing school buildings does not necessarily solve this problem. The schools within this noise contour are already underperforming compared to the district and state overall, indicating that additional resources are likely required to support the student population. If state funding is reduced, these costs will fall to the cities. However, if the median property value within the Highline Public School District is negatively impacted by the cumulative expansion of the 65+ DNL noise contour due to previous projects as well as SAMP NTPs, it could result in a reduction in state funding for the district.
- The SEPA DEIS concludes that there are no negative consequences for socioeconomics or environmental justice populations, while emphasizing that there are positive impacts for the region. The only "minimization" offered by the DEIS is a vague nod to "employment assistance" for the Doug Fox parking lot employees. **The DEIS fails to account for the spatial distribution of airport impacts – notably, that economic benefits are regional while harms are local**. In other words, residents of Burien, Des Moines, and SeaTac realize very limited economic benefits such as job growth while experiencing disproportionate impacts of air pollution, noise, and traffic.
- **The Port is currently leasing three Master Park lots for employee parking. This has long-term fiscal impacts for the City of SeaTac**, which receives revenue from parking transactions. The Port's lease has already resulted in a decrease in revenue of $600,000 for the City of SeaTac as a result of this. These long-term leases, effective for between 20 to 30 years from 2025 according to the lease agreements, will lead to significant lost revenue over this period – potentially amounting to around $20 million. These fiscal implications were not addressed in the SEPA DEIS.
- The SEPA DEIS argues that plans to build additional emergency services facilities within the AAA mean that increased operations will not result in impacts to the police in the three cities. However, the 2018 ILA already acknowledged that airport operations add to local policing costs**. While the Port provides the City of SeaTac with around $1.4 million per year for emergency services, this amount is likely not sufficient to keep up with the increases in airport activity** expected under the Action Alternatives as well as the cumulative effect of earlier projects. **The DEIS should include additional analysis to identify the impacts of the alternatives on emergency services off of Port property in the three cities.**

No-Action Alternative

This memorandum lays out a number of economic, land use, and environmental justice implications tied to flaws and oversights in the DEIS that are specific to the various discipline areas. This section, however, concerns a central methodological problem that cuts across all discipline areas addressed in the SAMP SEPA DEIS – namely, that **the No-Action Alternative, as constructed, does not represent a genuine non-expansion scenario**. Instead, it reflects a baseline already substantially elevated by a decade of incremental airport capacity investments that were individually approved without sufficient cumulative environmental review. As a result, the incremental impact of the SAMP Near-Term Projects is systematically compressed in every impact category, including those with direct fiscal, land use, and other consequences for the Cities of Des Moines, SeaTac, and Burien.

The No-Action Baseline Obscures the Cumulative Contribution of Prior Expansions

The DEIS characterizes the No-Action Alternative as the condition in which the SAMP NTPs are not built, while airport operations continue to grow in response to rising travel demand. Under No-Action, the DEIS projects 466,900 aircraft operations and 57.2 million passengers by 2032, rising to 474,874 operations and 59.5 million passengers by 2037 — a still-growing, already substantially expanded airport.

These figures reflect a baseline shaped by a sequence of major facility investments completed since scoping for the SAMP began 2018, each of which received a SEPA Determination of Non-Significance. However, these projects have not been evaluated as part of a cumulative expansion program:

- North Satellite Phase 1 (2019): 10 new gates and new mezzanine level
- International Arrivals Facility (2022): international-capable gates increased from 12 to 20; international passenger processing capacity nearly doubled to 2,600 passengers per hour
- Concourse A expansion (2025): 57,500 square feet of additional terminal capacity
- C Concourse expansion (2026): 108,000 square feet, four additional floors

Each of these projects is now embedded in the No-Action baseline as if it were neutral existing condition rather than a prior increment of an ongoing expansion trajectory. As a result, their contribution to current community conditions has never been cumulatively assessed. Separately, the Port's own operational forecasting in Appendix A establishes that the NTPs enable approximately 35,000 additional annual operations by 2037 that would not occur at SEA under No Action — directly connecting the infrastructure decision to additional operational impacts regardless of what drives underlying demand. The Port cannot characterize demand growth as inevitable and exogenous to infrastructure decisions while simultaneously forecasting materially different operational outcomes depending on which alternative is selected..

The Port's Own Documents Concede That the NTPs Induce Added Operational Volume

The DEIS's Appendix A (Landrum & Brown, Constrained Operating Growth Scenario, September 2023) explicitly acknowledges that the NTPs release demand that would otherwise remain suppressed by capacity constraints — not merely accommodate pre-determined growth. The Port's own forecasts confirm the magnitude of this latent demand: by 2037, the Action Alternatives project 509,892 operations and 64.1 million passengers, compared to

474,874 and 59.5 million under No Action — a difference of approximately 35,000 additional operations and 4.6 million additional passengers directly attributable to the NTPs.

The Port cannot simultaneously argue that demand growth is inevitable and unrelated to infrastructure decisions, while also showing materially different demand outcomes depending on which alternative is selected. The language used in Appendix A about capacity constraints limiting growth indicates that the NTPs will cause additional aircraft activity that would not otherwise occur, with underserved communities closest to the airport disproportionately bearing the costs of that activity.

The latent demand framing also raises questions about demand management: if demand is latent (suppressed by capacity constraints and consciously released by an infrastructure decision), then demand management tools like peak pricing, capacity constraints, diversion to regional airports, and modal substitution, could have kept it suppressed, and were thus worthy of analysis. Appendix A acknowledges that, subsequent to the development of the 3rd runway, airlines had agreed to divert some evening flights to nearby airports, returning aircraft to SEA in the morning — voluntary "mitigative" diversion measures that a more systematic demand management approach could have expanded. The DEIS improperly screens out several such demand management alternatives without meaningful analysis, treating the choice to release latent demand as inevitable rather than as an affirmative Port policy decision with community consequences.

Uninvestigated Cumulative Impacts

If the NTPs release latent demand, as asserted in the operational forecasting documented in Appendix A, then the post-2018 facility improvements, along with previous incremental construction not subjected to meaningful impact analysis since the Port's last comprehensive environmental review, should have also released latent demand at the time of their implementation. The International Arrivals Facility, which nearly doubled international processing capacity and increased international gates by two-thirds, likely released the largest single increment of latent demand in the sequence. That released demand is now embedded in the No Action baseline as if it were neutral background.

The cumulative operational volume enabled by this extended expansion sequence generated community impacts including increased noise exposure, increased roadway traffic, and depressed property values with direct fiscal consequences for the Cities – none of which has been analyzed as a whole. The current conditions in the surrounding Cities are not neutral starting points: they are the product of years of incremental demand release that was never cumulatively assessed or adequately mitigated, extending back well before the SAMP scoping process initiated in September 2018.

At a broader conceptual level, there is a clear disconnect between the way the Port acknowledges their own causal role in positive versus negative cumulative (and potential future) impacts on surrounding communities. The DEIS relies on the Northwest Seaport Alliance's commissioned economic impact analysis to document the airport's substantial positive contributions to regional employment and economic activity — implicitly crediting Port investment decisions with generating those benefits. Yet when it comes to the negative impacts borne by adjacent communities, the same Port investment decisions are characterized as passive responses to exogenous demand growth for which no mitigation is owed. The Port cannot credibly claim credit for the economic benefits of expansion while simultaneously disclaiming responsibility for its costs.

Implications for the Discipline-Specific Impact Analysis

The No Action formulation problem has a direct and quantifiable consequence for the economic impact assessment presented in this memorandum. In each discipline area, the DEIS measures the incremental impact of the NTPs against a baseline that already reflects substantial uninvestigated expansion. The apparent marginal impact described in the DEIS is therefore smaller than the true impact, because the reference point is itself elevated by latent demand already released through prior expansions.

Correcting this requires, at minimum:

- Disaggregating facility improvements since the Port's last comprehensive environmental review – including, at least, those completed after 2018 -- from the No Action baseline and analyzing their contribution to current conditions;
- Applying the Port's own latent demand methodology retroactively to estimate the operational volume enabled by those improvements;
- Evaluating demand management alternatives that could have kept latent demand suppressed, establishing the counterfactual against which the NTPs' community impact should be measured.

Land Use & Growth Management Act

The Growth Management Act (GMA), codified in RCW 36.70a, was adopted by the Legislature in 1990 to discourage sprawl and encourage development in urban centers, as well as planning for a variety of housing types to accommodate all income levels and encouraging multimodal transportation and economic development opportunities. The GMA mandates that cities update their Comprehensive Plans and development regulations on a 10-year cycle. The Cities of SeaTac, Burien, and Des Moines each completed their 2024 periodic Comprehensive Plan update, which included updates to the cities' future land use maps as well as goals and policies related to land use, housing, and economic development. The most direct relationship with the airport is in the city of SeaTac, in which the entirety of the airport area is contained. However, the airport's noise contours, flight paths, and effects on transportation networks extend beyond the borders of the City of SeaTac, and have significant influence on land use and planning in all three jurisdictions.

Section 4.3.8.1 of the DEIS states that "Each of the local land use plans for jurisdictions adjacent to or in the vicinity of SEA has recognized the Airport operations, including in some cases specifically addressing the potential for additional development of Airport property or property in the vicinity of SEA for Airport-related operations." While it is true that each city's Comprehensive Plan does recognize the airport and its associated land uses, there are ongoing concerns regarding the impact of increased airport development, flight, and passenger frequency on the ability of the cities to implement their land use plans, and potential conflicts between continued airport expansion and intensification and state planning mandates contained in the GMA and in recent legislation regarding land use and housing.

Housing and Employment Targets and Requirements

Section 4.2 of Appendix H of the DEIS (the "Land Use Technical Report") states: "Because the Action Alternatives would be consistent with all SEA and local jurisdiction planning documents, would not significantly alter the general land use patterns in the area, disrupt or divide an established community, cause residences to relocate, or induce adverse socioeconomic impacts, the Action Alternatives would not result in significant land use impacts."

While the proposed NTPs do fall within allowed land uses and development regulations in the City of SeaTac's Comprehensive Plan, intensification of airport activity is already having land use effects in the three cities, and the assumed continued increase in flights, passengers, and airport staff that would be enabled by the implementation of the NTPs are likely to continue to increase those impacts.

Section 3.3.9 of the DEIS states "Housing would not be affected by the Proposed Action and is not addressed further." In fact, there are a variety of issues related to planning for housing that are potentially affected by both the NTPs and the other baseline projects that are in progress.

In 2021, the Washington Legislature passed HB 1220, which amended the GMA to require that cities plan for needed housing based on the income levels of projected future households in the city. In practice, this requirement is implemented via land use planning, through an analysis of available land for housing based on housing types that are allowed by local zoning and assumed affordability levels of those housing types. Book 2 of the Department of Commerce's Guidance for Updating Your Housing Element directly correlates specific housing types to area median income (AMI) levels (Exhibit 16, page 39). Low-rise multifamily and accessory dwelling units (ADUs) are considered attainable to households making less than 80 percent of AMI while middle (or moderate density) housing is considered attainable for households making 80 to 120 percent of AMI. Because cities are required to plan for housing across income bands, they must update zoning codes to allow for all of these housing types. In addition, RCW 36.70A.635 requires cities with at least 25,000 residents in Washington to allow more than one unit per lot. Burien, Des Moines, and SeaTac are all Tier 2 cities, which are required to allow at least two units per lot (up to four units if at least one is affordable) in residential areas and four units per lot when near major transit stations such as the SeaTac/Airport LINK Light Rail station. This increase in "middle housing" typologies such as duplexes, triplexes, and fourplexes is designed to increase affordability and create a wider variety of housing opportunities for various income levels and household types.

The requirements to plan for additional housing density in formerly single-family neighborhoods are at odds with continued increases in flight volume and the associated noise, safety, and pollution impacts on cities adjacent to the airport. The FAA discourages densification in flight paths, and additional noise proofing may be necessary in these areas. In addition, even with mitigation in place, flight paths are an undesirable place for residential development, and aircraft noise can depress property values (Nelson, January 2004). While the DEIS highlights soundproofing as a mitigation for this, Port-funded efforts to soundproof homes have largely stalled since 2008. In addition, these so-called "Port Packages" for soundproofing homes have resulted in significant ongoing problems for homeowners, including defective windows and insulation which harm not only the health of the occupants but also the value of the properties. The largely unmitigated impacts of noise and air pollution make the three cities' requirements to accommodate a variety of housing types more difficult, particularly since nearly all of Des Moines' neighborhoods and the City of SeaTac's light rail stations and transit-oriented development (TOD) areas are in the flight path. Increased flight activity over time as forecast in the DEIS may exacerbate this tension between regulatory requirements.

This tension between growth targets/requirements and airport activity has also been borne out recently in Burien, where a single-family residential neighborhood ("North of NERA") is being proposed for rezoning from residential to industrial. This zoning proposal stems from state requirements to plan for expected levels of employment growth, in addition to planning for housing growth at a variety of income levels as described above. In Burien's case, the city's land capacity analysis in its 2044 Comprehensive Plan found insufficient capacity to meet its expected employment targets. Due to compatibility issues, the city identified a currently residentially zoned area as a potential employment district since the proximity to the airport causes safety, noise, and pollution issues in the area. Although this represents conformance with RCW 36.70.547 which describes the need for cities' land use plans to consider the impacts of airport activities, it clearly has potentially negative community impacts, including

the potential displacement of residents and disruption of an established community, two impacts that the DEIS (Appendix H, Section 4.2) claimed were negligible. Although this specific rezoning did not stem directly from the NTPs described in the DEIS, the rezoning would not be necessary without the cumulative impacts of airport activities over the past several years, including many of the projects that are included in the No Action scenario. While Chapter 5 of the DEIS claims that these previous projects do not cause any additional impacts on the three cities, the Port does not provide sufficient data or analysis to support this assertion.

Transit Oriented Development and PSRC Activity Centers

The City of SeaTac contains two LINK Light Rail stations, one of which is located adjacent to the airport. Another LINK Light Rail Station in Tukwila is adjacent to SeaTac Airport boundaries and serves the city. The city has been engaged in planning for these station areas for many years, including through its recent Comprehensive Plan update and associated subarea planning efforts. Envision SeaTac 2044 (the City of SeaTac's Comprehensive Plan) contains an Urban Center element, which outlines the City's vision for the Urban Center – which comprises most of Central SeaTac, including both of SeaTac's LINK stations:

> *In 2044, SeaTac will continue to provide a thriving Urban Center, connecting residents, businesses, workers, and visitors to goods and services, multi-modal transportation options, affordable housing choices, and parks and open space. In 2044, three urban villages will anchor the Urban Center in the north, central, and southern sectors of the International Boulevard corridor, adjacent to the city's light rail stations, where they will provide equitable access to higher density, walkable, transit-oriented living, working, shopping, recreating, and entertainment opportunities for local and regional communities and out of town visitors to enjoy.*

This vision is supported by the Puget Sound Regional Council (PSRC)'s designation of the City of SeaTac's Urban Center as a Regional Growth Center (RGC), which, along with areas near high-capacity transit, are expected to absorb at least 65 percent of regional population growth and 75 percent of employment growth through 2050, per PSRC's Vision 2050 Multicounty Planning Policies. RGCs are expected to have a certain existing and planned future job and population capacity, measured in "activity units." One activity unit is one person or one job. In order to qualify as an RGC, an area must have at least 18 activity units per acre and must plan for a future density of 45 activity units per acre. Per the Urban Center Background Report in Envision SeaTac 2044, the City Center has a capacity for 63.6 activity units per acre under current zoning and has an existing density (as of 2024) of 39.4 activity units per acre.

In spite of the commitment not to amend airport boundaries until the SAMP is adopted and commences development projects after project authorization (2018 ILA between the City of SeaTac and the Port; Section 3.4 (c)., in recent years, the Port has been both purchasing and leasing land in the City's Urban Center. In particular, the Port has recently entered into an agreement to lease three parking lots from Master Park for use as airport employee parking, as well as purchasing the STOC office property for Port/Airport related uses. The STOC office property is centrally located within SeaTac City Center and features a large surface parking lot. In City planning documents, it has been identified as a potential opportunity for more walkable infill development and/or through-block connections. The MasterPark lots and STOC property are outside the Airport Activity Area and are within SeaTac's Urban Center zoning districts. Because the Port is a municipal corporation and therefore tax exempt, **the purchase of the STOC office building not only impedes City plans for increased connectivity in its City Center, it also represents a loss of around $420,000 annually in property tax revenue (based on the 2025 total taxable value of $37,526,600, per the King County Assessor, and the 2026 levy rate of 11.19578).**

As described in the City Center Market Analysis Report in Appendix A of Envision SeaTac 2044 Comprehensive Plan, the city was already facing market challenges to redevelopment of the Urban Center into the type of

"'people-heavy' uses such as hotel, office, and multifamily projects, as well as desired pedestrian-oriented uses" envisioned by the City. These challenges stem from the significant revenue potential of airport-related commercial parking businesses which provide a significant financial disincentive to redevelopment. In fact, the City's code was amended a decade ago to prohibit new surface lots and require all new parking in the City Center to be placed in buildings with ground floor commercial uses. Since these changes, no new surface parking lots have been built. The Port's October 22, 2024 meeting presentation deck (Slide 6) indicates that when the Port approached Master Park, Master Park "expressed interest in reducing its portfolio," leading to the leasing of two of their lots (A, C, and M) to the Port for use as employee parking for 20 years, with the opportunity to purchase the lots at that point. In essence, the Port leases have exacerbated the existing market challenges for these parcels, adding a financial incentive for Master Park to keep them in their current use as parking lots, rather than potentially exploring other redevelopment options that could further the City's land use goals and incorporate parking alongside other more active commercial uses. The Port's actions in incentivizing the continued current use of these lots could be interpreted as a hinderance to the City's ability to meet its PSRC growth targets within the RGC and are in conflict with the City's stated Comprehensive and Subarea Plan goals and vision for the Urban Center.

Noise & Noise Compatible Land Use

As stated in the No-Action Alternative section of this document, the difference in assumed operations between the No-Action alternative and the Action Alternatives is very small due to the baseline assumptions that do not adequately consider the cumulative effects of one-off projects started or completed since 2018. Still, the DEIS estimates that the Action Alternatives would result in an increase of 96 operations on average per day over the No-Action alternative by 2037. Figure 1 below shows the impact of the scenarios on sensitive uses, based on the data in Appendix J. The Action Alternatives include 337 additional homes in this area over the No-Action Alternative, including 160 additional sound-insulated homes. However, the Action Alternatives include a significant increase (3,639 homes, three schools, and two nursing homes) of sensitive uses in the 65+ DNL contour over the 2022 baseline. **If the No-Action alternative were to adequately reflect existing conditions, the difference in the number of homes and other sensitive uses in the 65+ DNL noise contour would likely be greater than what is described in the DEIS**. It is important to note that although sound insulating schools and homes can have some quality-of-life benefits for students and residents while they are indoors, this temporary relief does not expand to outdoor areas like backyards, gardens, or playgrounds where residents will still be exposed to unsafe noise levels, nor does it account for open windows, a common form of cooling in the Seattle area where many households lack air conditioning. Additionally, the DEIS does not indicate where the funding for additional sound insulation would come from, or whether this soundproofing would be an improvement over the previous "Port Packages," which have created unsafe conditions for residents due to defective windows and insulation. The DEIS also does not analyze how the expanding noise contour prevents high-demand sensitive uses such as daycares from locating in much of Burien, Des Moines, and SeaTac, limiting economic opportunities for residents.

Figure 1. Sensitive Uses withing the 65+ DNL Noise Contour by Scenario

	2022 Baseline	No-Action (2032)	Action (2032)	Action over 2022	Action over No-Action
Housing Units	6,216	9,518	9,855	3,639	337
Sound Insulated	*3,542*	*4,534*	*4,694*	*1,152*	*160*
Schools	9	12	12	3	0
Sound Insulated	*5*	*5*	*5*	*0*	*0*
Places of Worship	19	22	22	3	0
Nursing Homes	3	5	5	2	0
Libraries	2	2	2	0	0

Source: SeaTac Airport SAMP DEIS, Appendix J.

There is significant research available on the impact of noise on property values. **Despite this, Appendix J does not consider the impacts of increased noise (either by decibel level or frequency of noise events) on property values**. As noted in the articles listed in the literature review below, sound insulation does not mitigate the impacts of noise on property values because it only addresses noise impacts inside the home. The impact of noise on property values affects not only the residents and homeowners of Burien, Des Moines, and SeaTac, but also on the fiscal health of the cities themselves, which rely on property taxes as a significant source of revenue.

In addition, areas with higher property values receive more funding for schools from the State to account for challenges recruiting teachers in high cost of living areas. Increasing the area of the noise contours as well as the number of flights per day could have significant impacts on the median housing value in cities like Burien and Des Moines, potentially leading to reduced funding for schools in the Highline Public School District.

Literature Review: Impacts of Airport Noise on Home Values

For the purposes of this technical memo, Leland reviewed the following academic reports which show a link between aircraft noise and property values:

- Affuso, E., Caudill, S. B., Mixon, Jr., F. G., & Starnes, K. W. (August 2019). Is Airport Proximity an Amenity or Disamenity? An Empirical Investigation Based on House Prices. *Land Economics*, 391-408.
- Almer, C., Boes, S., & Nüesch, S. (October 2017). Adjustments in the Housing Market after an Environmental Shock. *Oxford Economic Papers*, 918-938.
- Collins, A., & Evans, A. (May 1994). Aircraft Noise and Residential Property Values: An Artificial Neural Network Approach. *Journal of Transport Economics and Policy*, 175-197.
- Espey, M., & Lopez, H. (Summer 2000). The Impact of Airport Noise and Proximity on Residential Property Values. *Growth and Change*, 408-419.

- Jud, G. D., & Winkler, D. T. (2006). The Announcement Effect of an Airport Expansion on Housing Prices. *The Journal of Real Estate Finance and Economics*, 91-103.
- Levesque, T. J. (May 1994). Modelling the Effects of Airport Noise on Residential Housing Markets: A Case Study of Winnipeg International Airport. *Journal of Transport Economics and Policy*, 199-210.
- Nelson, J. P. (January 2004). Meta-Analysis of Airport Noise and Hedonic Property Values: Problems and Prospects. *Journal of Transport Economics and Policy*, 1-27.
- Ogneva-Himmelberger, Y., & Cooperman, B. (January 2010). Spatio-Temporal Analysis of Noise Pollution near Boston Logan Airport: Who Carries the Cost? *Urban Studies*, 169-182.
- Tomkins, J., Topham, N., Twomey, J., & Ward, R. (February 1998). Noise versus Access: The Impact of an Airport in an Urban Property Market. *Urban Studies*, 243-258.

These studies indicate that **airplane noise has a quantifiable effect on property values**, with properties located within noise contours valued less than those outside of these areas. In addition, the amount of noise matters. Nelson's 2004 meta-analysis analyzed 20 hedonic property value studies with 33 estimates of the noise discount for properties near 23 airports in the U.S. and Canada. This meta-analysis found a mean Noise Depreciation Index (NDI) of 0.569 to 0.739, indicating that a property located in an area where the Day-Night Average Sound Level (DNL) is 55 would be worth 10 to 12 percent more than an equivalent property in an area with a DNL of 75.

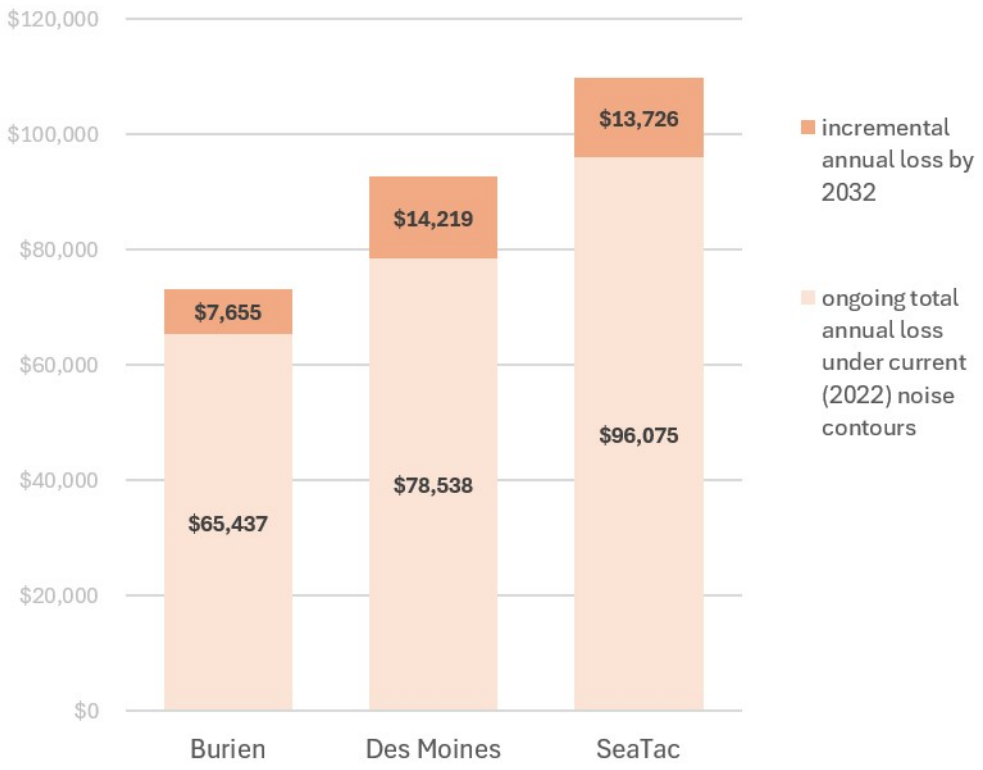
Fiscal Impacts of Noise on Property Values

Using parcel shapefiles and tabular assessment data for the three cities, overlaid with 2022 and 2032 (Preferred Alternative) noise contour shapefiles obtained from the Port, Leland conducted a preliminary analysis of noise-related property value depression and its fiscal consequences. The analysis applies the midpoint Noise Depreciation Index from Nelson's (2004) meta-analysis — 0.654 percent reduction in residential property value per decibel of DNL exposure above 55 dB — to residential parcels falling within the available noise contour bands (65-70, 70-75, and 75+ dB). Commercial parcels were excluded, making the estimates conservative. Two distinct fiscal impacts are quantified: the incremental impact of the SAMP-specific contour expansion between 2022 and 2032, and the cumulative fiscal impact already embedded in current property values due to long-standing inclusion in high-noise areas.

The incremental analysis — comparing parcel noise assignments in the 2022 and 2032 contours — identifies 1,836 residential parcels with a combined assessed value of approximately $997 million that are projected to experience a noise band increase under the Preferred Alternative. Applying a 5 dB increase assumption and the Nelson NDI midpoint yields an estimated $32.6 million in property value depression attributable to SAMP-specific contour expansion, translating to approximately $35,600 in annual foregone city property tax revenue across the three cities. While modest as a standalone figure, this increment lands on top of a substantially larger existing burden: residential parcels already within 2022 noise contours carry an estimated cumulative noise discount that results in approximately $240,000 in annual foregone property tax revenue — a recurring fiscal injury that, over the approximately eight years since 2018, represents at least $1.9 million in cumulative foregone revenues to the three cities combined. Both figures are conservative: they reflect residential parcels only, apply a 5 dB minimum contour resolution that misses sub-threshold increases, and exclude parcels below the 65 DNL floor where noise

impacts on value are nonetheless documented in the literature. The DEIS's socioeconomic analysis addresses none of these fiscal consequences.[1]

Figure 2: Annual Property Taxes Lost Due to Noise Impacts on Value of Residential Properties



Sources and notes: Leland Consulting Group calculations using parcel data from King County Assessor (accessed June 2026); noise contours from Port of Seattle SAMP DEIS Appendix J (2022 existing and 2032 Preferred Alternative). Property value discount estimated using Nelson (2004) Noise Depreciation Index midpoint (0.654% per dB above 55 DNL). Residential parcels only. All figures in 2026 dollars. Full methodology in accompanying technical memorandum.

[1] Washington's budget-based property tax system means levy rates adjust with changes in total assessed valuation, such that noise-related value depression does not necessarily translate dollar-for-dollar into reduced city revenue. However, because Washington limits annual property tax revenue increases to 1%, cities already operating near that ceiling cannot fully compensate for assessed value losses through rate adjustment. To the extent the three cities face binding revenue cap constraints — which the fiscal pressures documented elsewhere in this memorandum suggest is likely — the foregone revenue estimates presented here approximate actual fiscal impact. Precise quantification would require city-specific levy modeling beyond the scope of this preliminary analysis.

Surface Transportation, Parking, and Traffic

According to the DEIS, under the No-Action alternative, nine roadway intersections would fail to meet mobility standards by 2032 and 17 would do so by 2037. The DEIS attributes this to "background growth in traffic and/or travel pattern changes unrelated to the Action Alternatives" as well as expected increases in Airport operations. However, as stated previously in the No-Action Alternative section of this report, the assumptions included in this alternative are not a true baseline and do not account for the induced demand that expansion of Airport facilities and operations will cause.

Surface Transportation

For the Action Alternatives, the DEIS identifies nine Category 1 intersections that need to be mitigated as well as 19 Category 2 intersections that will be impacted. While the mitigations proposed in the DEIS address the traffic impacts to these intersections, **they do not account for ongoing costs**. Increased traffic on surface streets means more wear and tear on roads, especially near airports where larger freight vehicles are common. Despite the difference in impacts on road conditions, the DEIS does not separate passenger vehicles from freight vehicles in its analysis. This is important because freight vehicles are significantly heavier than passenger vehicles, with disproportionate impacts on maintenance costs. Already, some airport-support operations, such as flight kitchens, to industrial parks in the city of SeaTac and other neighboring cities, requiring more vehicular trips between these sites and the Airport that are not accounted for in these mitigation measures. This section of this memorandum includes additional detail related to the ongoing maintenance costs that will fall on the three cities – especially SeaTac – as a result of the Action Alternatives.

The transportation analysis in the SEPA DEIS indicates that projects C02, C03, and S10 will result in additional truck-trip generation. According to the World Road Association (PIARC), heavy vehicles such as freight trucks have a more significant impact on roadways than passenger vehicles. PIARC cites a study from South Africa that found that the 80 to 85 percent of heavy vehicles that are legally loaded cause 40 percent more damage to pavement than light (passenger) vehicles while the 15 to 20 percent of heavy vehicles that are overloaded cause 100 percent more pavement damage than light vehicles (World Road Association (PIARC), 2022). Differentiating the increase in freight traffic vs. passenger vehicle traffic is essential for understanding the ongoing cost of road maintenance for the City of SeaTac. **The failure of the DEIS to account for the impacts of increased traffic on surface streets beyond intersection delays has significant fiscal implications for the cities, which are not accounted for in the DEIS.** Because the Port does not provide an analysis of the share of increased traffic that is expected to be heavier freight vehicles, there is insufficient information to inform its conclusions.

The City of SeaTac's 2025-2026 Biennial Budget estimates that the total cost of roadway maintenance for the City will be 67 percent higher in 2026 than in 2021, significantly outpacing the rate of inflation. Between 2023 and 2024, road maintenance costs in the city grew by 31 percent. In 2026, the City expects its public works department to spend $2.3 million on roadway maintenance. Similarly, although the total maintenance cost is significantly lower, repair and maintenance costs in Burien are expected to rise 32 percent over the same period. While this increase in road maintenance costs may not be entirely attributable to airport activity, without additional information regarding types of traffic associated with the airport (i.e., truck vs. passenger vehicle), as well as the additional vehicle miles traveled (VMT) driven by airport activity, the true ongoing cost for the three cities cannot be estimated. Because the SAMP focuses on level-of-service rather than additional VMT, it does not adequately account for the mitigations needed to address these ongoing costs. Instead, it includes mitigation measures aimed at one-time improvements to intersections, rather than accounting for for the wear and tear of additional traffic – particularly freight traffic – on the roads adjacent to the Airport.

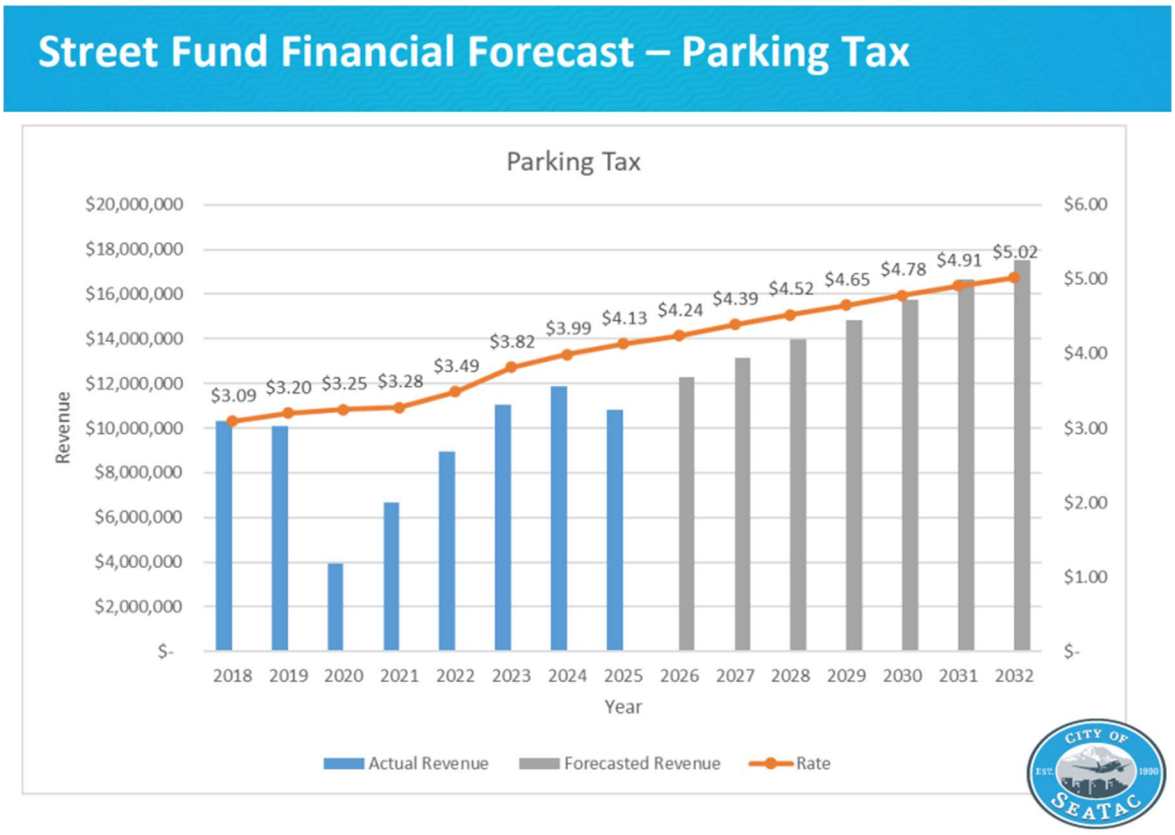
Parking

The Doug Fox Airport Parking Lot would be demolished and replaced by a new parking structure under the Action Alternatives. In anticipation of this and the projects described in the SAMP, the Port has leased MasterPark lots A, C, and M, converting them from private park-and-ride lots to employee parking. According to the lease agreements, the terms of these leases are 30 years for lot A, 20 years for lot C, and 28 years for lot M, with a commencement date of 2025. Currently, the City of SeaTac receives approximately $4.13 per transaction per space (as of 2025) from occupied parking spaces – an important source of revenue for the City. However, the conversion of the lot to employee parking has significantly reduced the number of transactions, largely because employees pay for parking on a monthly basis. **Because of the current arrangement, the City saw a reduction in revenue between 2024 and 2025 despite an increase in the tax rate**. As a result, the finding that the impacts to parking are not significant does not adequately account for the impact of these arrangements on the City of SeaTac on an ongoing basis.

Between 2024 and 2025, the parking tax rate grew from $3.99 to $4.13. However, due to the Port's master lease of multiple MasterPark lots as employee parking, revenue dropped by around $600,000 over this period. These leases are effective for 20 to 30 years from the 2025 commencement date, indicating that there will be ongoing impacts to the City of SeaTac's revenue through this period. The City of SeaTac assumes the number of parking transactions will grow in a linear fashion. However, this growth will be from the 2025 revenue figure, which is the first year since 2020 that there has been a reduction in parking revenue, rather than from the higher 2024 level prior to the Port's master lease of these parking lots.

Because of the drop in transactions (and therefore parking revenue) between 2024 and 2025, the total revenue the City expects to make by 2032 is substantially less than what it would have made if the trend from 2022-2024 continued. Based on the data in Figure 2 below, from the City of SeaTac's May 2025 budget workshop Council Study Session, the difference in lost revenue could potentially add up to around $20 million over this period. While additional detail on the data used for the budget work session analysis would be needed to ensure the accuracy of any quantification of lost revenue, it is clear that the conversion of these MasterPark lots to employee parking will have significant ongoing impacts to City revenue.

Figure 2. City of SeaTac Parking Fund Financial Forecast



Source: City of SeaTac.

Public Services & Utilities

Emergency Services

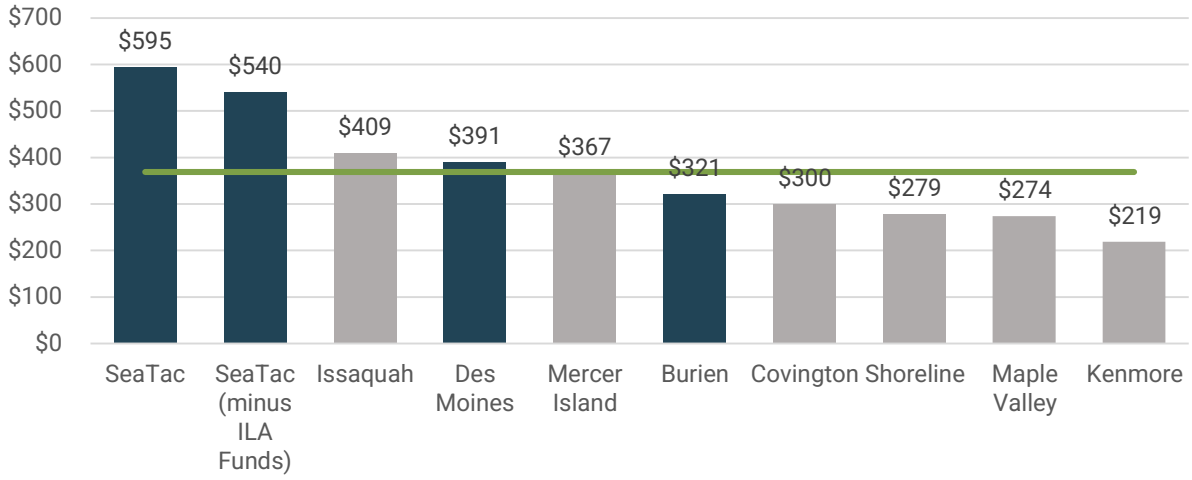
The DEIS Public Services and Utilities analysis includes a discussion of fire, police, water, and sewer services. The analysis in Chapter 4 of the DEIS concludes that because the number of passengers would go up in the No-Action Alternative, the demand for emergency services, including police and fire, would also increase. The DEIS concludes that the No-Action Alternative would therefore necessitate the hiring of additional emergency services staff to meet FAA requirements. Because the Action Alternatives include an ARFF Facility replacement as well as a Secondary ARFF Facility, the DEIS concludes that these alternatives would have a beneficial impact on emergency service provision. However**, the DEIS does not commit to hiring more emergency personnel for these facilities, nor does it account for distinct off-airport public service costs generated by increased airport activity. The action alternatives are likely to have an impact on the local police and fire services, particularly in the City of SeaTac**. Even if additional personnel are hired for the new ARFF facilities, these emergency responders would not be responsible for addressing incidents outside of the airport boundaries. In addition, as noted in the other sections of this memorandum, the No-Action Alternative includes projects for which the cumulative effect was insufficiently analyzed in Chapter 5 of the DEIS, which claims that past projects do not add to the impact of NTPs. It is not clear that the new facilities included in the NTPs would be sufficient for addressing the increased demand for emergency services under the Action Alternatives.

The DEIS does not analyze airport-related calls for service, calls at airport-serving hotels or parking facilities, traffic enforcement, mutual-aid responses between the Port and the Cities, officer hours, emergency-management requirements, or documented Port requests for City assistance. Because of this, there is inadequate data to analyze the true impact of airport activities under the No Action and Action Alternatives on emergency services in the three cities. In the absence of this data, this section uses certain crime categories as proxies for potential airport-related incidents. While this does not provide a comprehensive picture of all airport-related calls, especially those handled by the Cities' fire departments, it demonstrates that more analysis is needed by the Port to conclude that emergency services in the three cities will not be impacted by the Action Alternatives.

The Port expects local police, particularly in the city of SeaTac, to address these crimes when they occur off Port property. In addition, local police are expected to support Port emergency responders in case of an emergency. In an event that requires evacuation of the Airport, workers and travelers will exit into the City of SeaTac, where emergency responders will be expected to coordinate and ensure their safety. Because of these excess demands on the police in the city of SeaTac, the 2018 Interlocal Agreement includes a $1.4 million annual Community Relief Contribution for police, enforcement of traffic and parking violations, and enforcement of City codes and ordinances. The agreement notes that "the City shall not request additional funding from the Port for matters covered by the Community Relief Contribution during the term of this agreement" (which ends in 2028). **This ILA does not cover the cities of Burien and Des Moines, which also absorb some of the impact of Airport operations on emergency services**.

According to the City of SeaTac 2025-2026 Biennial Budget, the City received $1.62 million in ILA funds in 2024, $1.81 million in 2025, and $1.89 million in 2026. The City of SeaTac spends significantly more per capita on police than neighboring communities (with the exception of Tukwila, which recently moved from contracting with King County to standing up its own police force). Even without the ILA funds, in 2025 the City of SeaTac spent $132 more per capita for police than Issaquah and $149 more per capita than Des Moines. Between 2021 and 2025, the cost of policing in the city increased by 51 percent, even though the population grew by just three percent and overall crime in the declined by around one percent. Over the same period, the total number of passengers that enplaned or deplaned at SeaTac Airport grew by 46 percent. **While the increase in spending is not entirely attributable to airport growth, it does indicate that more analysis is needed on the part of the Port to determine how airport activities contribute to ongoing emergency services costs.**

Figure 3. Police Costs per Capita in SeaTac and Similarly Sized King County Cities



Source: City of SeaTac; City of Issaquah; City of Des Moines; City of Mercer Island; City of Burien; City of Covington; City of Shoreline; City of Maple Valley; City of Kenmore.

Because the DEIS failed to account for the increased need for additional police resources in Burien, Des Moines, and SeaTac due to an increase in Airport capacity and passengers, the conclusions about the impacts of the Action Alternatives in Chapter 4 are insufficient. The DEIS should analyze the true impacts of the No-Action Alternative, the cumulative impacts of the projects not included in the list of NTPs, and the effect expanded Airport operations have on emergency responders outside of the campus boundaries.

Schools

Despite being a core public service, the impact to schools is not discussed in the Public Services and Utilities section of the DEIS. As stated above in the Noise & Noise Compatible Land Use section of this memorandum, the Prototypical Funding Model used by the State of Washington to apportion money to schools provides more funding per student to schools in areas with higher median home values due to the challenges associated with recruiting teachers in high-cost areas. **The cumulative effects of Airport projects have expanded the noise corridor over time without adequate mitigation for these ongoing effects.** The reduction in home values associated with expanded noise contours could result in lower levels of state funding for schools in the Highline Public School District, which includes Burien, Des Moines, and SeaTac. Typically, 75 percent of school funding comes from the State while 15 percent comes from local sources and nine percent comes from the federal government. A reduction in funding for schools in this area would need to be subsidized by additional local funding – a challenge for cities that have relatively low-income populations and property tax revenue that has already been suppressed by the noise and pollution associated with the Airport.

In addition, there is significant evidence (including evidence cited in Appendix J) that **the noise associated with airports has a negative impact on learning**. While the Environmental Protection Agency's (EPA) recommended limit for hearing risk is 70 L_{eq} (the unweighted average of decibel levels for 24 hours) for children, nonauditory effects occur at much lower noise levels (Evans & Lepore, September 1993). These effects can include elevated sympathetic nervous system activity as well as disturbances in attentional processes. Chronic noise exposure can also cause learned helplessness in children and adults, which can make it harder for students to develop the persistence needed to gain new skills and retain knowledge. Chronic noise has been associated with reading deficits in seven studies. Note that this is not only a result of the noise students experience throughout the school day but rather relates to the average of decibel levels over a 24-hour period. Students who attend sound insulated schools but spend time outside working or playing, or who live in homes that are not sound insulated, will still experience the negative impacts of chronic noise on their learning.

According to Table 3.3.11-4 in Chapter 3 of the DEIS, the schools located in the 2022 65+ DNL noise contour include:

- Puget Sound Skills Center
- Midway Elementary School (sound insulated)
- Mount Rainier High School (sound insulated)
- Southern Heights Elementary School (closed, sound insulated)
- Pacific Middle School (sound insulated)
- Beverly Park Elementary School
- Our Lady of Lourdes School
- St. Philomena Catholic School (sound insulated)
- Glacier Middle School (sound insulated)

Figure 6 below compares the English, math, and science proficiency of students in the Highline Public School District to those at the schools within the 2022 65+ DNL noise contour that have report cards for the 2024 and 2025 school years. For comparison, it also includes data for all schools across Washington. Overall, the Highline Public School District underperforms when compared to Washington public schools. Within the 65+ DNL noise contour, Midway Elementary School, Pacific Middle School, and Glacier Middle School all underperform the district across all three subject areas. While Mount Rainier High School outperforms the district in ELA and math proficiency, it significantly underperforms in science proficiency. Although this is not entirely due to the impact of airport noise – this district includes a significant number of low-income students and those for whom English is not a first language – **the fact that these schools largely underperform compared to the rest of the district does suggest that airport noise may be having an impact on learning outcomes**.

Figure 4. English, Math, and Science Proficiency at Schools in the 65+ DNL Noise Contour

	All WA Schools	Highline PSD	Midway Elementary	Mount Rainier High	Pacific Middle	Beverly Park Elementary	Glacier Middle
ELA Proficiency	70.9%	52.8%	26.8%	74.7%	51.0%	42.6%	35.5%
Math Proficiency	63.3%	44.5%	33.3%	46.5%	35.8%	42.2%	27.7%
Science Proficiency	62.6%	41.1%	29.6%	22.3%	33.1%	62.1%	33.0%
Sound Insulated?			*Yes*	*Yes*	*Yes*	*No*	*Yes*

Source: Washington Office of Superintendent of Public Instruction.

Providing additional support for students exposed to high levels of chronic noise is an ongoing expense. Because of the way Washington schools are funded, this expense is likely to fall to the cities, which lack the resources to meaningfully address these challenges. **If expanded noise contours result in reduced property values, the Cities will have even less money to commit to this, even as more schools are exposed to higher levels of sound**.

Socioeconomics & Environmental Justice

Chapter 4 of the DEIS argues that because of the Airport's regional economic benefits, there would not be any negative consequences for socioeconomics or environmental justice (EJ) populations. The only minimization measure proposed is "employment assistance" to the 25 Doug Fox employees whose jobs would be eliminated. The type of employment assistance is not described in detail, nor does it account for the fact that the vast majority of these employees are racial and ethnic minorities.

The Northwest Seaport Alliance's Economic Impact Analysis (in Appendix K) is the basis for the DEIS conclusions regarding socioeconomic impacts. This analysis shows the economic impact of the airport on the region, highlighting the employment, logistics, and tourist revenues supported by airport activities. However, this report does not account for geographic inequality throughout the region. While the city of SeaTac tops the list of cities with jobs related to airport activity, neither Burien nor Des Moines is in the top ten for jobs impact. In addition, the report does not make clear whether those jobs are actually going to SeaTac residents. The city of SeaTac is also fourth on the list of cities seeing an increase in jobs due to visitor spending, after Seattle, Tacoma, and Bellevue. Again, Burien and Des Moines do not make the top ten. By relying on this report to determine the socioeconomic impacts of the SAMP, particularly on vulnerable communities, **the DEIS is not adequately weighing the benefits against the costs that nearby cities experience**.

Table 6-1 in the SEPA Environmental Justice Memorandum in Appendix K outlines the impact from the action alternatives in relation to WADOH Map Factors and Port Equity Indicators. As discussed in the No-Action Alternative section of this document, **the impacts are likely under-accounted for because the No-Action alternative is not a true baseline for comparison** but rather includes several projects that have not been analyzed

in a DEIS process. In addition, despite the fact that Section 5 of this memorandum includes maps showing that the most impacted census tracts have low equity index scores, the report concludes that for many of the measures there is not a significant impact to an EJ population.

Leland has outlined concerns below in response to the information in Table 6-1:

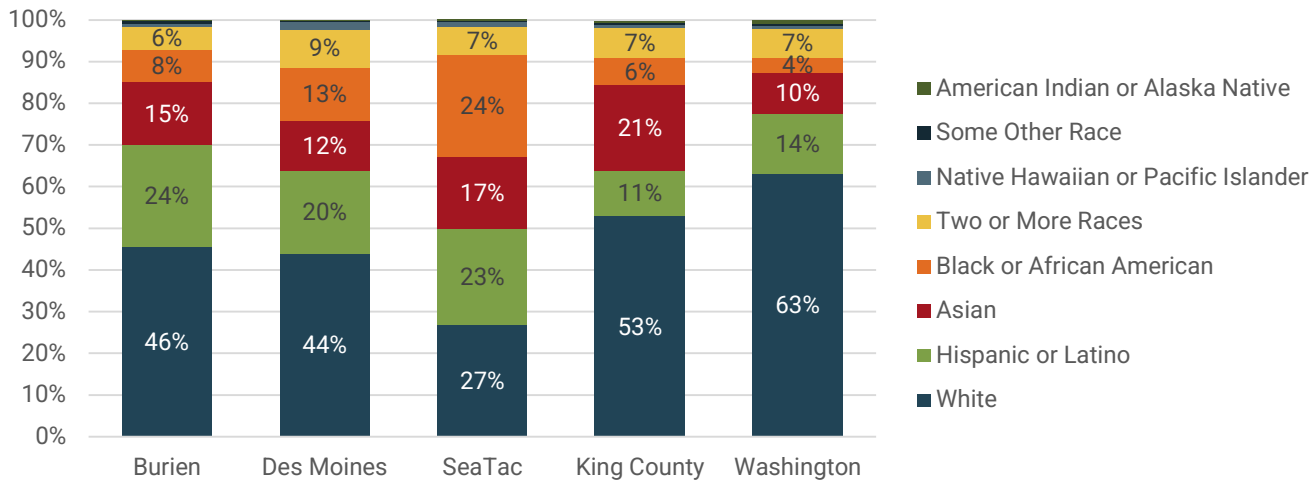
- **Greenhouse Gas (GHG) and Climate.** The analysis finds that the Action Alternatives would increase GHG emissions by 2.1 percent in 2032 and 7.4 percent in 2037 over the No-Action Alternative. In describing the potential adverse effect of this, the Port claims that it "expects to continue to make progress towards its Century Agenda GHG emission and reduction targets" and "will continue to minimize GHG sources of emissions through collaboration with partners." These vague, non-binding statements are insufficient to determine that the analysis does not show a significant impact to an EJ population. As described below, Burien, Des Moines, and SeaTac are majority-minority, largely lower-income communities and therefore increased emissions in this area would impact EJ populations.
- **Noise.** The analysis finds that by 2037, the 65+ DNL noise contour for Action Alternatives would be 0.66 square miles larger than under the No-Action alternative. First, it should be noted that this is likely an undercount due to the insufficient baseline for the No-Action alternative used throughout the DEIS. In addition, the analysis states that this 0.66 square mile expansion would expose 4,439 additional people in 1,851 homes to noise levels of 65 DNL or higher compared to the No-Action Alternative. As discussed above in the Noise & Noise Compatible Land Use section of this document, noise has a direct effect on property values. People – largely those considered to be EJ populations – who purchased homes outside of the 65+ DNL noise contour will see a reduction in their property values due to the increased area of the contour under the Action Alternatives. This change will have a direct impact on wealth-building opportunities, as homes are the largest asset for most households. In addition, noise at this level has negative impacts on learning (Hygge, Evans, & Bullinger, September 2002) (Evans & Lepore, September 1993) and mental and physical health (Passchier-Vermeer & Passchier, March 2000) – whether homeowners or not, residents in this area will see a significant decrease in livability. Therefore, the conclusion in Table 6-1 that the increase in operational noise would have no effect on EJ populations is incorrect and should be re-evaluated.
- **Socioeconomic.** The analysis finds that there is a positive but not significant effect of the Action Alternatives on the socioeconomic status of EJ populations because there is the potential for job and employment growth. However, as discussed below in the Spatial Distribution of Airport Impacts section of this memorandum, job growth due to airport operations is less likely to benefit populations in cities adjacent to the airport, including Burien, Des Moines, and SeaTac. Increased noise, greenhouse gas emissions, traffic, and other negative effects of airport operations are likely a deterrent to business and job growth in these areas. Additionally, airport noise and pollution are a deterrent to high-demand sensitive uses like daycares, which limits economic opportunities for parents in the three cities. In evaluating the impact to EJ populations, the Port should take into consideration the inequitable spatial distribution of airport benefits and harms.
- **Surface Transportation.** The surface transportation section of the analysis only considers the impact of traffic increases on intersections. It argues that both the Action and No-Action Alternatives would see traffic increases due to population and employment growth in the GSA, but the inadequate definition of the No-Action Alternative obscures the true impact. An increase in traffic not only causes delays at intersections, but also particulate matter in the air from tires and the safety of vulnerable road users such as pedestrians and cyclists. Because Burien, Des Moines, and SeaTac are all majority-minority communities, the increase in surface transportation in the Action Alternatives would have a direct impact on EJ populations.

- **Public Services and Utilities.** Per Table 6-1, the analysis of potential effects on emergency services, schools, and public utilities found no impact to EJ populations. However, as noted in the Noise & Noise Compatible Land Use section above, the impact of increased noise reduces property values and therefore fiscal revenues. This impact compounds over time, especially due to property tax regulations in Washington. At the same time, Burien, Des Moines, and SeaTac are majority-minority, largely low-income areas where there are higher service needs than in other communities. In particular, the 12 schools located within the 65+ DNL noise contour not only serve high-needs populations, the mental, physical, and cognitive health of their students are impaired by exposure to noise from the Airport. The Airport's impacts on fiscal revenues, which were not evaluated in the DEIS, have a direct impact on the availability and quality of public services for EJ populations in nearby communities.

Three-Cities Demographics

Accurate evaluation of impacts on EJ communities is an essential component of this DEIS because Burien, Des Moines, and SeaTac are all majority-minority cities. Figure 7 below shows the populations of the three cities, King County, and Washington by race and ethnicity. SeaTac in particular has a high concentration of Black, Asian, and Hispanic/Latino residents.

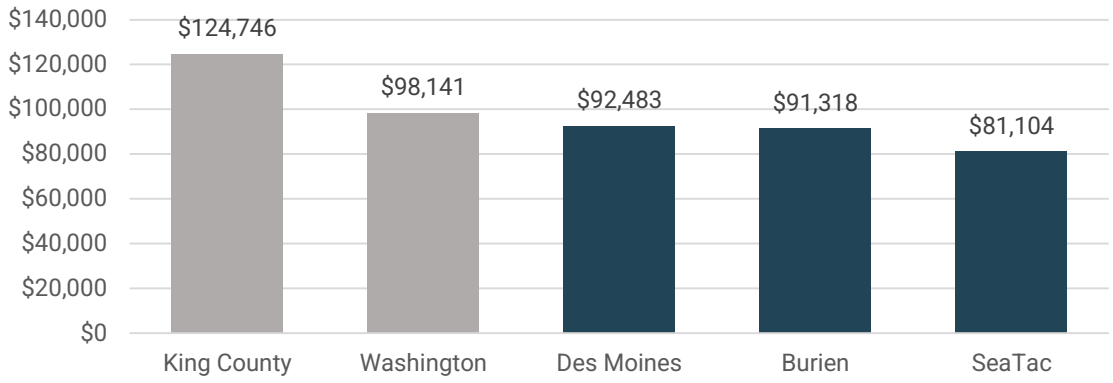
Figure 5. Race and Ethnicity in the Three Cities, King County, and Washington



Source: US Census Bureau 2024 Five-Year ACS (Table DP05).

The cities also have lower median household incomes than the county and state, with a higher share of residents receiving government assistance.

Figure 6. Median Household Income in the Three Cities, King County, and Washington



Source: US Census Bureau 2024 Five-Year ACS (Table S1901).

Figure 7. Share of Residents Receiving Earnings and Assistance

	Burien	Des Moines	SeaTac	King County	Washington
With Earnings	80.7%	78.1%	83.8%	84.0%	78.7%
With Social Security	25.7%	31.4%	23.2%	21.3%	29.0%
With Retirement Income	21.2%	25.7%	19.8%	18.5%	24.1%
With SSI	5.0%	3.7%	5.4%	3.2%	4.5%
With Cash Public Assistance	3.3%	4.3%	4.8%	3.2%	3.6%
With Food Stamps/SNAP	14.8%	13.2%	14.8%	8.2%	11.5%

Source: US Census Bureau 2024 Five-Year ACS (Table DP03).

Because of the high share of residents in this area that are considered EJ communities, the Port has a responsibility under SEPA to holistically consider the impacts to these groups, regardless of any changes to federal requirements. Impacts to the environment, property values, and public services related to Port activity has a direct impact on EJ communities in these cities.

Spatial Distribution of Airport Impacts

Throughout the SEPA Environmental Justice Memorandum, the Port asserts that the economic benefits of the Airport and the Action Alternatives largely outweigh the harms. This is in opposition to the purpose of a DEIS, which is to identify impacts to communities in order to mitigate them. However, studies have shown that while the benefits of airports are regional, the harms are localized to the communities directly adjacent to the airports. Julie Cidell's 2015 study on the economic development impacts of airports found that the professional and administrative employment jobs that are attracted to metro areas with major airports in most cases are not located directly adjacent to airports, but rather on average around eight miles away. In the case of SeaTac Airport, the distance between the airport and the weighted mean center of professional services establishments was 8.2 miles. Cidell argues that the regional economic benefit of airport expansion has been used to justify development at the expense of local communities, which are exposed to higher levels of noise, air pollution, traffic, and other disamenities (Cidell, November 2015). Similarly, a 2010 study of noise pollution at Boston Logan Airport found that minority populations and lower-income households typically bear the brunt of negative impacts (Ogneva-Himmelberger & Cooperman, January 2010). In addition, the negative externalities associated with the airport caused increased clustering of low-value homes and the concentration of poverty.

In the case of the three cities, residents are not necessarily even benefiting from the creation of new jobs at the airport. Just nine percent (5,135) of all employed residents in Burien, Des Moines, and SeaTac worked within the city of SeaTac (including the airport) as of 2023. More than a third of workers in these cities commuted to Seattle. This indicates that these workers are not choosing to live in SeaTac because of the proximity of jobs – in the case of many workers who live in SeaTac, access to light rail is likely a bigger amenity than access to the airport (six percent of residents across the three cities commute via public transportation).

Among the 14,701 workers at SeaTac Airport and the airport-serving businesses along International Boulevard in 2023, 1.8 percent (262) lived in SeaTac and a combined 1.8 percent (274) in Burien and Des Moines. The jobs in this area pay less than the county average, as shown in Figure 10 below. While roughly three quarters of King County jobs pay more than $3,333 per month ($40,000 annually), the same is true for just 58.9 percent of jobs at SeaTac Airport and along International Boulevard. These jobs are primarily concentrated in the accommodation and food services, retail trade, and administrative and support services sectors.

Figure 8. Share of Jobs by Wages

	SEA & Intl Blvd	King County
$1,250 per month or less	11.1%	10.7%
$1,251 to $3,333 per month	30.0%	14.6%
More than $3,333 per month	58.9%	74.7%

Source: US Census Bureau via LEHD OntheMap.

In order to properly assess the socioeconomic and environmental justice impacts of the Airport expansion, the DEIS should acknowledge the spatial inequities caused by airports, where the closest cities disproportionately bear the negative effects and experience much more limited benefits.

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