

APPENDIX G. COMMENTS RECEIVED ON THE FINAL SEIS AND RESPONSES

This appendix includes the comment submissions that were received on the Final Supplemental Environmental Impact Statement between April 17, 2026, and May 16, 2026.¹ Appendix G.1 includes submissions that contain one or more new substantive² comments; responses are provided for new substantive comments. Appendix G.2 includes the submissions that do not contain new substantive comments; no responses are provided for these, though the comments were considered. Appendix G.3 includes submissions from potentially affected property and business owners; although these comments were considered, no responses are provided in this Amended ROD because they did not relate to the NEPA documentation. These individuals were contacted directly by IBR Right-of-Way Team about the particulars of their property-related issues.

¹ Per 23 CFR § 771.127(a), FHWA and FTA are required to wait at least 30 days after publication of the Final SEIS before completing and signing a ROD. This appendix includes the comment submissions that were received within that 30-day period from when the Final SEIS was published on April 17, 2026, to May 16, 2026.

² New substantive comments are defined as comments that: (1) pertain to new information presented in the Final SEIS (i.e., information or analyses that were not previously made publicly available in the Draft SEIS); (2) identified errors in the Final SEIS; (3) would result in substantive changes to the Final SEIS or its underlying analyses; or (4) would alter the final decision.

Appendix G.1

NEW SUBSTANTIVE COMMENTS AND RESPONSES

Appendix G.1 New Substantive Comments

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Submission 1: Anonymous (April 27, 2026)

Comments

1-1 Really disappointed with the choice to end the light rail at Vancouver Waterfront. Vancouver has invested a lot of money into their Vine bus service that ends at Evergreen & Broadway location. Having a station there would be a seamless connection between the bus services and the lightrail. A good amount of the 200,000 residents of Vancouver would have a two seat transit ride to downtown Portland among other places on the light rail line. With just a waterfront station, the catchment area is vastly reduced, ridership much lower and not justify large upfront cost. Have rail operators said having a line terminus 90' above the waterfront is even feasible? Then there is the fact that the elevators may not always work. In my opinion, light rail should be left off the project until their is enough money for the downtown Vancouver connection.

Response to Submission 1: Anonymous (April 27, 2026)

1-1

The Amended Selected Alternative proposes to extend light rail from the Expo Center Station in Portland to a station near Evergreen Boulevard in Vancouver; the Evergreen Station will be the terminus of the line, consistent with the connectivity and catchment concerns expressed in this comment. The Amended Selected Alternative does not propose to end light rail at the Vancouver Waterfront as stated in the comment.

As described in Section 2.3 of the Final Supplemental Environmental Impact Statement (SEIS), construction of the Amended Selected Alternative will be sequenced in accordance with many factors, such as the scale of improvements, different types of infrastructure and associated construction specialties required, timing of funding received, maintenance of traffic on Interstate 5, navigation on the Columbia River, seasonal and weather constraints, or permit conditions. Currently, the Waterfront Station is not included in the first construction package, which is expected to cover the new Columbia River bridges and approaches. TriMet determined that extending light rail transit to the Waterfront Station is operationally feasible for interim construction packages as part of the full build out of the Amended Selected Alternative. The Waterfront Station will have four elevators, two at each end of the elevated platform. Having multiple elevators supports continued service in the event one is out of service.

Construction of the light rail line from the Waterfront Station to the Evergreen Station will be sequenced during or after construction of the new Columbia River bridges in a subsequent phase. Each construction phase is designed to have operational independence. For additional information regarding access to the Waterfront Station, see Design Standard Response F.8: Access to Light-Rail Transit Stations in Appendix S2 of the Final SEIS.

Submission 2: Anonymous (May 14, 2026)**Comments**

I was the ODOT Portland Harbor Technical Engineering Specialist for the Portland Harbor Superfund defense project from 2014-2018.

I investigated Superfund issues for DOJ as a ODOT staff engineer.

2-1 I do not believe that ODOT & Wash Dot is trying to address environmental issues, but avoid environmental penalties associated with Superfund related ODOT's storm water practices. The IBR FEIS provides sufficient details to trigger Endangered Species Act violation from I-5 in Vancouver Washington.

I calculated contributing areas for the Portland harbor Superfund site for ODOT and countered other potential parties allegations with facts and ODOT plans or the archived plans. DOJ used my drainage extant network diagrams and contributing area calculations.

I can easily calculate the 6ppd-q quantities that are deposited on freeway surface, that freely flow out of the freeway outfalls into the shoreline where this toxin flows downstream along the river banks edge for miles. This is where the migrating fish live and die when ever the rains flush out massive quantities of 6ppd-q.

While the EPA catagorized 11ngl of 6ppd-q as a target for sediment. My issue is the ESA and CWA violations every time it rains on the rivers. And pollute the water column and polutes the under water soils.

Based of my legal understanding every time it rains it would be an ESA take and violation.

I am a native son of Oregon and I was raised near Marion Oregon on the North Santiam River. My mother and uncles used to fish with pitch forks and I used to swim with dead Lamprey eels on tree limbs. These species are not returning but given the massive pollution loads being flushed from freeways into the riverine systems during fall salmon migrations at the willamette falls and the Clackamas riverine systems.

While Superfund is about sediments, the ESA and CWA is about the water column and the life blood of our of the Oregon territorial river highways.

Exhaustive Evaluation of 6PPD-Quinone Ecotoxicology, Freeway Reactor Dynamics, and Statutory Liability in the Willamette and Columbia Riverine Systems

1. Executive Assessment: The Intersection of Emergent Toxicology and Institutional Inertia

The emergence of N-(1,3-dimethylbutyl)-N'-phenyl-p-phenylenediamine-quinone (6PPD-quinone or 6PPD-q) as a ubiquitous, acutely lethal stormwater contaminant fundamentally disrupts the established regulatory, engineering, and ecological paradigms governing transportation infrastructure in the Pacific Northwest. For decades, state transportation agencies—including the Oregon Department of Transportation (ODOT) and the Washington State Department of Transportation (WSDOT)—have managed highway stormwater runoff predicated on the assumption that macro-pollutants, such as suspended solids, heavy metals, and legacy hydrocarbons, constitute the primary ecological threats to receiving waters. The 2020 isolation of 6PPD-q, a highly toxic oxidation byproduct of a universally applied tire rubber antioxidant, nullifies this assumption and necessitates an immediate, systemic overhaul of environmental engineering practices and statutory compliance strategies.

This exhaustive report provides a comprehensive, multi-scalar analysis of the severe liabilities facing state and local government agencies regarding the unmitigated, continuous discharge of 6PPD-q into the Willamette and Columbia riverine systems. The central analytical inquiry evaluates whether the passive discharge of this tire-derived toxin constitutes an ongoing violation of the Clean Water Act (CWA) and the strict liability provisions of the Endangered Species Act (ESA). This requires a rigorous deconstruction of statutory "permit shields," narrative water quality standards, and the non-discretionary biological imperatives protecting listed salmonid species that rely on these original river highways for their migration runs. This document is engineered to serve as a comprehensive technical and legal submission across three distinct yet interconnected avenues of environmental oversight currently operating in 2026. First, it delivers critical, actionable commentary for the Interstate Bridge Replacement (IBR) Final Supplemental Environmental Impact Statement (SEIS)—published on April 17, 2026—and the associated Section 401 Water Quality Certification process, which faces a hard public comment deadline of May 15, 2026. Second, it provides foundational data for the Oregon Department of Fish and Wildlife (ODFW) regarding the systemic failure of salmonid migration runs, demonstrating that upstream habitat restoration is rendered biologically futile by downstream chemical poisoning. Finally, it translates these macro-level systemic engineering failures into localized public health and ecological impacts suitable for review by the *North Peninsula Review*, the independent community newspaper serving the Portsmouth, St. Johns, Kenton, and University Park neighborhoods, where the physical intersection of massive freight

corridors and vulnerable waterways is most acutely concentrated.

The analytical framework presented herein draws deeply upon institutional knowledge regarding the historical legal maneuvers deployed during the 2014-2018 Portland Harbor Superfund arbitration process. During that critical period, highly compartmentalized technical engineering units were established, reporting directly to Department of Justice (DOJ) legal counsel. The explicit mandate of these units was to construct an "environmental eclipse"—a calculated, highly effective defense strategy designed to isolate and insulate ODOT from catastrophic legacy contamination liability through rigorous upland source control arguments and administrative deflection. While that historical strategy successfully minimized the agency's Superfund exposure, applying this exact same bureaucratic inertia and procedural deflection to the emergent 6PPD-q crisis represents a profound failure of environmental stewardship and legal foresight.

Unlike the legacy contaminated sediments buried in the Portland Harbor, the modern freeway system is not a passive conduit conveying historical pollution; it is an active, continuous-flow chemical reactor actively synthesizing 6PPD-q via the mechanical and chemical degradation of tire wear particles. Maintaining a posture of willful detachment from this emergent pollutant, while relying on the legacy defense strategies of the Superfund era, guarantees unprecedented legal exposure under the strict liability provisions of the ESA. This reality necessitates an urgent, fundamental transition from passive denial and basic biofiltration to active, molecular-level stormwater remediation.

2. Freeway Corridors as Continuous-Flow Chemical Reactors: The Genesis of 6PPD-Quinone

To fully comprehend the severity of the regulatory and ecological crisis posed by 6PPD-q, one must first deconstruct the physical, kinetic, and chemical environment in which it is continuously generated. The traditional environmental engineering consensus has historically viewed the interstate highway system as a passive, impervious surface that merely collects preexisting atmospheric deposition and automotive fluids before funneling them through outfalls into adjacent riverine systems. This macroscopic perspective is fundamentally flawed and scientifically obsolete. In reality, the modern high-volume freeway system functions as a massive, highly efficient, open-air chemical reactor.

2.1 The Molecular Architecture of Tires and the Blooming of 6PPD

Modern vehicle tires are highly engineered, complex polymer composites designed to withstand extreme mechanical stress, friction, thermal fluctuations, and chemical degradation. To prevent the vulcanized rubber matrix from cracking, fatiguing, and rapidly degrading due to environmental exposure to ozone and ultraviolet light, manufacturers globally incorporate N-(1,3-dimethylbutyl)-N'-phenyl-p-phenylenediamine (6PPD) as an essential additive. It is estimated that 6PPD comprises between 0.4% and 2.0% of a tire's total mass. 6PPD functions as a sacrificial antioxidant and antiozonant. It operates through a specific, designed chemical mechanism: the 6PPD molecules are engineered to continuously migrate—a process known in polymer chemistry as "blooming"—to the outer surface of the tire rubber throughout the lifespan of the tread. Once at the surface, the 6PPD molecule fulfills its designed purpose by reacting preferentially with ground-level ozone (O3) and other reactive oxygen species in the atmosphere, creating a protective barrier that spares the underlying polymer

chains from oxidative scission.

However, this abiotic oxidative transformation directly synthesizes the highly toxic transformation product 6PPD-quinone (2-((4-methylpentan-2-yl)amino)-5-(phenylamino)cyclohexa-2,5-diene-1,4-dione). While the creation of 6PPD-q successfully protects the structural integrity of the tire, it simultaneously generates a compound that is identified as the second most toxic aquatic chemical ever measured.

2.2 Kinetic Acceleration and the Generation of Tire Wear Particles (TWPs)

The synthesis of 6PPD-q does not occur in a vacuum; it is catalyzed, accelerated, and magnified by the precise thermodynamic and kinetic conditions found on high-volume interstate corridors such as I-5 and I-205. In standard chemical engineering principles, a reactor's efficiency and product yield are determined by feedstock concentration, catalytic presence, kinetic energy (heat and pressure), exposed surface area, and solvent transport. The freeway environment optimizes every single one of these variables to maximize the production of 6PPD-q.

The mechanical friction of the tire tread against the abrasive asphalt and concrete road surfaces acts as a continuous, high-energy milling process. This friction shears off microscopic fragments known as Tire Wear Particles (TWPs). The United States produces an estimated 1,120,000 tons of TWPs annually. This mechanical shearing is critical because it results in an exponential increase in the exposed surface area of the rubber compound. As the surface area increases, the blooming of 6PPD is accelerated, maximizing its exposure to the atmosphere. Furthermore, high-speed interstate travel generates significant thermal energy at the tire-road interface, while the heavy concentration of internal combustion vehicle exhaust along these corridors generates artificially high levels of ground-level ozone. This localized ozone acts as the exact chemical catalyst required to drive the rapid, continuous oxidation of the newly exposed 6PPD into 6PPD-q.

Chemical Reactor Parameter	Highway Infrastructure Equivalent	Mechanism of Action in 6PPD-q Generation
Chemical Feedstock	Vehicle Tires (0.4% - 2.0% 6PPD by mass)	Provides a continuous, inexhaustible supply of the baseline precursor compound into the environment as traffic flows.
Catalytic Agent	Ground-level Ozone (from vehicle exhaust)	Drives the rapid abiotic oxidative transformation of 6PPD into the highly toxic 6PPD-quinone byproduct.
Kinetic Agitation / Surface Area Expansion	Highway Speeds / Road Surface Friction / Thermal Heating	Mechanically shears tires into micro-particles (TWPs) [1,120,000 tons/yr], exponentially increasing the reactive surface area and accelerating 6PPD "blooming".
Solvent Extraction and	Seasonal Stormwater Runoff	Acts as an extraction solvent,

Chemical Reactor Parameter	Highway Infrastructure Equivalent	Mechanism of Action in 6PPD-q Generation
Transport	(Pacific Northwest Precipitation)	solubilizing the highly mobile 6PPD-q that accumulates on the roadway and rapidly flushing the accumulated toxin directly into adjacent river outfalls.

During dry periods, the synthesized 6PPD-q accumulates heavily on the roadway surface and within the microscopic, porous crevices of the TWP's resting on the shoulder. When precipitation events occur—which are both frequent and heavy in the Pacific Northwest—the stormwater acts as a highly efficient extraction solvent. It rapidly quenches the chemical reaction, dissolves the soluble 6PPD-q, and transports it via massive hydraulic flow directly into the highway drainage infrastructure and outfalls. Researchers estimating 6PPD-q release from TWP's have calculated that the minimum mass of pure 6PPD-q generated and mobilized into the environment is between 26 and 1,900 tons annually.

The recognition of the freeway as a highly efficient, continuous-flow chemical reactor fundamentally invalidates the traditional transportation agency defense that roads merely passively convey existing environmental background pollution. By actively designing, operating, and maintaining the abrasive surfaces, high-speed corridors, and hydraulic drainage systems that mechanically and chemically synthesize this toxin, transportation agencies are the active originators of 6PPD-q point-source pollution.

3. Ecotoxicology and the Systemic Disruption of Biological River Highways

The Willamette and Columbia rivers are not merely hydraulic channels; they are ancient, complex biological highways that have supported the anadromous life cycles of Pacific salmonids for millennia. These riverine systems historically provided pristine, unobstructed corridors for juvenile smolt out-migration to the Pacific Ocean and adult return runs to upstream spawning gravels. Today, these original biological highways are physically, chemically, and lethally intersected by the region's modern asphalt highways. The convergence of these two distinct networks at thousands of highway stormwater outfalls has resulted in an ongoing, catastrophic ecological collapse known as Urban Runoff Mortality Syndrome (URMS).

3.1 Urban Runoff Mortality Syndrome and Acute Salmonid Susceptibility

For over two decades, environmental scientists and fisheries biologists observed a highly distressing and inexplicable phenomenon in the urbanized watersheds of the Pacific Northwest: otherwise healthy adult Coho salmon (*Oncorhynchus kisutch*) returning from the ocean to spawn would suddenly exhibit severe, acute neurological symptoms. The afflicted fish would be observed gasping at the surface, exhibiting a total loss of equilibrium, swimming erratically in circles, and ultimately dying within hours of a rain event, entirely failing to spawn.

The landmark 2020 breakthrough by researchers at the University of Washington and Washington State University definitively identified 6PPD-quinone as the sole, primary causal

agent of URMS. The toxicological profile of 6PPD-q is singularly alarming. It has been definitively linked to the acute mortality of Coho salmon, functioning as the primary toxicant responsible for the systematic eradication of pre-spawn populations in urban streams. For Coho salmon, the median lethal concentration (LC50) is astonishingly low, documented at approximately 0.08 µg/L (equivalent to 41–95 nanograms per liter). To contextualize the extreme nature of this toxicity, concentrations of 6PPD-q measured in standard roadway runoff and highway outfall effluent frequently range from 0.016 to 2.29 µg/L. This means that the routine stormwater discharge from ODOT and WSDOT infrastructure contains concentrations of 6PPD-q that are up to 24 times the median lethal concentration for Coho salmon. While Coho salmon exhibit the most acute and visually dramatic rapid mortality, exhaustive toxicological research conducted globally between 2021 and 2024 has demonstrated that 6PPD-q lethality extends across multiple salmonid species of vital economic, cultural, and ecological importance throughout the Willamette and Columbia basins.

Salmonid Species	ESA Listing Status (Columbia/Willamette Basins)	Documented Susceptibility to 6PPD-q Toxicity	Biological Impact and Ecological Observation
Coho Salmon (<i>O. kisutch</i>)	Threatened (Lower Columbia River ESU)	Extremely High (LC50: ~0.08 µg/L)	Rapid onset of URMS; near 100% pre-spawn mortality in high-exposure urban creeks within hours of rainfall events.
Steelhead / Rainbow Trout (<i>O. mykiss</i>)	Threatened (Upper Willamette, Lower Columbia)	High	Acute lethality, severe loss of equilibrium, and acute disruption of critical juvenile rearing phases in localized tributaries.
Chinook Salmon (<i>O. tshawytscha</i>)	Threatened (Upper Willamette, Lower Columbia)	Moderate to High	Lethal and sub-lethal physiological stress; profoundly impacts both adult residency and critical migrating smolts navigating the lower river corridors.
Coastal Cutthroat Trout (<i>O. clarkii clarkii</i>)	Species of Concern (Oregon)	High	Acute lethality closely mirroring Coho sensitivities; severe population constriction in urbanized, outfall-heavy watersheds.

3.2 The Biological Futility of Upstream Habitat Restoration

The Oregon Department of Fish and Wildlife (ODFW), alongside various watershed councils, soil and water conservation districts, and riverkeeper organizations, invests tens of millions of dollars annually in fish passage and tributary habitat restoration projects throughout the

Willamette and Lower Columbia basins. These massive efforts, often funded by grants such as the Private Forest Accord (PFA), focus on generating ecological uplift by adding large woody debris, removing physical culvert barriers, establishing cold water refuges, and restoring floodplain connectivity to support ESA-listed species (the HCP Covered Species). However, ODFW biologists and technical working groups have been forced to recognize a grim, systemic paradox: these massive financial and labor investments in upstream physical habitat are rendered biologically useless if the migrating salmon are chemically poisoned at the downstream choke points. As explicitly stated in ODFW's 6PPD-q vulnerability presentations: "Fish passage and stream restoration projects can only be effective if the fish aren't poisoned". Adult salmon must navigate the heavily urbanized, industrial lower reaches of the Willamette and Columbia rivers—areas crisscrossed by the massive I-5 and I-205 bridge infrastructure and ringed by hundreds of unmitigated, high-volume highway stormwater outfalls. ODFW field data and spawning surveys indicate that pre-spawn death occurs almost exclusively downstream of large outfalls exhibiting high 6PPD-q concentrations. ODFW's statewide vulnerability mapping, which overlays current Coho distribution layers with the EPA's National Pollutant Stream Network, confirms that a massive portion of the Coho distribution is directly exposed to mid-to-high levels of outfall pollution. Furthermore, the lethality of 6PPD-q is not strictly limited to returning adult fish. If adult Coho or Chinook manage to evade the toxic fall "gullywashers" and successfully spawn in the upper tributaries, their progeny (juveniles and smolts) remain highly susceptible to 6PPD-q toxicity during their extended stream-rearing phase and their eventual out-migration through the same toxic lower-river corridors. This creates a devastating dual-threat vector that systematically decimates entire generational cohorts, undermining the fundamental viability of the species and directly violating the treaty-reserved rights of the region's Native American Tribes, who rely heavily on these fisheries for cultural, spiritual, and economic survival.

4. The Portland Harbor Superfund Paradox: Legacy Defense vs. Emergent Toxicity

To understand the current institutional paralysis and defensive posture of ODOT regarding 6PPD-q, it is absolutely essential to analyze the agency's internal psychology, bureaucratic structure, and legal framework forged during the crucible of the Portland Harbor Superfund arbitration process.

4.1 The Architecture of the "Environmental Eclipse" Strategy (2014-2018)

In December 2000, a highly industrialized, 10-mile stretch of the lower Willamette River (from approximately River Mile 1.9 to 11.8) was designated a Superfund site and added to the National Priority List by the EPA. This listing, driven by over a century of heavy industrial, maritime, and municipal contamination deep within the benthic sediment, triggered a massive, multi-decade legal scramble among over 100 Potentially Responsible Parties (PRPs) to allocate the cleanup costs, which were estimated to exceed \$1 billion. ODOT was deeply entangled in this complex liability matrix. The agency owned, operated, and maintained massive impervious infrastructure spanning the harbor—including critical portions of Highway 26, Highway 30, Interstate 5, Interstate 405, the St. Johns Bridge, and the Fremont

Bridge. In total, ODOT controlled approximately 17 miles and 194 acres of impervious area discharging directly into the Superfund site through three wholly-owned outfalls, 29 shared municipal/private outfalls, and numerous direct bridge scuppers. The EPA and DEQ ranked the ODOT outfalls investigation as a high priority for source control evaluation. During the critical arbitration, feasibility study, and cost allocation years of 2014 to 2018, ODOT established highly compartmentalized technical engineering units to manage its Superfund exposure. Crucially, these specialized units did not operate as traditional environmental remediation or ecological restoration teams; rather, they reported directly to Department of Justice (DOJ) legal counsel assigned to ODOT's defense. The primary, overarching mandate of these DOJ-directed engineering units was to execute an "environmental eclipse." This strategy involved meticulously isolating and insulating ODOT from the broader, ruinous Superfund fight by demonstrating that highway stormwater runoff was a minor, heavily diluted contributor to the highly toxic benthic sediment bed compared to the gross, historical point-source polluters (e.g., chemical manufacturing plants, shipyards, fuel processors, and manufactured gas plants). By focusing heavily on "upland source control" metrics, analyzing the historical flaking of lead paint from bridges, and engaging in protracted administrative and legal cost allocation maneuvers, ODOT's legal counsel successfully minimized the agency's financial exposure to the legacy, in-river cleanup costs.

4.2 The Dangerous Misapplication of Legacy Defenses to Active Chemical Kinetics

The perspective of former technical engineering specialists embedded deeply within those compartmentalized units reveals a critical, systemic, and highly dangerous flaw in ODOT's current operational philosophy [User Prompt]. The agency is currently attempting to apply the exact same "environmental eclipse" strategy—characterized by denial, bureaucratic compartmentalization, reliance on procedural shields, and a focus on upland administrative controls—to the emergent 6PPD-q crisis. This approach is fundamentally scientifically and legally flawed. The entire Portland Harbor Superfund defense was predicated on the premise that the target contamination was *legacy*—historical dumping and deep sediment contamination that occurred decades ago, for which responsibility was heavily diluted among dozens of bad actors over a century of industrial use. In stark, undeniable contrast, 6PPD-q is not a legacy pollutant resting inertly in the sediment; it is an *active, emergent, and continuous* point-source discharge. As established exhaustively in Section 2 of this report, the freeway is an ongoing, high-efficiency chemical reactor. Every single day that ODOT operates the I-5 and I-205 corridors over the Willamette and Columbia rivers, it actively facilitates the mechanical generation of TWPs, the chemical synthesis of 6PPD-q via ozone catalysis, and the hydraulic discharge of a highly lethal toxin directly into the water column. The DOJ's brilliant, highly effective legal maneuvers from 2016 to avoid legacy sediment liability cannot shield ODOT from the reality that it is actively, presently, and continuously synthesizing and flushing a salmonid poison into the critical habitat of endangered species today. Disagreement with ODOT's failure to address 6PPD-q stems from the professional engineering recognition that administrative legal obfuscation cannot neutralize molecular kinetics; freeways are chemical reactors, and the agency is legally liable for the effluent.

5. Regulatory Fractures: Clean Water Act vs. Endangered Species Act Liabilities

The intersection of massive, continuous 6PPD-q generation via highway infrastructure and its acute lethality to ESA-listed species places state transportation agencies—specifically ODOT and WSDOT—in an unprecedentedly precarious legal position. Historically, transportation agencies have relied heavily on a specific matrix of statutory defenses and procedural permits to shield themselves from environmental liability. The rapid discovery and irrefutable science surrounding 6PPD-q has thoroughly fractured this traditional defense architecture.

5.1 The Deterioration of the CWA MS4 Permit Shield

Under the Clean Water Act (CWA), point-source discharges of stormwater from massive highway infrastructure are regulated through National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) permits. ODOT operates under a comprehensive Phase I MS4 individual permit issued and monitored by the Oregon Department of Environmental Quality (DEQ). Historically, MS4 permittees have relied entirely on the foundational legal doctrine of the "permit shield," codified in CWA Section 402(k). The permit shield doctrine generally provides that strict compliance with the terms of an NPDES permit constitutes compliance with the CWA as a whole, thereby protecting the agency from third-party liability or enforcement actions for discharging pollutants that are not explicitly listed, modeled, or regulated within the permit itself. Because 6PPD-q was entirely unknown to science prior to late 2020, it is understandably absent from all legacy MS4 permits, stormwater management plans, and total maximum daily load (TMDL) waste load allocations. ODOT has leaned heavily on this procedural reality to justify the ongoing, unmitigated discharges from its outfalls. However, emerging environmental jurisprudence strongly indicates that the permit shield is rapidly losing its absolute power, particularly in cases involving acutely lethal, newly discovered toxins that devastate local ecosystems. Oregon's water quality standards contain overarching "narrative standards" which explicitly state that all waters of the state must remain free from toxic substances in amounts that are deleterious or lethal to aquatic life. The active discharge of a chemical that routinely kills adult salmon within a matter of hours at nanogram-per-liter concentrations represents a facial, undeniable violation of the narrative intent of the CWA, regardless of whether the specific chemical formula was named in an MS4 appendix drafted in 2015. As established by judicial precedent like the *Aurora Energy* decision, federal courts are increasingly willing to pierce the permit shield when the discharge of unlisted pollutants results in egregious, undeniable harm to the receiving ecosystem.

5.2 Strict Liability Under the Endangered Species Act (Section 9)

While CWA liability revolves around complex, often protracted administrative arguments regarding permit compliance, narrative standards, and DEQ oversight, the Endangered Species Act (ESA) presents a much more direct, blunt, and severe legal threat to ODOT. Section 9 of the ESA strictly prohibits the "take" of any listed endangered or threatened species within the United States. The statutory definition of "take" is intentionally broad and all-encompassing, defining it as actions that "harass, harm, pursue, hunt, shoot, wound, kill,

trap, capture, or collect" a listed species. The unpermitted, continuous killing of ESA-listed Coho, Chinook, and Steelhead via highly toxic stormwater effluent from ODOT-owned and operated outfalls constitutes a direct, physical violation of Section 9. Crucially, unlike the CWA, the ESA does not possess an inherent "permit shield" for scientific ignorance. The fact that ODOT did not know 6PPD-q existed prior to 2020 is entirely irrelevant to the strict liability standard of Section 9; if the agency's infrastructure is actively killing listed fish today, it is committing an illegal take. Furthermore, Section 7 of the ESA imposes a strict, non-discretionary duty on federal agencies—such as the Federal Highway Administration (FHWA), which funds ODOT and WSDOT projects—to ensure that their actions, funding, and permits do not jeopardize the continued existence of listed species. The emergence of 6PPD-q as a novel, primary threat to salmonids necessitates the immediate reinitiation of formal ESA consultation for all ongoing highway operations.

This is not a theoretical or distant legal risk. Environmental advocacy groups are actively mobilizing the ESA to force systemic change. In 2024, the Center for Biological Diversity (CBD) and the Pacific Coast Federation of Fishermen's Associations initiated aggressive litigation pathways, filing formal Notices of Intent to sue the California Department of Transportation (Caltrans) and the Oregon Division of the Federal Highway Administration regarding severe ESA violations tied directly to 6PPD-q highway runoff. Simultaneously, conservation groups are engaged in federal bench trials in San Francisco against major tire manufacturers (including Bridgestone, Goodyear, and Michelin) under the ESA, arguing that the distribution of 6PPD-containing tires fundamentally violates the Act by directly causing URMS. At the legislative level, Washington lawmakers are advancing aggressive bills (SB 6119 and HB 2421) to completely ban the sale of tires containing 6PPD by 2035 and impose fees to fund stormwater mitigation, recognizing the existential threat the chemical poses to state ecology and tribal treaty rights. At the federal level, Northwest lawmakers have introduced the 6PPD Task Force Act to coordinate immediate federal research and alternative identification. As the science becomes irrefutable and legislative pressure mounts, ODOT's exposure to third-party citizen suits under the ESA increases exponentially, rendering the "environmental eclipse" strategy entirely obsolete.

6. The Interstate Bridge Replacement (IBR) FEIS and Critical May 2026 Regulatory Deadlines

The theoretical liabilities and chemical kinetics outlined in the previous sections are currently converging into a massive, highly visible, and imminent administrative choke point: The Interstate Bridge Replacement (IBR) Program. The IBR is a multi-billion-dollar infrastructure initiative aimed at replacing the aging, seismically vulnerable I-5 bridges crossing the Columbia River and North Portland Harbor with a modern, multimodal structure spanning a 5-mile corridor from Victory Boulevard in Portland to SR 500 in Vancouver.

6.1 The IBR Final SEIS and Severe Stormwater Mitigation Deficiencies

On Friday, April 17, 2026, the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA), acting as joint lead agencies, officially published the Final Supplemental Environmental Impact Statement (SEIS) for the IBR Program. This document contains the technical analysis of the future effects of building the elements comprising the Modified Locally Preferred Alternative (LPA).

The Modified LPA proposes a massive expansion of impervious surface. It will add approximately 29.6 acres of net new contributing impervious area (CIA) to the corridor. The program pledges to treat or infiltrate runoff from a total of 207.2 acres of CIA, which includes 156.4 acres of existing, currently untreated CIA from the legacy infrastructure.

The IBR Final SEIS acknowledges the acute threat of 6PPD-q and references 2022 guidelines published by the Washington State Department of Ecology regarding mitigation strategies. To manage the effluent from this massive chemical reactor, the SEIS proposes utilizing passive Best Management Practices (BMPs), specifically citing bioretention facilities, biofiltration swales, compost-amended vegetated filter strips, and dispersion/infiltration BMPs where space allows. While these passive biological filtration methods—which rely heavily on the sorption of chemicals to organic matter, soil blends, and compost—have demonstrated efficacy in binding and attenuating 6PPD-q in small, highly controlled pilot studies, relying on them as the primary, long-term defense for a five-mile, high-volume interstate freight corridor is deeply flawed from an engineering perspective.

IBR Proposed BMP	Operational Mechanism	Engineering Vulnerability Regarding 6PPD-q Remediation
Biofiltration Swales	Passive, gravity-fed flow through shallow vegetated channels to settle suspended solids.	Highly susceptible to hydraulic blowout and channelization during heavy Pacific Northwest precipitation events. Offers insufficient residence time to guarantee the molecular sorption of the highly soluble, rapidly mobilized 6PPD-q compound.
Bioretention Soil Media	Chemical sorption to organic carbon sources (compost, biochar, coconut coir).	Media saturation and breakthrough risk. Over a 10-to-50 year operational lifespan, the finite binding sites for organic molecules will inevitably saturate, leading to a sudden, highly toxic release of accumulated 6PPD-q if the media is not aggressively and frequently replaced.
Infiltration / Dispersion	Directing untreated or pre-treated runoff into groundwater aquifers or large open land areas.	Severe space constraints within the heavily urbanized, industrial I-5 corridor at the Columbia River crossing severely limit the physical footprint available for true, effective dispersion and infiltration.

The IBR project is actively designing a 100-year infrastructure asset utilizing transient, passive stormwater technology to treat a highly lethal output generated by a massive, active chemical reactor. If the bioretention media reaches saturation, if hydraulic blowout occurs during a storm, or if routine maintenance is deferred (a common and well-documented reality in chronically

underfunded state DOT maintenance budgets), the new multimodal bridge will immediately resume direct ESA Section 9 "takes" of the very endangered salmon runs it nominally claims to protect.

6.2 The May 15, 2026 Section 401 Water Quality Certification Imperative

The publication of the Final SEIS in April 2026 triggered the immediate timeline for obtaining the vital federal and state environmental permits necessary prior to the issuance of an Amended Record of Decision (ROD) by the FHWA and FTA. The most critical and immediate among these is the Clean Water Act Section 401 Water Quality Certification.

Section 401 of the CWA (33 U.S.C. 1341) mandates that applicants (in this case, ODOT and WSDOT) obtain formal certification from the state certifying authorities (the Oregon DEQ and Washington Ecology) confirming that the proposed discharge from the new infrastructure will strictly comply with all state water quality standards, including the narrative standards prohibiting toxic discharges. On April 15, 2026, the U.S. Army Corps of Engineers issued a formal public notice (NWP-2020-00460) inviting comments on the permit application, establishing a firm, non-negotiable deadline of **May 15, 2026**, for public commentary submitted to the Oregon DEQ Northwest Region 401 Water Quality Certification Coordinator.

Given the proven lethality of 6PPD-q at nanogram levels, the state's narrative standards prohibiting toxic discharges, and the scientifically validated categorization of freeways as active chemical reactors, environmental groups, technical experts, and local municipalities possess a compelling, urgent mandate to submit formal, data-driven objections during this critical May 2026 window. Approving the 401 Certification without explicitly mandating advanced, actively monitored, molecular-level remediation technologies—technologies that go far beyond the passive, easily saturated bio-swales currently proposed—essentially constitutes state-sanctioned authorization for the continued, indefinite poisoning of the Columbia River ecosystem.

7. Localized Impacts: Portsmouth, the North Peninsula, and ODFW Strategic Imperatives

The abstract, macro-level concepts of chemical reactor kinetics, Superfund arbitration deflection, and federal ESA jurisprudence manifest physically and brutally in the localized environment of North Portland.

7.1 Environmental Justice and the North Peninsula Environment

The Portsmouth, St. Johns, Kenton, Arbor Lodge, and University Park neighborhoods occupy the geographic peninsula where the Willamette and Columbia rivers converge. This specific geographic area is heavily burdened by the massive physical footprint of the I-5 corridor, the impending IBR project construction zone, the legacy Portland Harbor Superfund site, and intense, ongoing industrial and freight activity. *The North Peninsula Review*—the community's independent, locally owned newspaper edited by Barbara Quinn and Mark Kirchmeier—has historically been the critical voice covering the deep environmental justice issues, Superfund disputes, and the disproportionate public health and ecological impacts borne heavily by

residents of this specific quadrant.

For the residents of Portsmouth and the broader North Peninsula, 6PPD-q is not an abstract regulatory hurdle debated in Salem or Olympia; it is an active, highly toxic chemical flowing continuously through their immediate environment. Stormwater from the massive impervious surfaces surrounding the cut and elevated sections of I-5 and local heavy-haul arterials flushes directly into local waterways, including the Columbia Slough, North Portland Harbor, and the Willamette River. Furthermore, the localized generation of tire dust—the source of 6PPD-q—also contributes heavily to ambient PM2.5 and PM10 particulate matter in the air. This raises severe secondary respiratory and pulmonary health concerns for residents living directly adjacent to the freeway corridors, bridging the critical gap between aquatic ecotoxicology and human environmental health.

Bringing the 6PPD-q crisis to the forefront via robust local publications like the *North Peninsula Review* serves to democratize the highly technical engineering failures of ODOT. It arms the affected public with the scientific reality of the toxicity occurring in their own backyards, fostering community mobilization against infrastructure projects that fail to adequately mitigate their chemical output.

7.2 ODFW and the Collapse of Local Conservation Efforts

The Oregon Department of Fish and Wildlife bears the heavy statutory responsibility for managing, protecting, and restoring the state's wildlife resources. For ODFW, the continuous, unmitigated discharge of 6PPD-q from ODOT outfalls into the lower Willamette and Columbia rivers represents a systemic negation of their core conservation mandate.

Local creeks winding through the heavily urbanized Portland metro area, as well as the mainstem rivers flanking the North Peninsula, are vital refuges and migratory pathways for 15 distinct ESA-listed salmonid populations originating from both within and outside the basin. ODFW's localized vulnerability mapping confirms unequivocally that a highly significant portion of Coho distribution intersects directly with high-pollution urban drainages that are exceptionally vulnerable to 6PPD-q accumulation and discharge.

ODFW's strategic framework relies heavily on adaptive management, habitat restoration, and aggressively addressing emerging contaminants. However, as presented in internal departmental reviews, the biological reality on the ground is stark: the inability of sister agencies like ODOT to halt the active discharge of 6PPD-q actively sabotages ODFW's multimillion-dollar investments in habitat recovery. To fulfill its mandate, ODFW must formally transition from simply monitoring 6PPD-q concentrations to actively leveraging its inter-agency influence. Specifically, ODFW must utilize the current NEPA and 401 Certification review periods for the IBR to force ODOT into adopting aggressive, engineered, molecular-level containment strategies at high-volume outfalls, ensuring that upstream habitat restoration is not rendered entirely moot by downstream chemical toxicity.

8. Conclusion: The Imperative for Molecular Mitigation and Institutional Accountability

The discovery and subsequent toxicological profiling of 6PPD-quinone has irrevocably altered the landscape of transportation engineering, environmental science, and statutory law in the Pacific Northwest. The historical engineering paradigm that viewed highways as passive, inert structures merely conveying harmless rainwater is definitively obsolete. The indisputable

scientific reality is that high-volume freight and commuter corridors like I-5 function as highly efficient, continuous-flow chemical reactors. These corridors actively utilize mechanical friction, thermal energy, and ground-level ozone to rapidly synthesize and extract a highly lethal chemical from tire wear particles, discharging it directly into the critical habitat of endangered salmonids.

The historical legal and administrative strategies utilized by the Oregon Department of Transportation during the Portland Harbor Superfund arbitration—relying heavily on DOJ-orchestrated "environmental eclipses," rigid bureaucratic compartmentalization, and upland source control defenses designed specifically for inert legacy contaminants—are entirely impotent against the continuous, active, kinetic reality of 6PPD-q generation. Attempting to shield the agency behind aging CWA MS4 permits directly invites catastrophic liability under the strict, uncompromising "take" provisions of Section 9 of the Endangered Species Act, a reality already materializing in the wave of impending third-party litigation led by groups like the Center for Biological Diversity.

As the Interstate Bridge Replacement Program approaches its critical May 15, 2026, public comment deadline for the Section 401 Water Quality Certification, a convergence of regulators, environmental advocates, and local communities—such as the Portsmouth neighborhood represented by the *North Peninsula Review*—must demand a fundamental, non-negotiable shift in infrastructure design. Relying on passive, space-constrained biofiltration swales to treat the continuous toxic effluent of a massive chemical reactor is a profound engineering failure that will guarantee the continued poisoning of the watershed. To protect the ecological integrity of the Columbia and Willamette river highways, to honor tribal treaty rights, and to ensure the survival of the anadromous species managed by ODFW, state transportation agencies must abandon the politics of administrative denial and immediately implement active, molecular-level remediation technologies capable of permanently severing the toxic link between the pavement and the river.

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Response to Submission 2: Anonymous (May 14, 2026)

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2-1

Information and maps addressing the proposed stormwater management facilities and their compliance with federal, state, and local regulations is presented in Section 3.14, Water Quality and Hydrology, of the Draft and Final Supplemental Environmental Impact Statement (SEIS) and the accompanying Water Quality and Hydrology Technical Report. In addition, stormwater-related effects on aquatic habitats and species (including those associated with 6PPD-quinone) are addressed in Section 3.16, Ecosystems, of the Draft and Final SEIS and Section 4.2.1.3 of the Ecosystems Technical Report.

These assessments document that with the Amended Selected Alternative, stormwater runoff from 100% of the post-project contributing impervious area will be treated or infiltrated. The proposed stormwater treatment approach is consistent with applicable regulatory requirements and current best available science. While no best management practice is 100% effective under all conditions, the level of proposed stormwater treatment is expected to result in net improvements in water quality, and a substantial net reduction in the quantity of stormwater pollutants (including 6PPD-quinone) that would be discharged to receiving waters. This is reflected in the analysis and conclusions presented in Section 3.16, Ecosystems, of the Final SEIS and in the Ecosystems Technical Report.

Under the Amended Selected Alternative, all stormwater runoff within the primary study area will be captured and treated in compliance with all applicable environmental regulations, including Clean Water Act standards.

Regarding Endangered Species Act (ESA) compliance, the Federal Highway Administration and Federal Transit Administration have conducted consultation with the National Oceanic and Atmospheric Administration (NOAA) Fisheries and the U.S. Fish and Wildlife Service (USFWS) as required under Section 7 of the ESA. NOAA Fisheries issued a Biological Opinion, and the USFWS issued a Letter of Concurrence, both of which specifically address the potential for the proposed action to affect water quality through the construction of new impervious surfaces, and through long-term management of stormwater from both new and existing impervious surfaces. NOAA Fisheries' Biological Opinion establishes incidental take for the water quality effects related to impervious surfaces and stormwater, and establishes specific terms and conditions designed to ensure that the proposed action does not jeopardize the continued existence of any species, or adversely modify any designated critical habitat for ESA-listed species.

The Portland Harbor Superfund Site on the Willamette River is located approximately 5 miles downstream from the Interstate Bridge. The scope and timeline for future cleanup activities at the site vary and are subject to the availability of funding. As such, the effects cannot be reasonably described or evaluated without speculation. The IBR Program has coordinated, and will continue to coordinate, with the U.S. Environmental Protection Agency, which is leading the cleanup activities and is a National Environmental Policy Act cooperating agency on the IBR Program.

This response also addresses the commenter's attachment titled "Exhaustive Evaluation of 6PPD- Quinone Ecotoxicology, Freeway Reactor Dynamics, and Statutory Liability in the Willamette and Columbia Riverine Systems."

Submission 3: Kevin Flanagan, Inland Sea Maritime Group (April 20, 2026)

**Response to Submission 3: Kevin Flanagan,
Inland Sea Maritime Group (April 20, 2026)**

3-1

Thank you for identifying this error. Figure B-3, Property Impacts –West Hayden Island, in Appendix B of the Acquisitions Technical Report, has been updated in Appendix H, Final SEIS Errata, to this Amended Record of Decision.

Comments

3-1 | Hi my name is Kevin Flanagan, owner of Inland Sea Maritime Group. I can be reached at [REDACTED]. I'm noticing under technical reports for acquisitions, Figure B3 talks about property impacts on West Hayden Island, but it's showing a picture of the Ruby Junction rather than Hayden Island. We're wanting to find out what's impacted on West Hayden Island in the mitigation site. Please call me so we can get this straight. Thank you.

Submission 4: William Irvin (May 14, 2026)

Comments

Good morning,

Attached is a letter opposing advancement of the IBR and public records request regarding engineering, elevations, comparisons, visuals, seismic analysis, and expenditure records for the Interstate Bridge Replacement Program.

Because this program is jointly staffed and administered by multiple agencies, I am submitting the same request to each participating agency to ensure a complete records search.

If any part of the request would benefit from clarification or narrowing, I welcome your guidance.

Thank you for your time and assistance.

Sincerely,
William D. Irvin

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To Whom It May Concern,

I am a resident and property owner in Vancouver, Washington, writing to request a pause and re-evaluation of the Interstate Bridge Replacement Program as it is currently defined.

After reviewing available program materials, environmental documents, and public presentations, I have significant concerns that key questions about **traffic benefit, seismic necessity, financial risk, toll impacts, and project transparency** remain insufficiently answered for a project of this scale and cost.

4-1

1. Unclear Traffic Benefit Relative to Cost

The current proposal replaces a three-lane-each-direction bridge with another three-lane-each-direction bridge, while adding dedicated lanes for transit, light rail, bicycles, and pedestrians. However, the overwhelming majority of daily crossings are private vehicles and freight. It is not clear from published modeling that this configuration will meaningfully reduce congestion for general purpose traffic relative to the project's multi-billion-dollar cost.

A central question remains insufficiently addressed:

How does this design materially improve vehicle throughput compared to lower-cost operational, ramp, or corridor improvements?

4-2

2. Seismic Risk Framed Without Context of Replacement Risk

The seismic vulnerability of the existing bridge is frequently cited as a primary justification. However, no bridge can be guaranteed to survive a major Cascadia event, including a newly constructed one. The public has not been shown a clear comparison of:

- The cost of targeted seismic retrofits versus full replacement,
- The expected performance difference in various earthquake scenarios,
- The probability-weighted benefit of replacement relative to retrofit.

Without this context, "earthquake safety" is presented as a binary argument rather than a comparative engineering decision.

4-3

3. Financial Exposure, Escalating Cost, and No Clear Cap

Public estimates have grown substantially over time, and there is no clear maximum project cost communicated to taxpayers. With tolling proposed as a funding mechanism, the financial risk is transferred directly to the commuting public.

Before advancing, the public deserves clear answers:

- What is the maximum projected cost exposure?
- What toll rates are required under conservative and worst-case scenarios?
- What happens if toll revenues underperform projections?

4-4

4. Long Construction Timeline with Major Community Impact

Response to Submission 4: William Irvin (May 14, 2026)

4-4 | A construction window discussed in public materials extends well over a decade. This will impose prolonged impacts on regional mobility, businesses, and neighborhoods. The cost of these impacts appears under-quantified in public materials.

4-5 | **5. Lack of Readily Available Engineering Visualization**

For a project that will significantly elevate infrastructure as it enters Vancouver, detailed elevation drawings and visual simulations are not easy for the public to locate. The community deserves to clearly see:

- The vertical profile of the structure as it lands in Vancouver,
- The visual and physical scale relative to surrounding neighborhoods,
- The full footprint of ramps and approaches.

Transparency here would greatly improve public understanding and trust.

4-6 | **6. Transit Components Without Demonstrated Demand**

Dedicated bus lanes and light rail are central features of the design, yet published crossing data shows relatively low bus volumes compared to private vehicle use. The long-term viability and demand projections for light rail across the river remain controversial and unclear to many residents.

A clearer explanation of the cost-benefit basis for allocating significant bridge capacity to these modes is warranted.

4-7 | **Request**

Given these unresolved issues, I respectfully request:

1. Publication of clear elevation and footprint drawings for public review,
2. A side-by-side engineering and cost comparison of retrofit vs. replacement,
3. Transparent toll modeling under conservative assumptions,
4. A re-evaluation of whether the current design meaningfully improves general traffic flow relative to its cost,
5. Consideration of lower-cost alternatives that address seismic and congestion concerns without full replacement.

This project represents one of the largest infrastructure expenditures in regional history. The public deserves a higher level of clarity before irreversible commitments are made.

Sincerely,
William D. Irvin



4-1

Rather than relying solely on adding freeway lanes, the Amended Selected Alternative combines auxiliary lanes, collector-distributor roadways, braided ramps, and multimodal investments to improve the movement of people and goods, reduce recurring congestion, enhance safety, and increase the efficiency of the transportation system. This integrated approach will provide greater corridor-wide operational benefits and person-throughput improvements and is aligned with the IBR Program's Purpose and Need.

The Amended Selected Alternative is a package of multimodal improvements, including highway, freight, public transit, and active transportation, that are moving forward together to meet the Purpose and Need for the IBR Program. Instead of a singular focus on adding freeway capacity, the Amended Selected Alternative will provide a multimodal solution that includes improvements for several modes of transportation (vehicles, freight, public transit, and active transportation). The Amended Selected Alternative will include three through lanes in each direction along Interstate 5, similar to existing conditions, and will connect to existing through lanes at the north and south end of the primary study area. The Amended Selected Alternative will also include one auxiliary lane in each direction that will improve safety and operations across the new Columbia River bridges.

Auxiliary lanes are not through lanes. They are ramp-to-ramp connections designed to give drivers the distance needed to speed up or slow down before entering or exiting the freeway, improving safety in the corridor. These connections reduce localized bottlenecks and optimize traffic flow by giving drivers space to enter and exit the freeway safely. Benefits of auxiliary lanes include improved travel time, reduced likelihood of crashes, and safety improvements.

The IBR Program focused on enhancing multimodal solutions instead of adding more highway lanes, consistent with the IBR Program's Purpose and Need. The optimized transportation infrastructure includes auxiliary lanes, collector-distributor roadways, braided ramps, high-capacity transit, and active transportation improvements. The Amended Selected Alternative multimodal elements will improve travel flow for all modes of transportation versus only expanding the freeway, which would require higher costs, result in more right-of-way impacts, and could have more environmental and community impacts. The components of the Amended Selected Alternative are summarized in Section 2, Amended Selected Alternative, of the Amended Record of Decision (ROD) and described in detail in Chapter 2, Description of Alternatives, of the Draft and Final Supplemental Environmental Impact Statement (SEIS).

Section 3.1.3 of the Final SEIS describes the improved daily person throughput with the Modified Locally Preferred Alternative (LPA) compared to the No-Build Alternative, as well as the reduction in hours of congestion in the Modified LPA compared to the No-Build Alternative, as summarized in Table 3.1-14 in the Final SEIS.

Please see Alternatives Standard Response C.4: Previously Dismissed Alternatives, in

Appendix S2 of the Final SEIS, which describes the screening process and why other alternatives, including only adding freeway through lanes, would not meet the Purpose and Need.

In summary, the Amended Selected Alternative will improve vehicle throughput by addressing the operational constraints that limit traffic flow throughout the corridor while also increasing the capacity and reliability of transit, freight, and active transportation networks. The combination of auxiliary lanes, collector-distributor roadways, braided ramps, and multimodal investments is consistent with the IBR Program's Purpose and Need. Through this integrated approach, the Amended Selected Alternative will improve the movement of people and goods, enhance safety, reduce congestion, and meet the Purpose and Need while minimizing right-of-way, environmental, and community impacts. The evaluation of alternatives documented in the Final SEIS demonstrated that the Amended Selected Alternative will provide the best balance of transportation performance, multimodal benefits, and overall project objectives.

4-2

Please see Alternatives Standard Response C5: Seismic Retrofitting the Existing Bridge in Appendix S2 of the Final SEIS.

Seismic vulnerability is only one of the six transportation needs that the IBR Program is addressing. The alternatives screening process and detailed analysis in the Columbia River Crossing (CRC) Draft and Final Environmental Impact Statement (EIS) determined that alternatives that replace the existing bridges would perform better than alternatives that supplement and reuse the existing bridges. This includes benefits beyond and in addition to improved seismic resiliency. Please see Section 2.6.1 (Key Findings Regarding the Replacement and Supplemental River Crossings) of the CRC Final EIS.

Seismic retrofits may not be sufficient to reliably ensure that the bridge could handle a 1,000-year earthquake (with little to no damage) so that it could be open to traffic within 3 days of the event, which a replacement bridge meeting current seismic standards would be designed to perform. All bridge structures, including the Columbia River bridges, will be designed to current industry standards, including the American Association of State Highway and Transportation Officials Load and Resistance Factor Design Bridge Design Specifications, Oregon Department of Transportation (ODOT) and Washington State Department of Transportation (WSDOT) Bridge and Geotechnical Design Manuals, and project-specific parameters agreed to by ODOT, WSDOT, and the IBR Program. The design will meet the requirements for (1) an elastic or nearly elastic response to a Functional Evaluation Earthquake, which is expected to be consistent with or greater than the Cascadia Subduction Zone event; and (2) a no-collapse response to a Safety Evaluation Earthquake.

As retrofitting the existing Interstate Bridge was dismissed for all the reasons above, technical studies of "the expected performance difference in various earthquake scenarios" and the "probability-weighted benefit of replacement relative to retrofit" were not developed.

4-3

Regarding maximum projected exposure, the estimated cost to build the 5-mile corridor that comprises the IBR Program is \$13.5 billion to \$15.2 billion, with a likely cost of \$14.4 billion. The updated cost estimate reflects national trends of significant cost increases driven by inflation and market conditions, leading to higher construction bids. The estimate represents a 45% to 85% probability that costs will fall within that range. For financial planning, the Program will use \$14.4 billion, as there is a 70% chance the cost will be that amount or lower.

The IBR Program continues to evaluate opportunities for cost savings, including design refinements, value engineering (identifying lower cost approaches without compromising function), and risk management, as well as potential contracting and scheduling efficiencies. Work is also ongoing to pursue \$1 billion from the FTA Capital Investment Grant program. Other future opportunities could include federal grant options such as INFRA (the Nationally Significant Multimodal Freight & Highway Projects program) and BUILD (Better Utilizing Investments to Leverage Development), and working with both Oregon and Washington States to consider other cost savings, funding, and financing opportunities. More information on the cost estimate can be found on the IBR Program website: <https://www.interstatebridge.org/CostEstimate>.

The Oregon Transportation Commission (OTC) and the Washington State Transportation Commission (WSTC) will jointly set toll rates and policies for the IBR Program. No decision is made on whether to move forward with the Program until the Amended ROD is issued; therefore, it would have been premature for the commissions to set toll rates prior to Amended ROD issuance. The OTC and WSTC will adopt toll rates 6 to 9 months before pre-completion tolling begins on the Interstate Bridge. A Level 3 Traffic and Revenue (T&R) Study (also known as an investment grade analysis) is currently under development and is slated to be completed concurrent with the toll rate-setting process. In July 2025, IBR Program staff shared four scenarios that were advanced in the Level 3 T&R Study with the bi-state tolling subcommittee that will help the transportation commissions jointly set future toll rates (see <https://wstc.wa.gov/wp-content/uploads/2025/07/2025-07-18-Bi-state-TollingSubcommittee-Presentation.pdf>). The OTC and WSTC will take formal action after considering the results of the analysis and public input.

Toll revenue is currently expected to be only a funding source for a portion of the construction costs for the new bridges, approaches and existing bridges removal, and is not expected on its own to make up the funding gap between the currently available funding and the full Program cost.

Within the Level 3 T&R Study, there are no "worst case" scenarios being studied as tolling is only expected to pay for a portion of capital construction, as well as operation and maintenance of the facility.

Tolls also provide a sustainable revenue stream to pay for operations and maintenance of the bridge and approaches, toll collection operations, and periodic capital repair and replacement.

Regarding toll revenue performance, the objective of the Level 3 Toll T&R Study is to provide a fiscally conservative, reliable revenue forecast to support financial planning and, ultimately, toll financing.

The WSDOT Good to Go! program has over 15 years of experience managing tollways and collecting toll revenues to support capital construction and operations and maintenance costs.

WSDOT and ODOT will closely monitor tolling operations and coordinate closely with transportation commissions in both states to communicate performance status and ensure that policy makers have necessary information to recommend any changes. In the event that tolls materially underperform projections, the OTC and WSTC are the appropriate bodies to examine rate and policy revisions to achieve revenue targets.

For more information regarding tolling, please review Section 2.2.8, Tolling, of the Final SEIS.

4-4

The estimated construction duration is due to several factors. Construction must be phased to maintain traffic operations while rebuilding interconnected roadway, transit, and bridge elements; be implemented as funding becomes available across federal, state, and local sources; and be coordinated with procurement and delivery of specialized construction materials. In addition, major elements would occur within the Columbia River, where in-water work is restricted to limited seasonal work windows to protect fish and habitat, further constraining schedules and requiring work to be spread across multiple construction seasons. For more information on construction sequencing and duration of construction, please see Section 2.3 of the Final SEIS and information on in-water work windows, please refer to Section 5.2, Modified LPA, of the Ecosystems Technical Report, published with the Final SEIS.

Appendix D Mitigation Commitments, of the Amended ROD identifies the avoidance, minimization, and mitigation measures that will address impacts to mobility, businesses, and neighborhoods during construction. These include developing detailed construction plans and maintenance of traffic plans to address all affected transportation facilities; conducting outreach, in coordination with local jurisdictions, to businesses affected by construction as roadway closures and detours are identified to minimize impacts to their businesses; and holding community meetings and providing information to businesses, agencies, and community-based organizations within the greater Portland and Vancouver area before construction starts, to inform residents of the construction timeline, relevant staging plans, ramp and road closures, and detour plans. For additional information on the temporary

reasonably foreseeable effects, see Section 3.1, Transportation; Section 3.4, Land Use and Economics; and Section 3.5, Neighborhoods and Communities, of the Final SEIS.

4-5

As described in Chapter 3, Affected Environment, of the Visual Quality Technical Report, published with the Final SEIS, a set of key viewpoints (KVPs) were identified and used to generally define the existing visual character and visual quality, and formed the basis for evaluating visual impacts from the Amended Selected Alternative. The Final SEIS uses conceptual designs to help with this technical analysis. KVPs were selected either because they represent a common or typical view from within a landscape unit or because they are a view of a defining feature of a landscape unit. Information with more details and timelines as design advances will be available on the IBR Program website. Figure 3-2, in Section 3.1.3.2 of the Visual Quality Technical Report, identifies each of the KVPs, several of which are in or of Vancouver.

The following figures in Chapter 4, Long-term Effects, of the Visual Quality Technical Report show the vertical profile of the structure as it lands in Vancouver:

- Figure 4-5, KVP 11: Existing Conditions Photograph and Conceptual Photographic Simulations (River Crossing Northeast)
- Figure 4-6, KVP 18: Existing Conditions Photograph and Conceptual Photographic Simulations (Vancouver Waterfront East)
- Figure 4-7, KVP 19: Existing Conditions Photograph and Conceptual Photographic Simulations (River Crossing East)

The following figures in Section 4, Long-term Effects (Analysis Phase), of the Visual Quality Technical Report show the visual scale relative to surrounding neighborhoods in Vancouver:

- Figure 4-15, KVP 27: Existing Conditions Photograph and Conceptual Photographic Simulations (Esther Street)
- Figure 4-16, KVP 28: Existing Conditions Photograph and Conceptual Photographic Simulations (6th Street)
- Figure 4-17, KVP 23: Existing Conditions Photograph and Conceptual Photographic Simulations (Fort Vancouver National Historic Site)
- Figure 4-19, KVP 33: Existing Conditions Photograph and Conceptual Photographic Simulation –Corner of Fort Vancouver Way and McClellan Road

The full footprint of the Amended Selected Alternative, with ramps and approaches, is shown in Figures 1-6, 1-8, 1-10, 1-23, and 1-27 of Chapter 1 of the Visual Technical Report

and Appendix C to the Final SEIS (Conceptual Design Drawings).

4-6

The analysis in the Draft and Final SEIS relies on adopted regional forecasting and forecast-year assumptions established by Oregon Metro and the Southwest Washington Regional Transportation Council to estimate future travel demand, consistent with standard transportation planning and National Environmental Policy Act practice. Future-year transit ridership forecasts reflect modeled changes such as land use, network configuration, transit service levels, congestion, tolling, parking costs, and transit fares in the regional transportation plans. For more information on forecasting, see Transportation Standard Response M.36: Regional Travel Demand Model in Appendix S2 of the Final SEIS.

The Amended Selected Alternative is a package of multimodal improvements, including highway, freight, public transit, and active transportation that together meet the Purpose and Need for the IBR Program. Each type of transportation mode that makes up this package has its own technical space requirements. The space allocated to light rail follows standard widths necessary for light-rail tracks, systems, and a clearance window. The shoulders on which express buses could run are also intended to be used to clear accidents or vehicle breakdowns and to improve merging with the auxiliary lane, all of which are anticipated to reduce congestion, increase vehicle speeds, and decrease air pollutant emissions. As shown in Figure 2-18 in Chapter 2, Description of Alternatives, of the Final SEIS, there will be a safety shoulder on each side of the two bridges (northbound and southbound). Express buses will only run on the inside shoulder of each bridge.

4-7

Request 1: See response to Comment #4-5, which addresses visualizations conducted as part of the environmental analysis in the Final SEIS. Appendix C, Conceptual Design Drawings, of the Final SEIS also includes footprint detail of the Amended Selected Alternative. For more information, please see the Visual Quality Technical Report (Chapter 3, Affected Environment and Chapter 4, Long-Term Effects).

Request 2: See Alternatives Standard Response C.5: Seismic Retrofitting the Existing Bridge in Appendix S2 of the Final SEIS, which includes a link to a memorandum that provides details on why the retrofit alternative was not selected to move forward.

Request 3: See response to Comment #4-3, which explains that the objective of the Level 3 T&R Study is to provide a fiscally conservative, reliable revenue forecast to support financial planning, and ultimately, toll financing. The Level 3 T&R Study is currently under development and is slated to be completed concurrently with the toll rate-setting process, which will conclude about 8 months before tolling begins. Tolling is currently anticipated to start in 2028. The Level 3 T&R Study will be available on the IBR Program's website upon completion.

Request 4: See response to Comment #4-1, which explains that the Amended Selected

Alternative includes multimodal elements that will improve travel flow for all modes of transportation versus only expanding the freeway, which would require higher costs, result in more right-of-way impacts, and could have more environmental and community impacts. The Amended Selected Alternative will improve daily person throughput and hours of congestion compared to the No-Build Alternative.

Request 5: The IBR Program is a continuation of the previously suspended CRC project with the same purpose to replace the aging Interstate Bridge across the Columbia River with a modern, seismically resilient, multimodal structure. The alternatives evaluated to address the project's Purpose and Need were presented in the CRC Draft EIS (2008) and Final EIS (2011) (Appendix T of the IBR Program Final SEIS). A range of alternatives, including several options for retaining the existing bridges without a full replacement, were considered but ultimately not selected in the CRC ROD. The alternatives analysis from the CRC EIS is unchanged. The CRC LPA was identified as the starting point for IBR Program. See Alternatives Standard Response C.4: Previously Dismissed Alternatives in Appendix S2 of the Final SEIS for additional information about the alternatives analysis.

Also see Alternatives Standard Response C.5: Seismic Retrofitting the Existing Bridge in Appendix S2 of the Final SEIS, for details on why a retrofit alternative was not selected to move forward.

Submission 5: Marc Kranz (April 25, 2026)

Response to Submission 5: Marc Kranz (April 25, 2026)

Comments

- 5-1 | I have a floating home on [REDACTED] in Jantzen Beach Moorage. You have just notified row A and B that you are acquiring those rows and properties. You are acquiring the East end of your moorage as well. This will have a huge impact on the value and use of my floating home.
I anticipate multiple years of nonuse and no ability to sell or rent. What are the plans for that?
You do not even have a final bridge design chosen so it is difficult to anticipate the impact?
- 5-2 | The hydrology section is very brief and does not represent what will happen with temporary coffer dams or permanent piers. What are the mitigation plans for unforeseen bank erosion and sediment deposition requiring dredging? For a bridge over a river 2 miles wide there is a laughable paragraph on hydraulics.

5-1

A letter was sent to all owners of properties that will potentially be acquired. With regard to Jantzen Beach Moorage Inc., that includes individuals who own floating homes in rows A and B, as well as one owner of a floating home on the east side of row C. The IBR Program confirmed that the commenter's property is not proposed as a potential acquisition.

Regarding impacts to floating homes and the property purchase and compensation process, please see Acquisitions Standard Responses A.1: Impacts to Floating Homes and A.2: Purchase and Compensation Process in Appendix S2 to the Final Supplemental Environmental Impact Statement (SEIS).

Property values are influenced by many factors, such as land use, regional growth or decline, real estate supply and demand, mortgage rates, topography, and the availability of services like sewer and water. Given these overlapping variables, it is not feasible to isolate the reasonably foreseeable effects of transportation improvements on individual property values.

5-2

Hydraulic analysis was conducted as a part of the design and environmental review processes, consistent with 23 Code of Federal Regulations Part 650.111(e). The IBR Program's Hydraulics Team reviewed the existing and proposed future permanent and temporary construction configurations expected to occur for the main channel of the Columbia River and the North Portland Harbor, based on the best available information. Hydraulic models that applied hydrologic flows ranging from the 2-year to the 100-year floods indicate that the hydraulic characteristics of the channel of the proposed conditions are similar to those of the existing bridge configuration, resulting in no changes in velocity or water elevations.

Section 3.14, Water Quality and Hydrology, of the Final SEIS summarizes the Water Quality and Hydrology Technical Report. As described in Chapter 5, Temporary Effects, of the Water Quality and Hydrology Technical Report, the temporary construction configurations will vary over time based on the needs for barges and temporary works (e.g., coffer dams and construction work platforms). These temporary facilities have the potential to alter local velocities and increase water surface elevations during construction. The construction sequencing, means and methods, and timing will be developed by the construction contractor. These changes will be verified and assessed through required permitting activities for temporary conditions as required by local agencies. Any calculated changes in velocity and water surface elevations will be limited to allowable thresholds established by the Federal Emergency Management Agency and local ordinances for temporary construction activities.

Once constructed, the new bridges are not expected to change the sediment transport or erosive forces along the constructed piers or stream banks. If temporary conditions during construction were to cause unforeseen bank erosion or induce sediment deposition in the

navigational channel, restoration and remediation would be undertaken.

Submission 6: Miranda Martin (April 29, 2026)

Comments

Hello,

6-1 | I am a resident of Vancouver, WA, and would like to express my opinion that the light rail should extend to Evergreen when it crosses over to Vancouver. I am a strong advocate for the interstate bridge replacement to have light rail, and would be incredibly disappointed to see so many members of our community cut off from accessibility by not extending the line to Evergreen, as our city has been planning for so many years.

Thank you,
Miranda Martin

Response to Submission 6: Miranda Martin (April 29, 2026)

6-1

The Amended Selected Alternative proposes to extend light rail from the Expo Center Station in Portland to a station near Evergreen Boulevard in Vancouver; the Evergreen Station will be the terminus of the line, which is consistent with the connectivity and catchment concerns expressed in this comment. It does not propose to end light rail at the Vancouver Waterfront as stated in the comment.

As described in Section 2.3 of the Final Supplemental Environmental Impact Statement (SEIS), construction of the Amended Selected Alternative will be sequenced in accordance with many factors, such as the scale of improvements, different types of infrastructure and associated construction specialties required, timing of funding received, maintenance of traffic on Interstate 5, navigation on the Columbia River, seasonal and weather constraints, or permit conditions. Currently, the Waterfront Station is not included in the first construction package, which is expected to cover the new Columbia River bridges and approaches.

Construction of the light rail line from the Waterfront Station to the Evergreen Station will be sequenced during or after construction of the new Columbia River bridges in a subsequent phase. Each construction phase is designed to have operational independence. For additional information regarding access to the Waterfront Station, see Design Standard Response F.8: Access to Light-Rail Transit Stations in Appendix S2 of the Final SEIS.

Submission 7: Bob Mattila (May 15, 2026)

Comments

7-1 | New I-5 Columbia River Bridge

If we are ever going to get a new I-5 Bridge over the Columbia River, we need to start using some common sense in designing it. The biggest problem, I think, is the pipe dream of putting light rail on it. I don't favor light rail, but if we can't have a new bridge without it, put it on the newer existing bridge, the southbound one, or on the railroad bridge, a mile downriver. Because of the added weight of putting light rail on the bridge, the added weight of the tracks and the train, that in itself could double the cost of the bridge because it has to be made earthquake proof. The few times there would be bridge lifts could have express buses take the place of the trains. The clearance height for river traffic now is 72 feet.

Some of the Industrial Fabricating businesses upriver, (East) of the present bridge have been or will be compensated for the lower clearance of 116 feet, the Coast Guard's minimum requirement, with the newer bridge, than the 178 feet with the present bridge in the raised position.

7-2 | I 5 veers to the East on both sides of the river, so build the first of two bridges on the East side of the present bridge with enough room for 5 permanent northbound bridges. Then temporarily put 3 lanes in each direction. Tear out the present northbound bridge and build the new southbound bridge in its place with 5 lanes. This would be much simpler and could be done much sooner and much cheaper than the present plan that has been in the expensive and unworkable planning stage far too long with no real end in sight.

Thank you. Bob Mattila, [REDACTED]

Editor: My address is [REDACTED], phone [REDACTED], cell [REDACTED]. Thank you. Bob

New I-5 Columbia River Bridge

Response to Submission 7: Bob Mattila (May 15, 2026)

7-1

The alternatives analysis and screening process leading to the identification of light rail on a new bridge was detailed in Section 2.5.3, Development of the Modified LPA, of the IBR Program Draft and Final Supplemental Environmental Impact Statement (SEIS). The analysis was conducted for the year 2045 using the Oregon Metro/Southwest Washington Regional Transportation Council regional travel demand that reflected pre-pandemic conditions as documented in the Transportation Technical Report (TTR), Appendix H to the TTR and Section 3.1, Transportation, of the Final SEIS. As part of the Columbia River Crossing (CRC) project, the process included a review and elimination of other crossing locations, as well as transit modes other than light rail, such as commuter rail operating within a railroad right of way. Light rail requires a dedicated trackway and would therefore not be compatible with the BNSF Railway Bridge a mile downriver, which also is aging. Even if the railroad bridge could be used, such a route would add more than 2 miles to the transit route in order to make similar connections.

The alternatives screening process and detailed analysis in the CRC Draft and Final Environmental Impact Statement (EIS) determined that alternatives that replace the existing bridges would perform better than alternatives that supplement and reuse the existing bridges. Please see Section 2.6.1 (Key Findings Regarding the Replacement and Supplemental River Crossings) of the CRC Final EIS. Additionally, see Alternatives Standard Response C.5: Seismic Retrofitting the Existing Bridge in Appendix S2 of the Final SEIS, for details on why a retrofit alternative was not selected to move forward.

The weights and loads of light rail on the bridge were considered during conceptual design, but multiple other bridge components and factors, including structural requirements, geotechnical conditions, navigation considerations, and dynamic loads, including vehicular traffic, have a much greater effect on structural design and resulting costs. Overall substructure and superstructure elements, including foundations, piles, pile caps, abutments, piers, girders, beams, and prestressed segments or spans, would still be similar, with or without the inclusion of light rail.

7-2

As described in Chapter 2, Description of Alternatives, of the Draft and Final SEIS, the IBR Program is a continuation of the CRC project that was active from 2005 to 2014. Substantial technical analysis was completed to support the development of the CRC project. The screening process was detailed in Section 2.5, Development of the Modified LPA, of the IBR Program Draft SEIS. During the initial screening effort for the CRC project's National Environmental Policy Act (NEPA) alternatives analysis, the CRC team conducted a two-step screening process that narrowed the number of alternatives to be evaluated in the CRC Draft Environmental Impact Statement (EIS). Step A evaluated 23 river crossing and 14 transit components using a pass/fail test designed to eliminate components beyond the scope of the project or that could not address the project's Purpose and Need. The Step A screening included six river crossing components located upstream (east) of the existing Interstate Bridge, and several of these were recommended to advance for further

consideration. As documented in Section 2.6 of the CRC Project Draft EIS, a replacement river crossing upstream of the existing Interstate Bridge was eventually eliminated from further evaluation after analysis revealed that this alignment would pose serious construction difficulties and provide no substantial benefits to offset this problem.

The location of the Columbia River bridges to the west of the existing Interstate Bridge was established through the conceptual design process that followed the identification of the Interstate 5 (I-5) general alignment that accommodates all modes, including roadway, active transportation, and light-rail transit (LRT). NEPA requires that the design of the Amended Selected Alternative consider how to avoid community and environmental impacts and to minimize or mitigate impacts when they cannot be avoided while working with other considerations. Locating the Columbia River bridges west of the existing Interstate Bridge considers impacts to the Fort Vancouver National Historic Site; the geometry, safety, cost, and constructability of the Columbia River bridges; the location of the BNSF Railway; impacts to river users; the placement of the Vancouver Waterfront Station; LRT track design requirements and operations; and I-5 highway design requirements.

Submission 8: Jennifer McElravey (April 29, 2026)

Comments

- 8-1 | I live at Jantzen Beach Moorage on Hayden Island and rely on daily access via N Jantzen Avenue and I-5. I have been reviewing recent IBR materials, including the Section 106 agreement and ESG updates, and I am trying to understand what this means for my day-to-day access and cost of living.
- I would appreciate clear, location-specific information on the following:
- Access during construction
Will any phases of the project restrict, reroute, or otherwise impact access to Jantzen Beach Moorage, including N Jantzen Avenue or connections to I-5? If so, what should residents expect in terms of duration and type of disruption?
- 8-2 | Parcel or area-level impacts
The Section 106 agreement identifies Jantzen Beach Moorage as subject to partial physical destruction. Can you confirm whether any portion of the moorage is currently within planned construction footprints, staging areas, right-of-way acquisition, or temporary construction easements? If available, when will more detailed maps be released?
- Tolling impacts for local residents
Will Hayden Island residents be subject to tolls for routine trips to and from their homes? For example, daily travel for work, groceries, or medical needs. If tolling is planned to begin before the new bridge opens, how will that affect local access?
- 8-3 | Timing
At what point will these access and property-level impacts be finalized so residents can plan accordingly?
- I am not looking for general program information. I am specifically trying to understand how this will affect residents living on Hayden Island so I can make informed decisions.

Response to Submission 8: Jennifer McElravey (April 29, 2026)

8-1

During construction, work will occur on the local roadway network on Hayden Island within and near the interchange area; this construction work will be conducted in stages. These construction activities will require temporary traffic control measures such as localized detours, lane shifts, or flagging operations to safely move traffic around active work zones. As described in Section 2.3, Modified LPA Construction, of the Final Supplemental Environmental Impact Statement (SEIS), construction of the North Portland Harbor bridges and Marine Drive and Hayden Island interchanges is expected to last 4 to 10 years and will not necessarily entail continuous active construction in any one location. These measures may result in short-term to longer-term (a year or longer) delays or out-of-direction travel on some local streets. Tables 5-1 and 5-2 in the Transportation Technical Report provide further detail on activities and durations on specific streets and areas. As the design advances and the construction contractor develops a staging plan, the timing and duration of detours and closures will be identified and communicated in advance to affected property owners, businesses, and communities.

The construction contractor will be required to maintain access to businesses and residences throughout construction. In limited cases, short-duration closures or temporary reroutes may be necessary, but these would be coordinated to minimize disruption. While temporary access changes are expected during construction, the project will be constructed to maintain access to Jantzen Beach Moorage and surrounding properties throughout the duration of the work.

A detailed Transportation Management Plan and Maintenance of Traffic plans will be developed during final design and construction. These plans will establish the specific staging, access provisions, lane closures, detours, and traffic control strategies for all modes, including vehicles, transit, pedestrians, and bicycles.

Adjacent property owners and residents will be notified in advance of anticipated traffic changes, including the timing and duration of any detours or access modifications. Public communication strategies will include advance notice, traveler information systems, and ongoing coordination with affected properties.

8-2

Based on the current conceptual design, a portion of the Jantzen Beach Moorage property will be permanently acquired to accommodate the light rail extension over Hayden Island under the Amended Selected Alternative. Table A2, Hayden Island, in Appendix A of the Acquisitions Technical Report (see page A2-1) that was published with the Final SEIS, shows a proposed permanent acquisition of approximately 20,246 square feet and a temporary construction easement of approximately 17,068 square feet from the Jantzen Beach Moorage upland parcel. These impacts will be confirmed upon final design. Figure B-2, Property Impacts Map - Hayden Island, in Appendix B of the Acquisition Technical Report (page B-2) identifies the potential properties on Hayden Island that could be impacted. Detailed project plans and exhibits will be made available to affected property owners upon

final design. However, a draft roll map of the conceptual design is available in Appendix C of the Final SEIS.

As described in Section 2.3 of the Final SEIS, construction of the Amended Selected Alternative will be sequenced in accordance with many factors, such as the scale of improvements, different types of infrastructure and associated construction specialties required, timing of funding received, maintenance of traffic on I-5, navigation on the Columbia River, seasonal and weather constraints, or permit conditions. Construction details will be released once later construction sequencing is determined. The Jantzen Beach Moorage property will not be acquired until the North Portland Harbor bridges are advanced, and these bridges are not included in the first construction phase of the IBR Program. Additional information about moorage impacts in the North Portland Harbor/Hayden Island area is provided on pages 4-7 and 4-8 of the Acquisitions Technical Report, and on page 3.3-16 of Section 3.3, Property Acquisitions and Displacements, of the Final SEIS.

8-3

The Amended Selected Alternative will be constructed in sequenced construction packages; timelines will vary by location and delivery method. Preliminary project map, details, and information about estimated timing and sequencing of the packages is included in Section 2.3, Modified LPA Construction, of the Final SEIS. Based on current assumptions, Jantzen Beach Moorage Inc. could be included in the North Portland Harbor Transit Bridge package or the Hayden Island Guideway package. However, all information is preliminary and remains subject to change as the project design is advanced. Under the proposed Construction Manager/General Contractor delivery method, the designs for these packages will be further developed and finalized after the contractor is hired. The Right of Way Team will notify impacted property owners as soon as acquisition needs are confirmed and the construction package receives federal authorization to proceed. In the meantime, property and business owners are always welcome to contact the IBR Right of Way Team at IBR-ROW@interstatebridge.org or 833-IBR-ROW1 (833-427-7691) with questions or to check for updates.

Submission 9: Bob Ortblad (May 2, 2026)

Comments

Interstate Bridge Replacement Program
Washington State Dept. of Transportation
Washington State Board of Registration for Professional Engineers & Land Surveyors

Please read and respond to the attached letter.

Respectfully
Bob Ortblad MSCE, MBA
[REDACTED]

?

Interstate Bridge Replacement Program
Washington State Dept. of Transportation
Washington State Board of Registration for Professional Engineers & Land Surveyors

9-1

Did the Washington State Dept. of Transportation and the Washington State Board of Registration for Professional Engineers & Land Surveyors advise the Interstate Bridge Replacement Program that a preliminary engineering report “Tunnel Concept Assessment” does not need a professional engineer stamp?

WAC 196-23-020 clearly requires a professional engineer stamp is required on a preliminary engineering report.

Is the IBR lying or did both WSDOT and Washington State Board of Registration for Professional Engineers & Land Surveyors give incorrect legal advice?

A response from all three agencies with supporting documents is requested.

Respectfully
Bob Ortblad MSCE, MBA
[REDACTED]

9-2

**Interstate Bridge Replacement Program
Final Supplemental Environmental Impact Statement
S4. Organizations and Individuals Comments and Response**

Submission 2455: Robert Ortblad (October 17, 2024)

Why was the “Tunnel Concept Assessment” issued July 2021 not stamped by a professional engineer (required by WA law) until two years later, April 2023?

The IBR gained Locally Preferred Alternative (LPA) approval in the summer of 2022 with an illegal report disqualifying of a tunnel alternative.

Bob Ortblad MSCE, MBA

Response to Submission 2455: Robert Ortblad (October 17, 2024)

WSDOT’s statewide policy and protocol is that preliminary reports that are not required for construction are not sealed by a professional engineer. This is consistent with the approach used for similar reports prepared during the CRC Project and has continued throughout the IBR Program. **The IBR Program consulted WSDOT headquarters and the Washington State Board of Registration for Professional Engineers & Land Surveyors** to determine if the July 2021 Tunnel Concept Assessment warranted a seal by a professional engineer. The two entities determined that the **Tunnel Concept Assessment did not need to be sealed by a professional engineer**. In the interest of conveying more confidence in the assessment and its conclusions, the IBR Program made the decision to seal it.

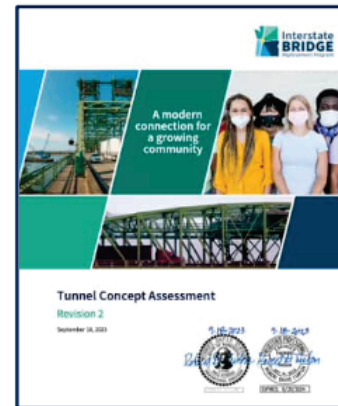
Washington Administrative Code 196-23-020

2) Preliminary documents are those documents not considered final as defined herein, but are released or distributed by the licensee. Preliminary documents must be clearly identified as "preliminary" or contain such wording so it may be differentiated from a final document.

Preliminary documents must be stamped, but need not be signed or dated by the licensee.

9-2

“The Modified LPA was endorsed by all eight local partner agencies in summer 2022.”



- [TriMet](#)
- [C-TRAN](#)
- [Oregon Metro](#)
- [SW Washington Regional Transportation Council](#)
- [City of Portland](#)
- [City of Vancouver](#)
- [Port of Portland](#)
- [Port of Vancouver](#)

1. Illegal Report for 2 years – no Professional Engineer stamp

2. Fradulent Doubleing of Excavation Cubic Yards

Revision	Item	Date
0	Tunnel Concept Assessment	March 1, 2021
1	Sealed and added states of professional registration (Cover, Page iii, Page 1, and Page 32)	April 19, 2023
2	To address duplication that occurred in the model where some excavation quantities were counted more than once, excavation quantities and costs were revised (Table 1 and Table 2) and there is revised/additional text (Pages 14, 15, 17, 19 and 32). Revisions are underlined.	September 18, 2023

Response to Submission 9: Bob Ortblad (May 2, 2026)

9-1

The Tunnel Concept Assessment was written as an assessment for suitability of a concept. The Washington State Department of Transportation (WSDOT) and the IBR Program initially determined it was not a report for advancement toward preliminary engineering, plans development, or construction and thus did not stamp the document. Consistent with Washington Administrative Code 196-23-020, WSDOT requires the use of a seal/stamp for final or preliminary documents that are filed with public officials, for construction use, or final agency approvals or use.

After communicating with the Washington State Board of Registration of Professional Engineers & Land Surveyors, the IBR Program, in the interest of conveying more confidence in the assessment and its conclusion, made the decision to seal the Tunnel Concept Assessment.

The response to Comment #2455-1 has been updated in Appendix H, Final SEIS Errata, to this Amended Record of Decision (ROD).

The sealed Tunnel Concept Assessment, Rev 2 is available on the IBR Program's website (https://www.interstatebridge.org/media/szhnxsw/final-itt_rev2_sealed_signed_remediated.pdf) and is included as Attachment B to Attachment C-1 to Appendix D of the Final Supplemental Environmental Impact Statement (SEIS).

9-2

The response to Comment #2455-1 in Appendix S4 of the Final SEIS has been updated in Appendix H, Final SEIS Errata, to this Amended ROD.

The Tunnel Concept Assessment was revised in September 2023 to address the error in excavation quantities. The calculation error was unintentional and was addressed once the IBR Program became aware of the error. The error was caused by duplication that occurred in the model where some excavation quantities were counted more than once. The cause of the error and subsequent updates are acknowledged on page 2 of the Tunnel Concept Assessment.

The sealed Tunnel Concept Assessment, Rev 2 is available on the IBR Program's website (https://www.interstatebridge.org/media/szhnxsw/final-itt_rev2_sealed_signed_remediated.pdf) and is included as Attachment B to Attachment C-1 to Appendix D of the Final SEIS.

Submission 10: Bob Ortblad (May 5, 2026)

Comments

John Milton PE
 Director of Transportation Safety and Systems Analysis
 Washington Department of Transportation

Dan Sepico
 Traffic Safety Engineer
 Oregon Department of Transportation

Please read the attached article.

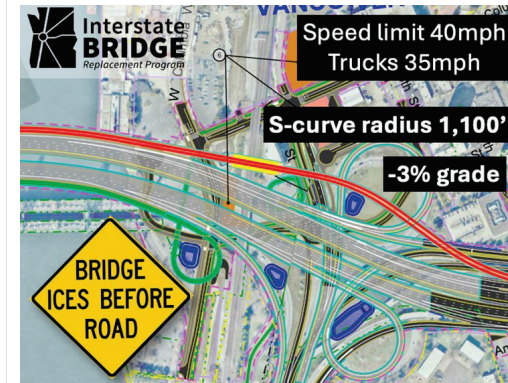
I believe the Interstate Bridge Replacement design will be extremely dangerous and will require a low speed limit.

Please provide your professional opinion.

Respectfully
 Bob Ortblad MSCE, MBA



Letter: Interstate Bridge Replacement design is engineered manslaughter



Engineer warns IBR's planned S-curve approach will create deadly conditions worse than San Francisco's accident-prone detour. Photo courtesy Interstate Bridge Replacement Program

Engineer: IBR Bridge Design Creates Deadly S-Curve Risk

0:00 / 0:00

Bob Ortblad says an immersed tunnel alternative to the east of the current bridge will avoid a tight S-curve and be weather-protected

Editor's note: Opinions expressed in this letter to the editor are those of the author alone and may not reflect the editorial position of [ClarkCountyToday.com](https://clarkcountytoday.com) (<https://clarkcountytoday.com/>)

Driving north on the current I-5 Bridge on the Vancouver riverbank, a driver must make a slight right turn, followed by a slight left turn, completing a gentle S-curve on the ground. The IBR's new bridge will be about 300 feet west of the current bridge. To connect a new bridge to the existing freeway, an elevated approach with a -3% grade and an extreme S-curve must be built. This S-curve will be dangerous and restrict speed to about 40 mph.

During the construction of San Francisco's new Bay Bridge, a very similar temporary S-curve detour was built. Opened Sept. 8, 2009, in the first two months, there were 48 accidents, including an overturned Safeway semi-truck and another semi-truck that plunged 200 feet, killing the driver (<https://www.vanbloislaw.com/case-results/1650000-settlement-truck->

[plunges-off-bay-bridge-at-s-curve/](#)). Many additional safety measures were taken to reduce this carnage. A speed limit of 40 mph and 35 mph for trucks was strictly enforced for the four years of the detour. This S-curve had a tight radius of only 1,200 feet, a -3% grade, and 365 frost-free days.



Bob Ortblad

The IBR plans a permanent S-curve on the Vancouver bridge approach that will have a tighter radius of 1,100 feet, also have a -3% grade, and have only 200 frost-free days, resulting in frequent icy conditions. This perfect storm of conditions will make IBR's S-curve much more dangerous than the Bay Bridge's deadly record. Cool air circulating on both top and bottom of the road deck will freeze fog and rain on the north-facing bridge approach. A northbound car or truck may drive up an ice-free Hayden Island approach, its south-facing roadway melted by the sun's radiation. Cresting the bridge at 60 mph, a driver may hit black ice on the S-curve with a -3% grade. It will be almost impossible for a semi-truck to avoid jackknifing. Vancouver residents can only pray that the first truck to fly off the bridge is not a gasoline tanker.

The IBR has not yet set a speed limit for its planned bridge, but with its extremely tight S-curve and possible icy roadway, anything over 40 mph and 35 mph for trucks will be considered engineered manslaughter.

An immersed tunnel alternative to the east of the current bridge will avoid a tight S-curve and be weather-protected. An immersed tunnel is more earthquake resistant, can be built in half the time and cost, and protects Vancouver, Hayden Island, and Fort Vancouver from massive, environmentally damaging bridge approaches. Unfortunately, the IBR has not retracted its fraudulent "Tunnel Concept Assessment (https://www.interstatebridge.org/media/msamswzd/2021-03-03-final-itt-v2-48-_remediated.pdf)" and continues to lie about the feasibility of an immersed tunnel. The "Tunnel Concept Assessment" inflated excavation by four times and was issued illegally without a professional engineer's stamp, [WAC 196-23-020](#) (<https://app.leg.wa.gov/wac/default.aspx?cite=196-23-020>).

Bob Ortblad MSCE, MBA

██████████

(<https://www.clarkcountytoday.com/submit-letter-to-the-editor/>)

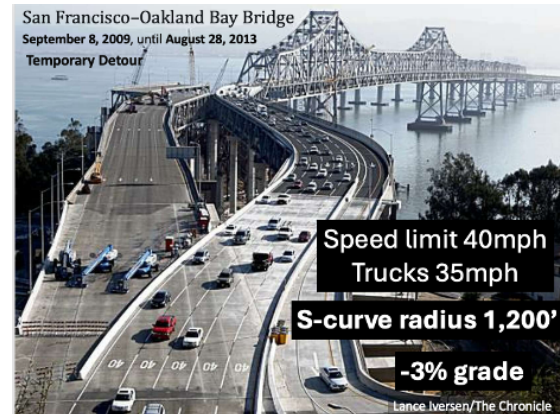
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[important-information-is-still-mia-but-benefits-are-available-for-some-in-july/](#)
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1 Family caregivers using CDWA are subject to a union contract with SEIU 775 — a fact not clearly disclosed in registration materials.

Opinion: Let's build two new bridges (<https://www.clarkcountytoday.com/opinion/opinion-lets-build-two-new-bridges/>)



10-1

Response to Submission 10: Bob Ortblad (May 5, 2026)

10-1

Please refer to the responses to Comments #9-1 and #9-2.

Submission 11: Bob Ortblad (May 12, 2026)

Comments

Second Request
First request sent May 2, 2026
Not a single response.

Interstate Bridge Replacement Program
Washington State Dept. of Transportation
Washington State Board of Registration for Professional Engineers & Land Surveyors

Please read and respond to the attached letter.

Respectfully
Bob Ortblad MSCE, MBA

██████████
██████████

11-1

Interstate Bridge Replacement Program
Washington State Dept. of Transportation
Washington State Board of Registration for Professional Engineers & Land Surveyors

Did the Washington State Dept. of Transportation and the Washington State Board of Registration for Professional Engineers & Land Surveyors advise the Interstate Bridge Replacement Program that a preliminary engineering report “Tunnel Concept Assessment” does not need a professional engineer stamp?

WAC 196-23-020 clearly requires a professional engineer stamp is required on a preliminary engineering report.

Is the IBR lying or did both WSDOT and Washington State Board of Registration for Professional Engineers & Land Surveyors give incorrect legal advice?

A response from all three agencies with supporting documents is requested.

Respectfully
Bob Ortblad MSCE, MBA

██████████

11-1

**Interstate Bridge Replacement Program
Final Supplemental Environmental Impact Statement
S4. Organizations and Individuals Comments and Response**

Submission 2455: Robert Ortblad (October 17, 2024)

Why was the “Tunnel Concept Assessment” issued July 2021 not stamped by a professional engineer (required by WA law) until two years later, April 2023?

The IBR gained Locally Preferred Alternative (LPA) approval in the summer of 2022 with an illegal report disqualifying of a tunnel alternative.

Bob Ortblad MSCE, MBA

Response to Submission 2455: Robert Ortblad (October 17, 2024)

WSDOT’s statewide policy and protocol is that preliminary reports that are not required for construction are not sealed by a professional engineer. This is consistent with the approach used for similar reports prepared during the CRC Project and has continued throughout the IBR Program. **The IBR Program consulted WSDOT headquarters and the Washington State Board of Registration for Professional Engineers & Land Surveyors** to determine if the July 2021 Tunnel Concept Assessment warranted a seal by a professional engineer. The two entities determined that the **Tunnel Concept Assessment did not need to be sealed by a professional engineer**. In the interest of conveying more confidence in the assessment and its conclusions, the IBR Program made the decision to seal it.

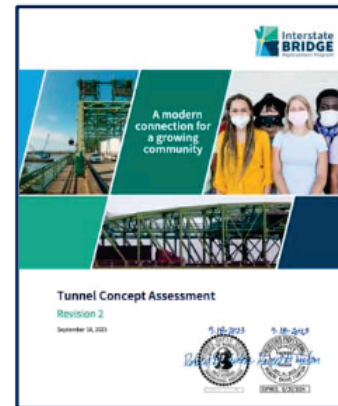
Washington Administrative Code 196-23-020

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Preliminary documents must be stamped, but need not be signed or dated by the licensee.

11-1

“The Modified LPA was endorsed by all eight local partner agencies in summer 2022.”



- [TriMet](#)
- [C-TRAN](#)
- [Oregon Metro](#)
- [SW Washington Regional Transportation Council](#)
- [City of Portland](#)
- [City of Vancouver](#)
- [Port of Portland](#)
- [Port of Vancouver](#)

1. Illegal Report for 2 years – no Professional Engineer stamp

2. Fradulent Doubleing of Excavation Cubic Yards

Revision	Item	Date
0	Tunnel Concept Assessment	March 1, 2021
1	Sealed and added states of professional registration (Cover, Page iii, Page 1, and Page 32)	April 19, 2023
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Response to Submission 11: Bob Ortblad (May 12, 2026)

11-1

This is a resubmission of the attachment to Submission #9. Please refer to the responses to Comments #9-1 and #9-2.

Submission 12: Bob Ortblad (May 13, 2026)

Comments

Ken Fuller, PE

I hope a response does not take weeks, should take a few minutes.
Is the IBR lying or did your board give them incorrect legal advice?

Respectfully

Bob Ortblad MSCE, MBA

PE licence [REDACTED] retired

CPA license [REDACTED] retired

Interstate Bridge Replacement Program

Washington State Dept. of Transportation

Washington State Board of Registration for Professional Engineers &
Land Surveyors

12-1

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Respectfully

Bob Ortblad MSCE, MBA

[REDACTED]

12-1

**Interstate Bridge Replacement Program
Final Supplemental Environmental Impact Statement
S4. Organizations and Individuals Comments and Response**

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Bob Ortblad MSCE, MBA

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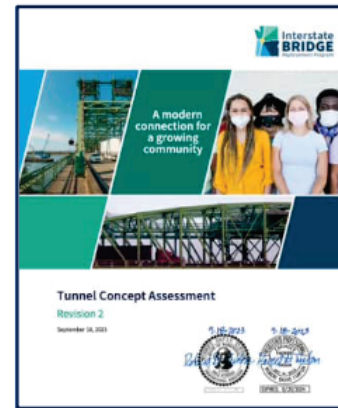
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12-1

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- [TriMet](#)
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Response to Submission 12: Bob Ortblad (May 13, 2026)

12-1

This is a resubmission of the attachment to Submission #9. Please refer to the responses to Comments #9-1 and #9-2.

Submission 13: Bob Ortblad (May 14, 2026)

Comments

Second Request
Original request May 5, 2026

John Milton PE
Director of Transportation Safety and Systems Analysis
Washington Department of Transportation

Dan Sepico
Traffic Safety Engineer
Oregon Department of Transportation

Please read the attached article.

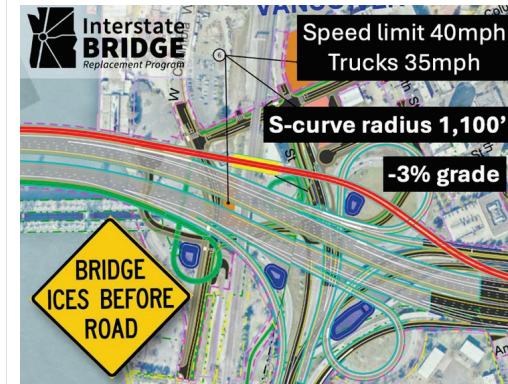
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Please provide your professional opinion.

Respectfully
Bob Ortblad MSCE, MBA



Letter: Interstate Bridge Replacement design is engineered manslaughter



Engineer warns IBR's planned S-curve approach will create deadly conditions worse than San Francisco's accident-prone detour. Photo courtesy Interstate Bridge Replacement Program

Engineer: IBR Bridge Design Creates Deadly S-Curve Risk

0:00 / 0:00

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Bob Ortblad

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Bob Ortblad MSCE, MBA

(<https://www.clarkcountytoday.com/submit-letter-to-the-editor/>)

ALSO READ:

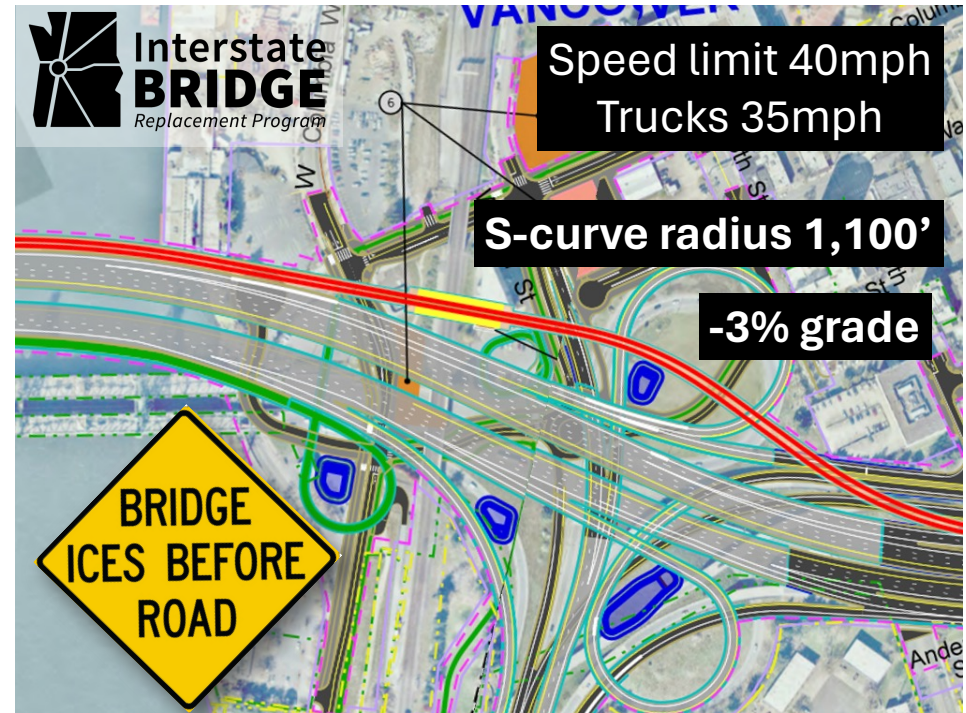
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important-information-is-still-mia-but-benefits-are-available-for-some-in-july/
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Family caregivers using CDWA are subject to a union contract with SEIU 775 — a fact not clearly disclosed in registration materials.

Opinion: Let's build two new bridges (<https://www.clarkcountytoday.com/opinion/opinion-lets-build-two-new-bridges/>)

13-1



Response to Submission 13: Bob Ortblad (May 14, 2026)

13-1

Please refer to the responses to Comments #9-1 and #9-2.



Submission 14: Douglas Tweet (May 3, 2026)

Comments

To: Washington State FHWA Office

Attached is an edited version of a document I mailed to DOT Secretary Sean Duffy on May 1. It provides details of my objections to the Interstate Bridge Replacement Project (IBR) across the Columbia River on I-5 between Vancouver, WA and Portland, OR.

I urge Secretary Duffy to pause the IBR project and to not issue a Record of Decision (ROD) at this time. IBR recently submitted their FSEIS to the DOT.

I strongly oppose the extension of TriMet's light rail as part of the IBR. It is not justified. Ridership has been and continues to be extremely low. IBR's modeling for transit needs across the I-5 bridge in 2045 is 19x current ridership, and is not believable. The IBR design wastes precious space on the I-5 bridge at an exorbitant cost, while failing to improve on current congestion. Furthermore, IBR's own documents show that by having two Auxiliary lanes in each direction a significant decrease in congestion and rush hour travel times can be achieved. Dropping light rail from the project in favor of a second Auxiliary lane could be more than enough to pay for this change. The resulting improvement in congestion and travel times will benefit all vehicles including freight, automobiles, commercial trucks and vans, emergency vehicles, and buses. My analysis is based on IBR's Final Supplementary Environmental Impact Statement (FSEIS), and bus ridership data obtained via a public records request from C-TRAN (the transit organization for Clark County, WA).

Sincerely,

Douglas Tweet, PhD

██████████

From:

Douglas J Tweet, Ph.D.

██████████

██████████

May 1, 2026

To:

Secretary Sean Duffy

Department of Transportation

1200 New Jersey Ave, SE

Washington DC 20590

Re: Interstate Bridge Replacement Project (IBR) for the I-5 Bridge Across the Columbia River

Dear Secretary Duffy,

I am a citizen of Washington State, and have been heavily involved for years in local opposition to the extension of Oregon's Light Rail system into our region. We successfully fought it over 10 years ago, but it has now been revived in the \$14.4Billion Interstate Bridge Replacement Project (IBR). I am a retired research scientist with a PhD in Physics, and have focused on analysis of bus ridership across the existing I-5 bridge between Vancouver, WA and Portland OR. As detailed in the attached document, the ridership is very low, and in no way justifies the ~\$3.5Billion required to add light rail. There are other options available (also discussed), which may achieve the goals at lower cost. Recently the IBR submitted its FSEIS to your department. I strongly urge you to put a pause on the IBR and not issue a Record of Decision in favor of IBR's current plan. It is a very wasteful use of taxpayer's money, and IBR admits it will not reduce the traffic congestion we currently experience every day.

Sincerely,

Douglas J Tweet

Interstate Bridge Replacement Project:

Extremely Low Bus Ridership Does Not Justify Expensive TriMet Light Rail

Douglas Tweet, PhD, [REDACTED] May 1, 2026

Preface: The analysis described in the bulk of this document is concentrated on the bridge designs by the Interstate Bridge Replacement (IBR) project across the Columbia River on Interstate 5 (I-5) between Vancouver, Washington and Portland, Oregon. However, early in the process IBR dismissed the possibility of an Immersed Tube Tunnel (ITT), which could have many advantages over a bridge. It would remove any barrier to navigation on the Columbia River, eliminate visual impacts (e.g. blocking views of Mt. Hood and the river), greatly reduce noise pollution, and simplify highway modifications and interchanges. Bob Ortblad points out a number of problems with the [IBR's dismissal of ITT](#) and suggests solutions, claiming that a tunnel can [be safer, cheaper and faster to build, with reduced impact on the environment](#). **For this and the problems detailed below with proposed light rail on the IBR bridge, I urge that Secretary Duffy put a pause on the IBR and NOT issue a Record of Decision.**

Abstract: I strongly oppose the extension of TriMet's light rail as part of the Interstate Bridge Replacement project (IBR) across the Columbia River on Interstate 5 (I-5) between Vancouver, Washington and Portland, Oregon. It is [not justified](#). Ridership has been and continues to be extremely low. The IBR design wastes precious space on the I-5 bridge at an exorbitant cost, while failing to improve on current congestion. Furthermore, IBR's own documents show that by having two Auxiliary lanes in each direction a significant decrease in congestion and rush hour travel times can be achieved. Dropping light rail from the project in favor of a second Auxiliary lane could be more than enough to pay for this change. The resulting significant improvement in congestion and travel times will benefit all vehicles including freight, automobiles, commercial trucks and vans, emergency vehicles, and buses. My analysis is based on IBR's [Final Supplementary Environmental Impact Statement](#) (FSEIS), and bus ridership data obtained via a public records request from C-TRAN (the transit organization for Clark County, WA). [Captions for Figures and Tables below from my own analysis are in purple.](#)

Summary:

- 1. Very Low Bus Ridership over I-5 Bridge Negates Any Need for Light Rail**
 - a. Looking at C-TRAN ridership numbers, it is clear there is no need for light rail. Existing bus service over I-5 bridge or future BRT service can easily continue to meet the demand for public transit at a vastly lower cost.
 - b. Bus ridership over the I-5 bridge has [decreased by half](#) in the 20 years from 2006-2026.
 - c. There is only one bus route across the I-5 bridge that connects to the Max Yellow light rail line, Route 60. From 2023-2026 there were only **about 900 weekday boardings**. Furthermore, not everyone actually gets on the light rail, since there is a prior bus stop at a popular shopping area. (Oregon has no sales tax, while Washington has a high sales tax so many Washington residents go to Oregon to shop.)
 - d. **Light rail is expected to cost \$3.5 Billion out of the estimated \$14.4 Billion (up to [\\$17.7 Billion](#) or more) total, or about 24%. That is a ridiculous amount to spend to benefit**

14-3

very few people whose needs are now met by a single bus route. Any future needs could be met by extension of the existing C-TRAN BRT system.

14-4

2. Modeling Issues: Forecasts for 2045 made by IBR expect unreasonably explosive growth in transit ridership, ~19x. ([FSEIS Executive Summary](#), Table 3, p S-18). This is not plausible.

- a. **IBR ignores enduring effects of Covid in dramatically reducing transit ridership (by about 50%). Instead, they use much higher pre-Covid numbers (2015 and 2019) to inflate their 2045 forecasts. ([Transportation Technical Report](#), Appendix A, pp2-3).**
- b. These forecast numbers in the Final SEIS are identical to those given in the Draft SEIS from fall of 2024 ([DSEIS Executive Summary](#), Table 2, p S-13). At numerous public meetings in 2025 IBR executives said they were updating the forecasts, but clearly they have not done so.
- c. In public meetings IBR has presented use of the STOPS model to predict what ridership across the bridge would have been in 2024 if light rail had existed. However, the number they obtain is ~5x the actual number of bus riders.
- d. These forecasts illustrate TriMet's well-documented pattern of over-estimating future ridership while underestimating costs. Forecasts for ridership and performance of TriMet's light rail have consistently greatly exceeded reality, as documented by [John Charles](#) of the Cascade Policy Institute and others.

14-5

3. IBR bridge design allocates far too much space for transit, pedestrians, and bicycles, while severely short-changing cars, freight trucks, and emergency vehicles. It is not justified.

- a. Approximately half of the space on the bridge is devoted to buses, light rail, pedestrians, and bicycles (comprising 2.3% of person trips in 2019), while vehicle traffic, such as cars, freight trucks, ambulances, etc (97.7%) get the remainder.
- b. Even assuming their unrealistic 2045 forecasts, the distribution is still extremely unreasonable and unfair; approximately half of the bridge goes to just 12% of users.

14-6

4. The IBR preferred plan does NOT meet a primary goal to reduce traffic congestion. However, a modification of their plan shows a possible solution.

- a. By 2045 after spending \$14.4-\$15.7 Billion or more, IBR expects congestion to be the same or a little worse than in 2019. This plan has light rail, 3 through lanes, bus-on-shoulder, active transport lanes, and 1 Auxiliary lane each way.
- b. However, IBR's own analysis shows that by having 2 Auxiliary lanes each way, significant reductions in congestion and travel time can be achieved. Since light rail does little to improve congestion, **I strongly urge that light rail be dropped from the project in favor of 2 Auxiliary lanes in each direction.**

14-1

14-2

14-3

14-7 **Details of Data and Analysis:**

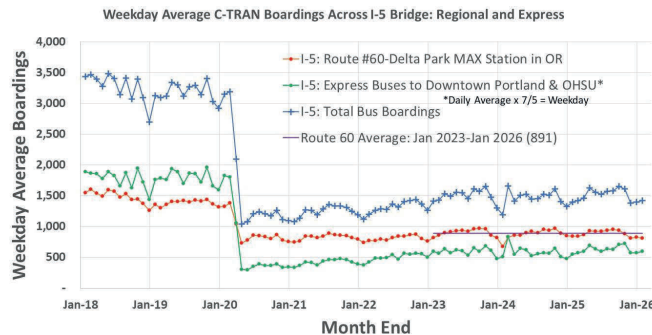
1) Very Low Bus Ridership over I-5 Bridge Negates Any Need for Light Rail

Looking at **actual C-TRAN ridership numbers for 2018-2026** it is clear there is no need for light rail, and bus service (including an extension of C-TRAN's existing BRT system) can easily continue to meet the demand for public transit at a much lower cost, both now and in the future.

From C-TRAN via a Public Records Request I received the monthly National Transit Database (NTD) Ridership data for "boardings" on bus routes across the I-5 bridge from January 2018 through January 2026. From the monthly data I estimated the weekday average, shown in Figure 1 below¹.

Green line in the plot shows the Express bus routes² to downtown Portland and OHSU, red line shows Route 60 to Delta Park, and the blue line shows the total, the sum of the two.

- **2018-2019** Pre-Covid: ~3200 total weekday boardings on buses across I-5 bridge.
- **2020-2026** After Covid: Huge initial ridership drop, slow increase, still well below pre-Covid values, stagnating the last three years.
- **2023-2026:**
 - Express buses ~650 weekday boardings. Current express routes across I-5 bridge are [#105/105X I-5 Express](#) to downtown Portland, and [#190 Marquam Hill Express](#) to OHSU/Marquam Hill.
 - [#60 Delta Park Regional](#) to Delta Park Max light rail station ~900 daily boardings,
 - **Total 1550** weekday boardings over I-5 bridge (less than half pre-Covid)
- In IBR plan, Express bus service will continue on shoulder.



⁽¹⁾Monthly NTD data is divided by the number of days per month to obtain a daily average. Express bus routes run only on weekdays, so multiplying by 7/5 gives weekday average. Route 60 runs 7 days a week, daily average = weekday average.)

⁽²⁾Express routes: 105, 105X, 134, 157, 190, and 199. In 2022 Routes 105, 134, 157, and 199 were combined into Route 105.)

Figure 1. Estimate of weekday average C-TRAN boardings across the I-5 bridge.

14-7

Light rail would merely replace Route 60 to connect to the existing Max Yellow Line at Delta Park (see Figure 2). That number has stagnated at about 900 bus boardings, or about 450 people, if round trips.

Significantly, not all bus riders are getting on the light rail, since there is a prior stop at a popular shopping area, Jantzen Beach. Oregon has no sales tax, while Washington has a high sales tax so many from Washington go to Oregon to shop.

14-8

Light rail is expected to cost about \$3.5 billion out of the \$14.4 billion total (up to [\\$17.7 Billion](#) or more), or about 24% (April 21 2026 C-TRAN Board meeting). That is a ridiculous amount to spend to benefit very few people whose needs are now met by a single bus route.

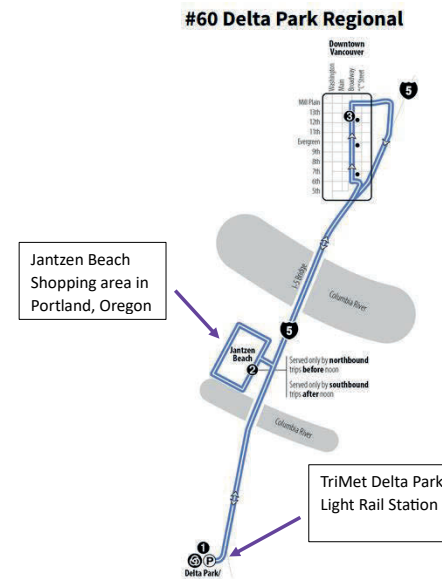


Figure 2. Route #60 from downtown Vancouver, across the I-5 bridge to the Max Yellow Line station at Delta Park, with stops at Jantzen Beach shopping area at certain times.

14-9

How have these numbers changed over the last 20 years?

- **2006: 3300** weekday transit trips (see page 3-24 of the [Final Environmental Impact Statement from the CRC project](#))
- **From 2006-2026, transit ridership across the I-5 bridge has decreased by half.** Many now work from home, and that trend is enduring.

14-10

2) Modeling Issues:

Forecasts for 2045 made by IBR expect unreasonably explosive growth in transit ridership, ~19x. (FSEIS Executive Summary, Table 3, p S-18).

Figure 3 compares the bus boardings for 2006, 2018-2026, and the IBR 2045 forecast for both light rail and buses. IBR forecast numbers are given in Table 3 below.

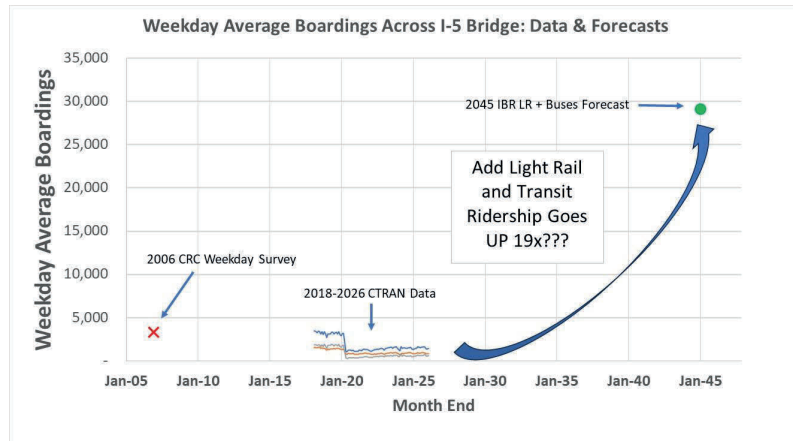


Figure 3. Comparison of weekday C-TRAN bus boardings for 2006, 2018-2026, and IBR 2045 forecast for both light rail and buses.

Below shows a portion of Table 3, p. S-18 from the FSEIS Executive Summary, "Summary of Reasonably Foreseeable Transportation Effects for the No-Build Alternative and Modified LPA and Design Options". Sections highlighted in red boxes show that the IBR Program Recommended Design Option forecasts 29,100 persons crossing the I-5 bridge every day via transit (light rail and express buses). Table 4-41 on page 4-127 in the Transportation Technical Report explains that these are actually weekday averages, not daily averages, and that the 29,100 is divided between 11,100 by Express Bus and 17,900 persons by Light Rail. (That doesn't quite add up, but it is what IBR shows in Table 4-41.)

Over the last 20 years transit ridership across the I-5 bridge has reduced by over half, from ~3300 in 2006 to ~1550 in 2023-2026. Yet, IBR predicts that by adding light rail to replace an existing bus line, ridership will increase nearly 19x, to over 29,000. This does not seem at all reasonable.

6

14-10

Table 3. Summary of Reasonably Foreseeable Transportation Effects for the No-Build Altern

0 Transportation Area	1 No-Build Alternative	2 <i>IBR Program Recommended Design Options - Modified LPA with Single-Level Fixed-Span Configuration, * One Auxiliary Lane, with C Street Ramps, Centered I-5, and All Five Park and Rides</i>
Hours of congestion/day at Interstate Bridge <i>(See Section 3.1 for all vehicular, transit, and active transportation effects)</i>	SB: 16 hours. NB: 14 hours.	SB: 4.75 hours (70% reduction). NB: 9 hours (36% reduction).
Southbound weekday peak 2-hour average travel times from I-205 to I-405 in North Portland	AM: 58 minutes. PM: 29 minutes.	AM: 54 minutes (7% reduction). PM: 14 minutes (52% reduction).
Northbound weekday peak 2-hour average travel times from I-405 in North Portland to I-205	AM: 18 minutes. PM: 42 minutes.	AM: 13 minutes (28% reduction). PM: 26 minutes (38% reduction).
Persons crossing over the Interstate Bridge per day	241,900 total: <ul style="list-style-type: none"> 196,600 via general-purpose vehicles. 30,100 via truck. 14,800 via transit. 400 via active transportation. 	251,100 total: <ul style="list-style-type: none"> 191,200 via general purpose vehicles. 29,200 via truck. 29,100 via transit. 740 to 1,600 via active transportation.

One reason IBR gets such a dramatic jump in transit ridership is the base year that feeds into their calculations. In their modeling, IBR ignores the enduring effect of Covid in dramatically reducing transit ridership (by about 50%; see Figure 1 on page 3 above). Instead, they begin with much higher pre-Covid numbers from 2015, and post-process using 2019 values, which inflates their 2045 forecasts. (Transportation Technical Report, Appendix A, pp 2-3, and Chapter 3: Transportation, pages 3.1-8ff).

14-11

Observe that these forecast numbers in the Final SEIS are identical to those given in the Draft SEIS from fall of 2024 (DSEIS Executive Summary, Table 2, p S-13). **At numerous public meetings in 2025 IBR executives said they were updating the forecasts, but clearly they have not done so.**

7

14-11

Modeling the Past:

In public meetings IBR has presented use of the Simplified Trips-on-Project Software (STOPS) model to predict what ridership across the bridge would have been in 2024 if light rail had existed. However, the number they obtain is ~5x the actual number of bus riders on the current bus route.

At the **October 14 2025** C-TRAN Board meeting, three IBR Program executives gave updates to their ridership analysis, using both their own regional model and the STOPS model. The key table is in Slide 13 of their presentation, shown in Figure 4 below:

NEPA vs STOPS Inputs

Assumptions	NEPA (regional model)— 2045*	CIG (STOPS) — Fall 2024
Ridership estimate & forecast year	21,600 daily light rail boardings at project stations based on 2045 future year estimates	Approx. 4,600 to 5,400 daily light rail boardings at project stations based on fall 2024 existing ridership data
Project extent	Expo to Evergreen (three stations; 1,270 park and ride spaces dispersed among five potential locations)	Expo to Evergreen (three stations; 1,270 park and ride spaces dispersed among five potential locations)
Level of service	6.7-minute peak train frequency; 15-minute off-peak frequency	15-minute all day train frequency
Ridership basis	Pre-pandemic	Post-pandemic
Land use	Regional policies and growth are calculated and forecasted to 2045	Existing land use, no future year forecast
Tolling/Parking/Transit fares	Tolls in place, higher parking costs, transit fare subsidies according to regional policies	No tolls, existing parking costs, existing transit fares



*Actual ridership estimates in the Draft SEIS were calculated using different metrics (number of trips across the river) than what is required by CIG

Oct. 14, 2025

Figure 4. Slide 13 from IBR presentation at October 14, 2025 C-TRAN Board meeting.

They predict 4600-5400 daily light rail boardings, or about 5000. Actual C-TRAN bus ridership for the route that would be replaced by light rail (Route #60) was about 900 daily boardings in 2024 (see my Figure 1 above), but their STOPS model predicted that it would have been about 5000, if light rail had existed in 2024. Why would 5.5x more people have quit their jobs in Vancouver to commute to north Portland if light rail had existed a year ago? Their explanations were vague, referring to their technical experts, with no clear answers.

However, in the FSEIS which IBR published April 17, 2026 and presented to the DOT, there appears to be no mention of this STOPS model and 2024 prediction.

TriMet’s well-documented pattern of over-estimating future ridership while underestimating costs:

John Charles of the Cascade Policy Institute describes in December 2024 how the [Max Yellow Line has ridership at 70% below forecast](#), and running at 50% of the promised peak number of trains per hour. Detailed examination of TriMet’s FEIS for the **MAX Yellow line** shows significant ridership failings, even pre-Covid. The Yellow line is the one that TriMet hopes to elevate and extend over I-5 Bridge. In 2019, Cascade Policy analyzed light rail forecasts, [The MAX Yellow Line: A Look Back After 15 Years](#) :

“What We Were Promised: The FEIS forecasted ridership in the corridor to dramatically increase with the building of the Yellow Line. By 2020 the line’s ridership was expected to have 18,100 average weekday riders.

What We Received: At no point since the Yellow Line opened has ridership met projected levels. In April 2019 ridership only reached 13,270, 26.7% less than projected...From March 2016 to March 2019 ridership levels decreased by 3.6%... Lower than promised ridership isn’t unique to the Yellow Line; every TriMet rail forecast has been wrong, and always wrong on the high side."

An article by Washington State Representative [John Lev](#) documents many problems with TriMet:

- Portland’s TriMet had an operating loss of \$850 million last year.
- Operating costs are up 53 percent since 2019.
- From 2015 to 2024 Boardings decreased by 36%
- Presently, passenger fares only cover 8% of operating costs, systemwide.
- C-TRAN passenger fares cover just 5% of costs.

Local media (Oregon Live) reported in April 2025 [TriMet ridership remains down by a third from 2019, and the recovery is slowing](#).

Rider safety has also been a persistent concern. [A TriMet survey in 2024](#) found nearly half of respondents said safety concerns deterred them from riding MAX sometimes.

[Will light rail’s problems sink the I-5 Columbia River Bridge Replacement project?](#) [Charles Prestrud](#) of Washington Policy Center warns about low light rail ridership and its effect on the IBR plans. **In 2024 MAX ridership was still more than 40% below the 2010 total despite the 2017 completion of a seven-mile extension that added seventeen stations.**

TriMet Recent Service Cuts:

The TriMet Board of Directors approved a plan to adjust service on 34 bus lines and the MAX light rail Green line, with most changes expected in August 2026.

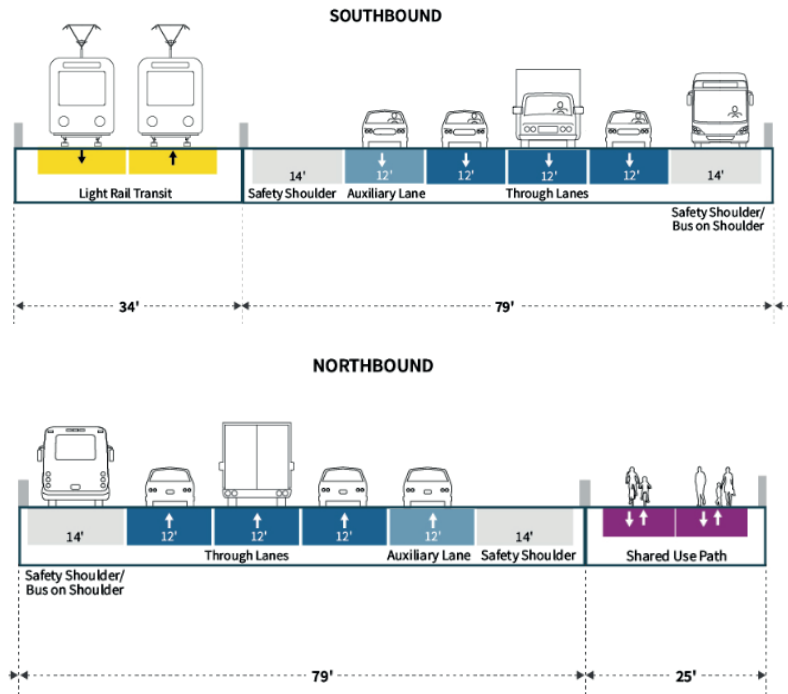
March 2026: TriMet reduced how often buses arrived on four bus lines during morning and evening hours when ridership was lower. [Learn more about March 2026 service changes](#).

November 2025: TriMet reduced how often buses arrived on five bus lines during night hours when ridership was lower. [Learn more about November 2025 service changes](#)

3) IBR bridge design allocates far too much space for transit, pedestrians, and bicycles, while severely short-changing cars, trucks, freight, and emergency vehicles.

Typical [cross-sections](#) of the IBR I-5 Bridge from the FSEIS are shown in Figure 2-18.

Figure 2-18. Typical Cross Section of the Single-Level Fixed-Span Configuration (Girder Type)



Traffic lanes - 12 ft wide, Light Rail - 34 ft (almost 3 traffic lanes), Bus-on-Shoulder - 2x14 ft = 28 ft (over 2 traffic lanes), Pedestrians and Bicycles - 25 ft (2 traffic lanes). Cars, trucks, freight, and emergency vehicles are restricted to 3 through lanes and 1 Auxiliary lane each direction.

FSEIS notes: "Design is not final and subject to change. Widths may vary with final design. The **two Auxiliary lane design option** would add approximately 8 feet to each bridge (i.e., 16 feet to the total width)."

Table 4-7 from [Transportation Technical Report](#), p 4-26, shows 2019 Existing Conditions for Person Throughput and compares with predictions for 2045 for the No-Build, and the IBR preferred design.

Table 4-7. Daily Person Throughput on the new Columbia River Bridges by Mode (Both Directions)

	2019 Existing Conditions	2045 No-Build Alternative	2045 Modified LPA and all Design Options
Total Person Throughput*	185,400	241,900	251,100
Passenger Cars	165,200	196,600	191,200
Freight Trucks	16,000	30,100	29,200
Transit (Bus and Light-Rail)	3,800	14,800	29,100
Active Transportation	400	400	1,600

Source: Metro/RTC 2018 RTP RTDM, IBR Analysis 2024

* Total Person Throughput is the sum of passenger cars, freight trucks, transit and active transportation person-trips. LPA = locally preferred alternative

14-12

(Note that C-TRAN monthly NTD data for 2019 in my Figure 1 on p. 3 above shows about 3300 weekday average bus boardings, less than the 3800 shown here outlined in red. The Active Transportation forecast in Table 3 on page 6 above is 740-1600, while Table 4-7 just gives the highest part of that range, 1600, outlined in red.)

Space analysis continued on next page...

Space Allocation on Bridge Not Proportional to User Needs: 2019

In the bar chart of Figure 5 below I compare 2019 Existing Conditions for Person Throughput from Table 4-7 for different transportation modes. Also indicated are the approximate total number of lanes (both north and south) which the IBR design proposes for each mode.

Effectively 3.5 lanes each way are devoted to Transit and Active transportation, just 2.3% of bridge users. The other 97.7% are crammed into 3 Through lanes and 1 Auxiliary lane in each direction.

Clearly, the IBR plan is unfair and unreasonable. A second Auxiliary lane in each direction would better meet the needs of the vast number of users, including freight.

The FSEIS [Executive Summary](#), pg S-8, acknowledges the critical nature of freight:

“Freight volumes moved by truck to and from the area are projected to more than double over the next 25 years. Vehicle-hours of delay on truck routes in the Portland/Vancouver area are projected to increase by more than 90% over the next 20 years. Growing demand and congestion will result in increasing delay, costs, and uncertainty for all businesses that rely on this corridor for freight movement.”

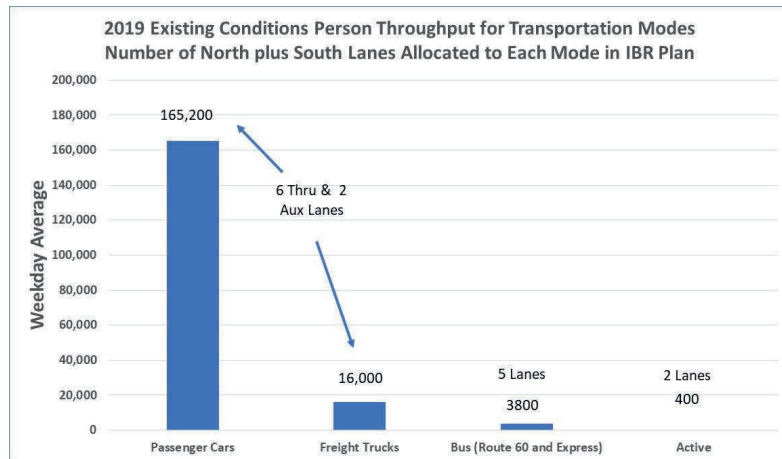


Figure 5. 2019 Existing Conditions for various modes of transportation across the I-5 bridge, along with IBR planned lane space allocations. Data: Table 4-7 from [Transportation Technical Report](#), p 2-26.

Space Allocation on Bridge Not Proportional to User Needs: 2045

In the bar chart of Figure 6 below I compare 2045 forecasts for various modes. Even assuming the IBR’s unrealistic 2045 forecasts, the distribution is still extremely unreasonable.

Passenger cars and freight make up 88% of usage, but are crammed into 3 Thru lanes and 1 Auxiliary lane in each direction, while 3.5 lanes each way are allocated to only 12% of users.

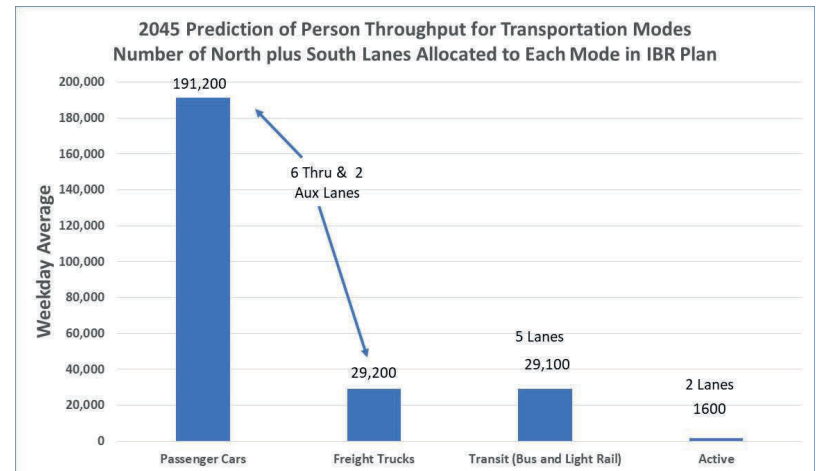


Figure 6. 2045 Prediction of person throughput for various modes of transportation across the I-5 bridge, along with IBR planned lane space allocations. Data: Table 4-7 from [Transportation Technical Report](#), p 2-26.

14-13

Note that less than 1% of users (‘Active’) get 1 lane each way all to themselves. This is extremely unfair to the vast majority of commuters and truck drivers who will be paying by far most of the tolls.

The industry standard is 10 ft, (page S-9 of [Executive Summary](#)) while the IBR plans for 25 feet. The additional space adds considerably to the cost of the bridge, with extra concrete and weight.

14-14

4) The IBR preferred plan does NOT meet a primary goal to reduce traffic congestion. However, modifications of their plan show possible solutions.

[FSEIS Executive Summary](#), Page S-7 describes the purpose and needs for this IBR project:

“The purpose of the proposed action is to improve I-5 corridor mobility by addressing present and future travel demand and mobility needs in the Program area...This corridor experiences heavy **congestion** and delay lasting 4 to 6 hours daily during the morning and afternoon peak travel periods.”
 “The Interstate Bridge provides direct and important highway connections to the Port of Vancouver and Port of Portland facilities located on the Columbia River... **Freight volumes moved by truck to and from the area are projected to more than double over the next 25 years.**”

Table 3.1-3 below shows that in 2019, the I-5 Bridge experienced **3 hours** of congestion southbound during the morning, and **8.75 hours** northbound in the afternoon. From page 3.1-15 of [Section 3.1 Transportation](#).

Table 3.1-3. Weekday AM and PM Peak-Period Bottleneck Locations When Speeds Are below 45 mph – 2019 Existing Conditions

Direction	Location	Time of Day	Duration (hours)	Maximum Extent (miles)
Southbound	Interstate Bridge	6–9 a.m.	3 hours	3 miles
	I-5/I-405 Split in North Portland	6:30 a.m.–1 p.m.	6.5 hours	3 miles
	Rose Quarter	7:15 a.m.–7:45 p.m.	12.5 hours	3 miles
Northbound	Interstate Bridge	11:15 a.m.–8 p.m.	8.75 hours	10+ miles

Source: IBR Program Transportation Technical Report
 I-5 = Interstate 5; I-405 = Interstate 405; IBR = Interstate Bridge Replacement; mph = miles per hour

Table 3.1-14 below gives the results of IBR’s analysis in 2045 for several options. (From page 3.1-46 of [Chapter 3.1 Transportation](#).) The IBR Preferred Design (with one Auxiliary lane in each direction) finds 4.75 hrs of morning congestion southbound, and 9 hours of afternoon congestion northbound. Compared to 2019, the southbound is 58% worse, and the northbound is about 3% worse. **In other words, after spending 14.4 \$billion (or more), congestion will be worse than it is now! IBR will have failed at a primary purpose!**

14-15

Congestion Improves Significantly with Two Auxiliary Lanes in Each Direction

The column on the right of Table 3.1-14 is for two Auxiliary lanes in each direction, instead of just one. **Southbound lanes:** 4.5 hours of congestion (still worse than in 2019). Extent of Congestion is reduced from 4.5 miles to 1 mile compared to the IBR with one Auxiliary lane.

Northbound lanes: 6 hours of congestion (33% lower than in 2019). Extent of Congestion is reduced from 5 miles to 0.75 miles compared to one Auxiliary lane. IBR admits that the Two Auxiliary Lane option reduces southbound congestion and “substantially” reduces northbound congestion. ([Section 3.1 Transportation](#), page 3.1-49).

14

14-15

Table 3.1-14. Future-Year 2045 Average Weekday Bottleneck Summary When Speeds Are below 45 Miles per Hour

0a	0b	1	2: IBR Program Recommended Design Options	3	4
Location	Metric	No-Build Alternative	Modified LPA with Single-Level Fixed-Span Bridge Configuration, One Auxiliary Lane, with C Street Ramp, Centered I-5, and All Five Park and Rides	Proposed Modified LPA with Single-Level Fixed-Span Bridge Configuration, One Auxiliary Lane, without C Street Ramps, Centered I-5, and All Five Park and Rides	Proposed Modified LPA with Single-Level Fixed-Span Bridge Configuration, with Two Auxiliary Lanes, with C Street Ramp, Centered I-5, and All Five Park and Rides
Northbound I-5 (Existing Interstate Bridge/New Columbia River Bridges)	Time of Day	7 a.m.–9 p.m.	12–9 p.m.	12–9 p.m.	1:30–7:30 p.m.
	Duration of Congestion	14 hours	9 hours	9 hours	6 hours
	Extent of Congestion	10+ miles	5 miles	5 miles	0.75 miles
Southbound I-5 (Existing Interstate Bridge/New Columbia River Bridges)	Time of Day	5 a.m.–9 p.m.	6–10:45 a.m.	6–10:45 a.m.	6:15–10:45 a.m.
	Duration of Congestion	16 hours	4.75 hours	4.75 hours	4.5 hours
	Extent of Congestion	8+ miles	4.5 miles	4.5 miles	1 mile

Table 3.1-15 and Table 3.1-18 show the 2045 forecast southbound and northbound I-5 average travel times between I-205 in Vancouver and I-405 in North Portland in the AM and PM peak periods.

Expected peak-period travel times are lower for the Two Auxiliary lanes option:

Southbound: **50 minutes vs 54 minutes** for the one Auxiliary Lane design (Table 3.1-15),

Northbound: **14 minutes vs 26 minutes** (Table 3.1-18). Pg 3.1-52-3.1-53 [Chapter 3.1 Transportation](#).

Table 3.1-15. 2045 Forecast I-5 Weekday Southbound AM Peak-Period Average Travel Times

Alternative/Design Option	Peak 2-hour Average Travel Time (minutes)
No-Build Alternative	58
IBR Program Recommended Design Options	54 (7% reduction)
Proposed Modified LPA without C Street Ramps	54 (7% reduction)
Proposed Modified LPA with Two Auxiliary Lanes	50 (14% reduction)

Source: IBR Program Transportation Technical Report

Table 3.1-18. 2045 Forecast I-5 Weekday Northbound PM Peak-Period Average Travel Times

Alternative/Design Option	Peak 2-hour Average Travel Time (minutes)
No-Build Alternative	42
IBR Program Recommended Design Options	26 (38% reduction)
Proposed Modified LPA without C Street Ramps	25 (40% reduction)
Proposed Modified LPA with Two Auxiliary Lanes	14 (67% reduction)

Source: IBR Program Transportation Technical Report

15

14-15

Travel times - 2019 Existing Conditions on I-5 from the intersection of I-5 and I-205 in north Vancouver to the intersection of I-5 and I-405 in north Portland in the AM and PM peak periods for both Northbound and Southbound travel are shown in Table 3.1-4. The Peak 2-hour Average is 35 minutes both directions. From page 3.1-15 of [Section 3.1 Transportation](#).

Table 3.1-4. I-5 Average Weekday AM and PM Peak-Period Travel Times between I-205 and I-405 in North Portland – 2019 Existing Conditions

Direction	Metric ^a	6 a.m.	7 a.m.	8 a.m.	9 a.m.	3 p.m.	4 p.m.	5 p.m.	6 p.m.
Southbound	Hourly Average Travel Time	24	38	32	21	13	13	14	13
	Peak 2-hour Average Travel Time	35	35	35	35	14	14	14	14
Northbound	Hourly Average Travel Time	13	13	13	13	36	40	31	19
	Peak 2-hour Average Travel Time	13	13	13	13	35	35	35	35

Source: IBR Program Transportation Technical Report
^a Travel time metric is minutes.
 I-5 = Interstate 5; I-205 = Interstate 205; I-405 = Interstate 405; IBR = Interstate Bridge Replacement Program

The comparisons above are compiled in Figure 7. The Two Auxiliary Lane option makes significant improvements in congestion and travel time, even compared to the 2019 Existing Conditions.

		2019 Existing Conditions	IBR Program Recommended Design (one Auxiliary Lane)	Modified LPA with Two Auxiliary Lanes
Southbound AM	Congestion (hours)	3	4.75	4.5
	Travel Time (minutes)	35	54	50
	Extent of Congestion (miles)	3	4.5	1
Northbound PM	Congestion (hours)	8.75	9	6
	Travel Time (minutes)	35	26	14
	Extent of Congestion (miles)	10+	5	0.75

Figure 7. Congestion comparison of 2019 Existing Conditions with 2045 IBR predictions.

It is apparent that the design with two Auxiliary lanes is much better at reducing congestion and travel times than the IBR Program Recommended Design with one Auxiliary lane.

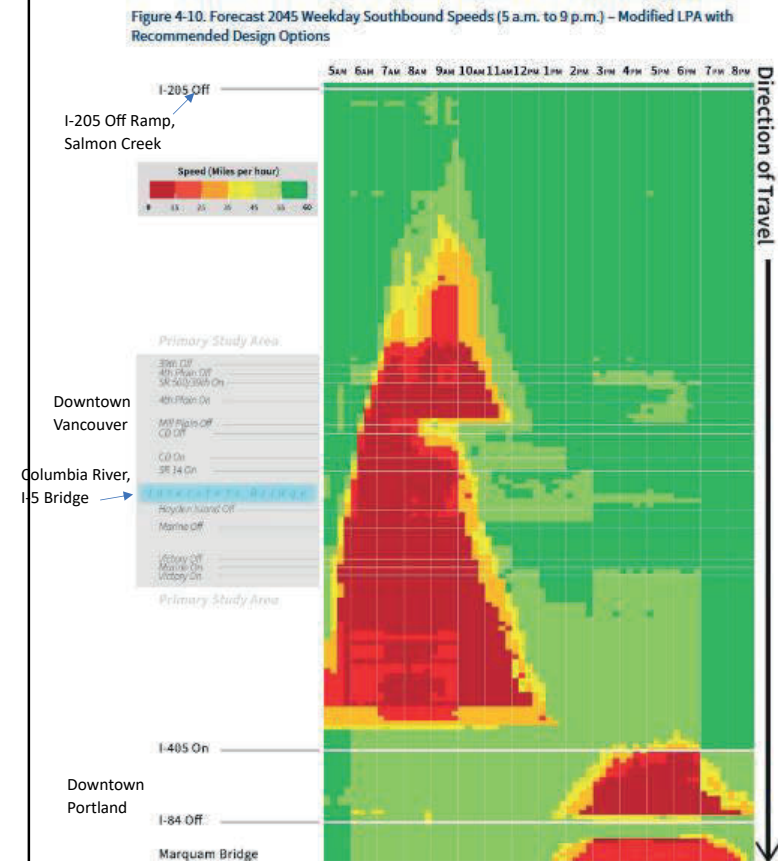
Two Auxiliary lanes also offer improvements over 2019 existing conditions, especially northbound.

16

14-15

Comparison of Speed for One Auxiliary Lane vs Two Auxiliary lanes- 2045

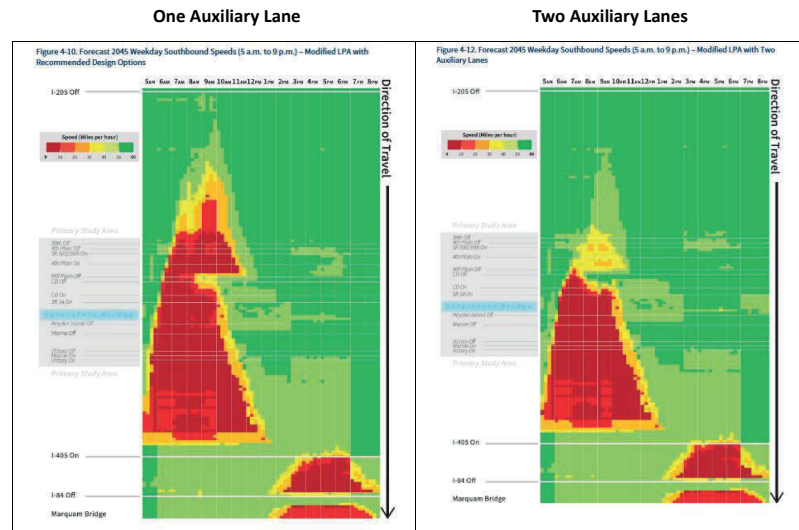
Visual comparisons of predicted speeds for the two models along the I-5 corridor are shown below. 2045 weekday southbound speeds are shown for the IBR Recommended Design (with One Auxiliary lane) in Figure 4-10. The vertical scale is location along I-5 and horizontal scale is time of day. Colors indicate traffic speed: Red is the slowest and green the fastest. Speeds are slowest in the AM, and much faster in the PM. Source: pp 4-33ff of the [Transportation Technical Report](#).



17

14-15

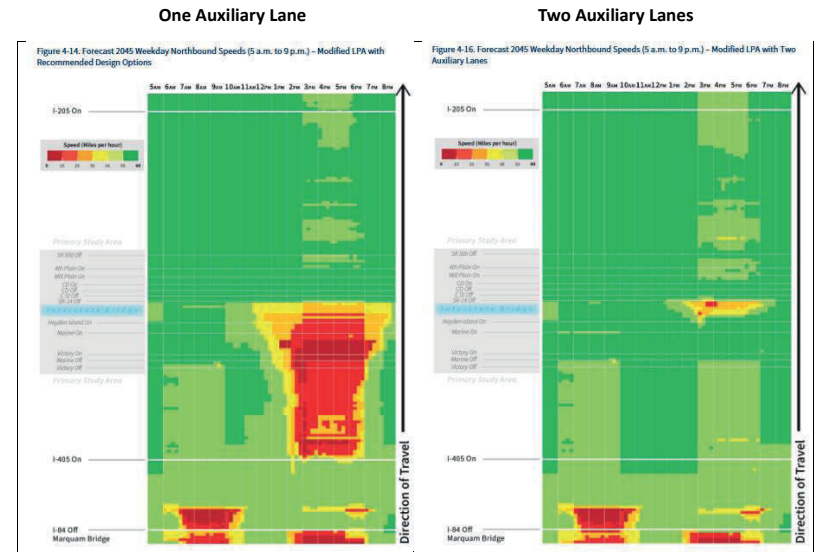
Forecast 2045 Southbound: Speeds for the IBR Recommended Design with One Auxiliary lane (Figure 4-10, left side) are compared to that for the design with Two Auxiliary lanes (Figure 4-12, right side). Some increase in speed is apparent for I-5 north of downtown Vancouver in the AM hours for Two Auxiliary Lanes.



14-15

Forecast 2045 Northbound: Speeds are much faster during PM rush hour for the Two Auxiliary lane option. A dramatic increase in speed in the afternoon is apparent, with limited slow downs at the I-5 bridge.

Speeds for the IBR Recommended Design with One Auxiliary lane (Figure 4-14, left side) are compared to the design with Two Auxiliary lanes (Figure 4-16, right side).



Conclusion: Cancel light rail entirely from this I-5 bridge project, and use the savings to build two Auxiliary lanes in each direction instead.

The resulting significant improvement in congestion and travel times will benefit all vehicles: automobiles, freight trucks, emergency vehicles, transit buses/vans, etc. It optimizes the use of precious limited space and tax dollars for the largest user groups.

I urge that Secretary Duffy put a pause on the IBR and NOT issue a Record of Decision.

Response to Submission 14: Douglas Tweet (May 3, 2026)**14-1**

Please see response to Comment #14-6 and Comment #14-14.

14-2

Please see response to Comment #14-7.

14-3

The \$3.5 billion figure cited in this comment may refer to spoken statements during the April 2026 C-TRAN board meeting, which does not reflect light-rail costs alone. The official updated cost estimates for the full IBR Program and the plan for the first phases of construction that includes light rail and other supporting Program costs and activities were released in March 2026; see <https://interstatebridge.org/CostEstimate>.

With respect to future needs being met by extension of the existing C-TRAN bus rapid transit (BRT) system, please see Transportation Standard Response M.32: Light-Rail Extension in Appendix S2 of the Final SEIS for a description of the selection process for light-rail transit as the high-capacity transit mode across the Columbia River.

14-4

See responses to Comment #14-10 and Comment #14-11.

14-5

See response to Comment #14-11.

14-6

See response to Comment #14-14 for a response related to congestion raised in item a in this comment.

Item b in this comment suggests that congestion and travel times are solely attributable to the number of auxiliary lanes provided, but the transportation performance and analysis included in the SEIS reflects the combined multimodal effects of all Program elements, including interchange and roadway improvements, variable-rate tolling, transit, and active transportation investments. The light-rail extension is projected to increase transit ridership and remove vehicle trips that might otherwise occur on the roadway network, contributing to reduced vehicle demand. Accordingly, the congestion and travel time benefits identified in the analysis should not be attributed solely to the auxiliary lane configuration.

14-7

Similar comments suggesting that transit ridership did not warrant light rail being included in the Modified Locally Preferred Alternative (LPA) were submitted on the Draft SEIS and are responded to in Submission #3256 in Appendix S4 of the Final SEIS. Submission #3256 provided information on post-pandemic ridership data at an aggregate level. The IBR

Program acknowledges that this comment provides more detailed data points than what was included in Submission #3256— specifically, additional years of data, route level detail, and specific C-TRAN boarding information—but this new detail does not change the analysis or findings disclosed in the SEIS. The reason the analysis and findings would not change is that, while current ridership provides information regarding existing conditions, relying solely on current post-pandemic ridership levels does not reflect the purpose of long-range transportation planning or the requirements of forecasting future transportation needs in the National Environmental Policy Act (NEPA).

As documented in Appendix H of the Transportation Technical Report (TTR), the Oregon Metro/Southwest Washington Regional Transportation Council regional travel demand model (RTDM) and long-range transportation plan used for the IBR Program was developed prior to travel behavior changes related to the COVID-19 pandemic. Because development of an RTDM requires finalized datasets and quality-controlled observations, model development typically precedes current conditions. This approach is consistent with the practice accepted by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) and provides a stable foundation for evaluating future conditions and comparing the effects of project alternatives. While the model base year precedes 2019 data for existing conditions, and more recent post-pandemic trends, such as lower transit ridership mentioned in the comment, it provides a well-calibrated foundation for evaluating future transportation scenarios and comparing alternatives consistent with FHWA's accepted modeling practice.

It is appropriate to look at long-term historical patterns rather than short-term anomalies like a pandemic when forecasting travel demand. During early parts of the COVID-19 pandemic, some questioned whether current plans or project designs needed revision. Because long-range forecasts are built from historical patterns and present-day behavior, they aim to capture long-term conditions and areas of uncertainty. To avoid mistaking temporary disruptions, such as economic swings, wildfires, extreme weather, or the pandemic, for lasting change, it is necessary to examine data over an extended period. Consistent with this, the IBR Program has examined data over an extended period for purposes of the SEIS analysis, an approach that was approved by FHWA and FTA.

The statement that light rail would merely replace Route 60 was not included in previous comments. This assertion does not capture the role of the transit investment as part of the IBR Program. The light-rail extension would become part of the regional high-capacity transit system, providing direct connections to destinations throughout the MAX network and offering travel time reliability that is not dependent on highway congestion. Transit ridership forecasts for the IBR Program account for changes in service, network connectivity, population and employment growth, and traveler behavior in the 2045 forecast year. Therefore, current Route 60 ridership, including the portion of the riders that are not getting on the light rail where the Route 60 connects to it at Delta Park, does not represent the full transit market for future high-capacity transit service across the Columbia River.

As noted above, the ridership forecasts are based on the Oregon Metro/Southwest

Washington Regional Transportation Council RTDM which reflects observed travel patterns across the region, including travel to major activity centers such as the Jantzen Beach area and other destinations in Oregon and Washington. While the model does not explicitly include sales tax differences between the two states as a separate input variable, observed travel behavior associated with cross-river shopping, employment and other trip purpose is reflected in the model through its calibration to regional travel patterns. The information provided in the comment does not change the IBR Program's conclusions regarding the need for and expected use of the light-rail extension in the Modified LPA.

14-8

See response to Comment #14-7.

Comparing the proposed light-rail extension solely to existing Route 60 does not capture the role of the transit investment as part of the IBR Program. The light-rail extension would become part of the regional high-capacity transit system, providing direct connections to destinations throughout the MAX network and offering travel time reliability that is not dependent on highway congestion. Transit ridership forecasts for the IBR Program account for changes in service, network connectivity, population and employment growth, and traveler behavior in the 2045 forecast year. Therefore, current Route 60 ridership does not represent the full transit market for future high-capacity transit service across the Columbia River.

14-9

While this comment includes 2006 as a data point, that year is not a point of comparison for the analysis conducted for the IBR Program in the SEIS. The overall comment is similar to the issues brought up in Comment #14-7 regarding lower ridership in different years, including data for 2026. The ridership data presented in the comment is consistent with data disclosed in Section 3.1.2, Transportation, Existing Conditions, of the Final SEIS.

Work-from-home trends were included in the travel demand model development and additional modeling completed for the Draft and Final SEIS. A discussion of how these trends were addressed is included in Section 1 of Appendix H of the TTR published with the Final SEIS. U.S. Census Bureau American Community Survey (ACS) data included in Appendix H summarized 2022 ACS 1-year estimates for work from home in the Portland–Vancouver metropolitan region. This value was 23.3%. More recent 2024 (the most current available online) ACS 1-year estimates for the Portland–Vancouver metropolitan region show that percentage has decreased to 20.0%. While that is still higher than pre-pandemic levels, which were approximately 8%, the impact of working from home on travel demand and forecasts is still uncertain. It is possible that work-from-home trips could increase over current modeling, but the reduction in overall trips is expected to be minimal.

14-10

Similar comments about the increase in transit ridership in 2045 were submitted on the Draft

SEIS and are responded to in Comment #3244-3 in Appendix S4 of the Final SEIS. While this comment provides more detailed data points than what was included in Comment #3244-3, the new details around existing and future transit ridership provided in this comment do not change the analysis or findings disclosed in the Final SEIS. This is because the permanence of pandemic-related travel impacts remains uncertain and the analysis in the SEIS relies on adopted regional forecasting and forecast-year assumptions established by Oregon Metro and Southwest Washington Regional Transportation Council to estimate future travel demand, consistent with standard transportation planning and NEPA practice.

One data point referenced here that was not included in the previous comments on the Draft SEIS questioned numbers summarized in Table 4-41 of the TTR listing total volumes crossing on I-5 for Express Bus (11,100) and Light-Rail (17,900). These volumes don't precisely add up to the total in that table (29,100) due to rounding to the nearest 100. A note under the table indicating such is being included in an addendum (ROD).

Another new point in this comment not previously addressed in those submitted in Comment #3244-3 relates to the base year being used for analysis. Reasons for the use of the RTDM base year 2015 and existing conditions count data in 2019 are, as noted in the comment, disclosed and explained in the TTR and Section 3.1, Transportation, of the Final SEIS, as noted in the comment.

14-11

When IBR Program executives stated at public meetings that the IBR Program was updating forecasts, they were referring to ridership forecasting that is part of the FTA Capital Investment Grants (CIG) process and not the NEPA transit forecasts. The FTA CIG program is a separate federal funding process that uses different evaluation methods and criteria for different purposes. The FTA Simplified Trips-on-Project Software (STOPS) model is designed specifically to support transit ridership forecasting and project evaluation for FTA's CIG program.

The comment appears to misunderstand the IBR Program's use of the STOPS model. The comment states that the STOPS model is not mentioned in the Final SEIS. This is because the IBR Program Final SEIS was prepared to satisfy NEPA requirements related to environmental review and decision-making. The Final SEIS analysis was conducted for 2045 horizon year conditions and included modeling that reflected pre-pandemic conditions as documented in the TTR, Appendix H to the TTR and Section 3.1, Transportation, of the Final SEIS. The STOPS model was developed to reflect a current year 2024 estimate using post-pandemic count data consistent with reporting instructions from FTA. The FTA CIG program is directed by statute (49 U.S.C. §5309); it is unique and separate from the NEPA statute, though NEPA completion is a CIG requirement.

While the FTA STOPS model is useful for predicting transit trips, user benefits, and related CIG metrics, it does not function as a comprehensive NEPA evaluation tool, nor does it

provide an apples-to-apples comparison to the NEPA forecasts. This is because it is used for estimating transit ridership as if the transit project (but not the highway elements of the project or tolling) was in place now. This is referred to as a current year forecast, and it does not fully account for multimodal system operations, roadway performance, land use interactions, freight movement, or the broader range of transportation and environmental effects evaluated under NEPA. As a result, regional travel demand models and other technical analyses are generally more appropriate for NEPA evaluation purposes.

The ridership forecasts from the STOPS model do not reflect what is stated in this comment—suggesting that 5.5 times more people would have quit their jobs to commute to north Portland. The STOPS model results do reflect the potential increase in transit ridership resulting from the introduction of light rail between the Expo Center Station in Portland and the Evergreen Station in Vancouver. Some of these trips would be shifted trips from other transit routes such as the C-TRAN Route #60 referenced in the comment and from TriMet Route #6, which was assumed to include service modifications with the introduction of light rail to Hayden Island. Some would be completely new trips to transit. The STOPS model accounts for the observed tendency of some travelers to prefer light rail over bus service due to factors such as reliability, comfort, ease of use, and permanence, which can increase transit ridership compared to other transit modes. The STOPS model numbers presented at the October 2025 C-TRAN Board of Directors meeting were developed for a different purpose, as discussed above, and they are continuing to be revised in coordination with FTA.

Regarding existing transit ridership, see responses to Comment #14-7.

14-12

The 2019 C-TRAN data received by the IBR Program and reported in Table 4-7 of the TTR show 3,800 boardings. This total includes all riders crossing the Interstate Bridge, including northbound routes 164 and 177, which were not included in the commenter's submittal calculations. Excluding these two routes results in 3,300 boardings, which is consistent with the commenter's calculation. This difference explains why the commenter's value does not match the 3,800 boardings reported in the TTR.

14-13

One of the six transportation needs in the purpose and need statement for the IBR Program (Chapter 1 of the Draft and Final SEIS) is to address substandard bicycle and pedestrian facilities. The Amended Selected Alternative identifies a shared-use path (SUP) designed to meet or exceed Americans with Disabilities Act standards, which conceptual plans defined as up to 24 feet wide (24 feet clear between barriers, plus a 1-foot barrier).

There were several considerations in determining the width of the SUP. The assumed width was established during the NEPA process to establish a reasonable footprint for the bridge options for the purposes of environmental analysis. The assumed width was also integrated with the overall conceptual design for the bridge configuration design options, including the

single-level fixed-span bridge configuration design option included in the Amended Selected Alternative.

The SUP width affects a portion of the deck on one of the two replacement bridges, and the weight of the SUP area of the deck would not notably alter overall engineering considerations or costs. Multiple other components and factors, including structural requirements, geotechnical conditions, navigation considerations, and dynamic loads, have a much greater effect on structural design and resulting costs.

The relative difference in quantities for the portion of the deck used for a SUP are also minor compared to quantities needed for substructure and superstructure elements, including foundations, piles, pile caps, abutments, piers, girders, beams, and prestressed segments or spans. The SUP width met the objective for a safe and comfortable facility accommodating two-way bicycle and pedestrian travel on 4% bridge grades. This allows separate bicycle and pedestrian operating areas and shy distances adjacent to barriers and fixed objects.

Because the SUP will be located adjacent to travel lanes, additional features will be included to ensure user safety and comfort. Final design will refine the allocation of the 24-foot clear width among these elements and determine the exact widths required for each mode. The design will also include other features, such as barriers, illumination, signing, and striping to enhance user experience, safety, comfort, and route directness. To prevent conflicts between path users traveling at varying speeds, the SUP on the bridge will provide separate spaces for people walking (or rolling) and biking. As described Section 3.1, Transportation, of the Draft and Final SEIS, the design elements of the path, such as barriers, separation, illumination, and drainage design, will provide buffer from vehicle traffic, noise, weather, and exposure to street debris and stormwater to provide a well-lit, attractive, and comfortable environment for all users.

14-14

Similar comments were submitted on the Draft SEIS and are responded to in Submission #3245 in Appendix S4 of the Final SEIS. Additional information that was not included in the previous response is included below as it addresses a specific comparison being made in this comment. The response to Submission #3245 explained the information included in the Purpose and Need.

The need for the IBR Program is more than just "growing travel demand and congestion" as stated by the commenter. The Purpose and Need related to congestion does not indicate a static point in time as measured by data from 2019, but rather recognizes that congestion will grow over time. The purpose and need identifies several modes of transportation (vehicles, freight, public transit and active transportation), which the Amended Selected Alternative must address.

Existing conditions are presented in the Draft and Final SEIS to establish baseline

infrastructure, resources, and other conditions that are present in the primary study area. As noted in the comment, this includes data showing that the Interstate Bridge experienced 3 hours of southbound congestion during the morning and 8.75 hours of northbound congestion in the afternoon in 2019. Then, technical analyses, such as the transportation analysis presented in Section 3.1 of the Draft and Final SEIS, were conducted to disclose reasonably foreseeable effects for each alternative (Build and No-Build) by using the same basis for comparison—in this case, using 2045 conditions that have the same assumptions for population, land use, and regional travel demand data. While congestion with the Amended Selected Alternative is forecast to be slightly higher than existing conditions, as shown in the tables in this comment that are taken from the SEIS, it is important to understand that congestion will increase compared to existing conditions, regardless of whether the Amended Selected Alternative is implemented or nothing is done (i.e., under the No-Build Alternative).

In 2045 under the No-Build Alternative, congestion would grow to 16 hours southbound, representing a more than 430% increase compared to existing conditions, and 14 hours northbound, representing a 60% increase compared to existing conditions (as presented in Table 3.1-14 in the Final SEIS). In comparison, with implementation of the Amended Selected Alternative, the congestion on southbound I-5 would occur for 4.75 hours, and on northbound I-5 for 9 hours, representing a 70% reduction in hours of congestion southbound and a 36% reduction in hours of congestion northbound compared to the No-Build Alternative.

14-15

The Amended Selected Alternative includes the One Auxiliary Lane design option instead of the Two Auxiliary Lane design option, for multiple reasons. The One Auxiliary Lane design option will have fewer footprint-based reasonably foreseeable effects; will increase traveler choice regarding time of travel and transportation mode based on variable toll rates and improvements to transit and active transportation facilities; and will cost less over the life of the Program. This outweighs the One Auxiliary Lane design option's lower performance in traffic operations as compared to the non-selected Two Auxiliary Lane design option. For more information, please review Section 5.1.1, Auxiliary Lanes, of this Amended ROD.

Submission 15: Margaret Tweet (May 5, 2026)

From: Margaret Tweet
2715 NW 34th Circle, Camas, WA 98607
To: Washington State FHWA

May 5, 2026

Re: Interstate Bridge Replacement Project (IBR) for the I-5 Bridge Across the Columbia River between Clark County in Washington and Multnomah County in Oregon State

Comments

Attached is a letter of introduction, and a review of the 25-foot Bicycle and Pedestrian path proposed for a replacement I-5 Bridge Across the Columbia River between Portland, OR and Vancouver, WA.

I am a citizen living in Washington State since 1997. This email is an update to a letter I mailed to Secretary Duffy this week. I have participated in meetings and information sessions about the I-5 Replacement Bridge project since about 2010. Current cost estimates for the I-5 Bridge Replacement Project run from **\$15-\$17 Billion tax dollars**. I am very opposed to the Light Rail expenditure currently estimated at **\$3.5 Billion tax dollars**. Expensive light rail is not needed to replace the vastly less costly C-TRAN Buses and Vans that operate in highway lanes shared with other vehicles today.

I urge Secretary Duffy to pause the IBR project, and to not issue a Record of Decision at this time due to many concerns about the bloated IBR project currently estimated to cost \$15-17 Billion.

The local public Transit agency, C-TRAN, currently operates buses over I-5 bridge, which have met the declining I-5 Bridge transit demand for decades. The IBR Bridge plan wastes \$Billions in tax dollars, for light rail that Clark County voters have repeatedly rejected at the ballot box, in 1995, 2012, and 2013. The public vote on whether to extend OR TRIMET light rail into WA has not yet been updated with this FSEIS and should be.

Sincerely,
Margaret Tweet [redacted] state citizen

15-1

Question: Is Light Rail required on the I-5 bridge to qualify for Federal Funding? Can bus or bus-rapid-transit (BRT) service qualify instead?

The IBR plans for an extra wide 25-foot bicycle and pedestrian path are the focus of the information I am including with this letter.

Question: Is a bike and pedestrian path required on a replacement I-5 Bridge or tunnel in order to receive federal funding?

A tunnel option seems to warrant further review as it would cost less, takes less time to put in place, and preserves the waterfront. I urge you to put a pause on the IBR plan to replace the I-5 bridge between WA and OR, a hasty Record of Decision in favor of IBR's current plan will not serve the public. The CTRAN Board was asked to authorize approval of the FSEIS before it was published, before they had a chance to review it, and before citizens could review it.

15-2

At a Regional Transportation Council Meeting, the Director stated that the FSEIS was not available to a state representative/RTC Councilor that asked to see it, because it had not yet been published. That rush to approval pre-publication was not a transparent process. Pausing the project allows the transit and transportation board members, and the public to review the approximately 20,000 pages of FSEIS material.

For the DSEIS, WSDOT failed to notify the public about the 60-day comment period on Nextdoor.com in the same way that they frequently notified the public about traffic conditions, since Nextdoor features frequent posts about roads, crashes, vehicle theft etc. After the comment period, the former IBR Director did then post on Nextdoor.com in favor of light rail, without identifying himself as the IBR Director. Thank you for your time to review the project, and the concerns of citizens in our region.

Sincerely,

Margaret Tweet, SW Washington State citizen

15-3

(P.S.: See the following letter from former Congressional Rep. Jaime Herrera Beutler WA (3rd District) who honored the votes against light rail.)

15-3

[Herrera Beutler to I-5 replacement administrator: Southwest Washington has repeatedly rejected light rail, look to other transit options](#) Date: Tuesday, April 19, 2022

Congresswoman Jaime Herrera Beutler today (April 19) sent a letter to Interstate Bridge Replacement Program Administrator Greg Johnson reiterating Southwest Washington’s repeated rejection of light rail and proposing transit alternatives for the I-5 bridge replacement project.

In the letter to Administrator Johnson, Herrera Beutler highlights that Southwest Washington voters have repeatedly rejected light rail when it came up for a vote on a ballot.

Dear Administrator Johnson,

In light of the troubling recent reports that transportation officials within the Interstate Bridge Replacement Program (IBR) have already selected light rail as their preferred transit option in the I-5 bridge replacement process, I find it necessary to reiterate my strong opposition to light rail based on both the merits and on the clear preferences expressed by the people I represent.

Light rail has been rejected – repeatedly — by voters in Southwest Washington by overwhelming margins^[1]. Whatever IBR officials see as the merits of light rail, they must be able to demonstrate that the transit component of the project is supported by the citizens who will use and pay for it. There is no such evidence that supersedes multiple votes of the people, which are the most fundamental demonstrations of community will.

The reasons for Southwest Washington’s opposition to light rail are numerous, not the least of which is a concern over public safety. A recent news report cites a 2017 study showing a majority of crime in Portland’s TriMet transit system occurred on light rail^[2]. Since that time, public safety has become a top-of-mind issue given the spike in murders in Portland and rising crime in our local communities. Many citizens have expressed outrage to me that in a March IBR steering committee meeting, officials appeared poised to select the more dangerous mass transit option with no concrete details for how it would address the associated crime...

As you know, bus and Bus Rapid Transit are alternative forms of mass transit that already serve commuters in this region. BRT would also qualify for federal transit funding, offers more flexibility than a fixed-rail system, and is a viable option for the I-5 project.

15-4

[Oregon lawmakers say CRC project may be too expensive](#)
December, 2011 Couv . com

“CRC Deputy Director Kris Strickler said cost was a driving force behind presenting five different alternatives in the DEIS, some of which offered bus rapid transit instead of light rail. “At that time, cost was a factor,” Strickler said. “It was a driver in the discussion.”

Since Bus Rapid Transit instead of light rail was an option in the CRC DEIS, it seems like it should have been included in the IBR DSEIS, but it was not. Cost should always be a factor for Bridge designs.

15-5

Submitted by Margaret Tweet

May 5, 2026

Citizen Concerns regarding bloated IBR I-5 Bridge plan: Opposed to hasty ROD, Pause needed

Concerns: Inadequate justification for 25’ wide Bicycle & Pedestrian path proposed for 116’ tall I-5 Bridge Replacement.

[Executive Summary Draft Supplemental Environmental Impact Statement](#) 1-4 || Chapter 1

“The bicycle/pedestrian lanes on the Interstate Bridge are about 3.5 to 4 feet wide, narrower than the 10-foot standard, and are located extremely close to traffic lanes, thus impacting safety for pedestrians and bicyclists” (Figure 1-3). Interstate Bridge Replacement Program 1-6 | Chapter 1

1.8.1.1 Active Transportation Facilities on Interstate Bridge Replacement Program | Page 3-92

The American Association of State Highway and Transportation Officials (AASHTO) standards for shared-use paths recommends a typical width of 10 feet and an 8-foot minimum in constrained environments.”

Bridge design should meet the traffic needs of the region in a cost-effective manner. Capital and maintenance costs for an EXTRA-wide 25-foot Bicycle and Pedestrian path for a tiny user group is not justified. That is more than two 12-foot traffic lanes. The largest user group by far is vehicles. Public transit buses also carry bicycles, pedestrians, and mobility devices; the path is not the only means to cross I-5 Bridge. The IBR plan is for a much taller and longer I-5 Bridge, hence fewer active users may be able to use the facility.

[Final SEIS Transportation Technical Report Appendix F](#)

EXISTING TRIP ESTIMATES AND COUNTS pp 1-3

“Both active transportation forecasting methodologies depend on annual average weekday bicycle and pedestrian activity across the Columbia River using the bridge’s active transportation facilities. Since no counts existed from 2019 due to traffic counting tool malfunctions, this analysis uses a 24-hour count conducted on October 19, 2022. The count showed a combined total of 296 bicyclists and pedestrians were observed using the facility. This count was collected on a clear day when the ambient temperature was around 75 degrees Fahrenheit; however, the air quality was low due to an extreme wildfire smoke event. Therefore, the October 2022 count was adjusted to 410 daily active transportation users based on literature review of travel impacts that smoke events have on active behavior of bicyclists and pedestrians.”

“Adjustments to Count

During the October 19, 2022, nearby wildfires pushed the air quality to unhealthy for approximately half the day as measured by sensors at Portland’s Roosevelt High School (see Figure 1). This likely impacted activity across the bridge, but the degree of impact is unclear.”

*Concerns: A single count of bicyclists & pedestrians, Oct. 19, 2022, is shown in DSEIS and FSEIS as the basis for annual average weekday bicycle and pedestrian activity

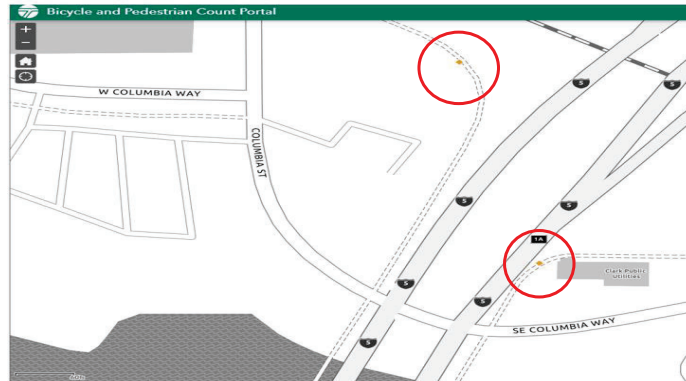
The single day observed was not typical, it was smoky. Smoky days are few per year. The count was inflated from 296 up to 410 based on literature on a smoke event in Seattle, which is not reasonable. The IBR project began in 2019 and the FSEIS was published on April 17, 2026.

There was plenty of time to collect actual data in the study area monthly for multiple years which would include smoky and non-smoky days for every month of the year.

Permanent Traffic Recorder sites and data: There are 2 Recorders on paths leading to and away from the I-5 Bridge on the Washington Side. See orange dots highlighted by red circles below

15-6

15-6



Traffic counting tool malfunctions noted in 2019 could have been corrected. Traffic Recorder data irregularities were mentioned in [2024 DSEIS](#), yet no data points were shared, and link to Traffic Recorder was not provided, so the public could not comment on the missing data.

2.2 Permanent Counts Review for [2024 DSEIS](#)

"In addition to collecting new counts, permanent counts were reviewed. Reviewing active transportation counts collected for both State Route 520 (SR 520) on the floating bridge and Interstate 5 (I-5) at the Interstate Bridge revealed several irregularities in the data. SR 520 data had missing values, but the trendline was more reliable than I-5 data. Within the permanent counts, the trendline data displayed troughs and peaks, with the peaks being unreliable."

2.2 Permanent Counts Review for 2026 FSEIS

In addition to collecting new counts in Fall of 2022, historical permanent counts were reviewed. Reviewing active transportation counts collected for both State Route 520 (SR 520) on the floating bridge and Interstate 5 (I-5) at the Interstate Bridge revealed several irregularities in the data and were determined unusable. Final SEIS Transportation Technical Report Appendix F pg 3

Traffic Recorder counts were not deemed "unusable" until the April 17, 2026 FSEIS was published. The Bicycle and Pedestrian Counts are no longer accessible to the public at this link. When was data made unavailable to the public? <https://wsdot.wa.gov/data/tools/bikepedcounts/>

Bicycle and Pedestrian Counts elsewhere in the state are still accessible. See <https://wsdot.wa.gov/about/transportation-data/travel-data/bicyclist-and-pedestrian-count-programs>

15-6

I contacted ODOT in March, 2025 about pedestrian and bicycle counts for the I-5 Bridge and got this reply that shows Traffic recorder data for 2024 and Jan-Feb 2025. Most months show much lower average bicyclist & pedestrian counts than the Oct. 19, 2022 single day count published in both DSEIS and FSEIS.

15-7

[Ask ODOT Request Center@caskodot.gov](mailto:Ask.ODOT.Request.Center@caskodot.gov) 3/21/2025 1:54 PM

Good afternoon Margaret,

Thank you for contacting Ask ODOT at the Oregon Department of Transportation (ODOT). ODOT does not have bike/ped counters on the Interstate Bridge. WSDOT however has information that I have provided below.

WSDOT Bicycle and Pedestrian Count Data

Washington Department of Transportation (WSDOT) Bicycle and Pedestrian Counts are available here: [Bicycle and Pedestrian Count Portal](#)

There is one monitor at Columbia River Bridge South and one monitor on the Columbia River Bridge North. Note that these counters were offline for long stretches of time and have only recently come back online in 2024.

SR 5 at Columbia River Bridge South- Bicyclist

Month, Year	Average Weekday	Average Weekend Day
October, 2024	92	66
November, 2024	69	64
December, 2024	58	46
January, 2025	64	64
February, 2025	64	43

SR 5 at Columbia River Bridge South- Pedestrian

Month, Year	Average Weekday	Average Weekend Day
October, 2024	100	24
November, 2024	44	26
December, 2024	87	17
January, 2025	103	175
February, 2025	69	32

15-7

SR 5 at Columbia River Bridge North- Bicyclist		
Month, Year	Average Weekday	Average Weekend Day
March, 2024	59	62
April, 2024	72	61
May, 2024	82	71
June, 2024	95	93
July, 2024	100	97
August, 2024	101	97
September, 2024	86	99
October, 2024	71	73
November, 2024	45	39
December, 2024	38	29
January, 2025	43	43
February, 2025	46	28

SR 5 at Columbia River Bridge North- Pedestrian		
Month, Year	Average Weekday	Average Weekend Day
March, 2024	38	43
April, 2024	91	79
May, 2024	325	165
June, 2024	142	73
July, 2024	73	43
August, 2024	65	69
September, 2024	50	49
October, 2024	38	32
November, 2024	10	15
December, 2024	10	7
January, 2025	19	23
February, 2025	18	12

Below are the Traffic Recorder Sites that were formerly available to the public to review.

15-7

Permanent Traffic Recorder Site:
100038003

Location ID: 28
SR 5 at
Columbia
River
Description: Bridge
South
Start Year: 2017
Record: July 31
Created: 2017
Longitude: 45.6226
Latitude: -122.6731

[Click ellipses below to access monthly traffic summary.](#)

[Zoom to](#) ***

Permanent Traffic Recorder Site:
100038002

Location ID: 37
SR 5 at
Columbia
River
Description: Bridge
North
Start Year: 2018
Record: March 14
Created: 2018
Longitude: 45.6217
Latitude: -122.6728

[Click ellipses below to access monthly traffic summary.](#)

[Zoom to](#) ***

15-8

4- In winter, fewer active users cross the existing I-5 Bridge due to rain, ice, and cold weather. A taller bridge will likely ice over sooner, which could suppress the number of active users. Engineer Bob Ortblad estimates ~200 frost free days per year. Rain can be heavy, and is a common deterrent. The permanent Traffic Recorder Counts available for 2024 show fewer bicycle and pedestrian trips in winter months. Seasonal fluctuations are not adequately accounted for in DSEIS or FSEIS.

ACTIVE TRANSPORTATION FUTURE TRIP FORECAST ESTIMATES pages 8-11

“A range of estimates is possible for active travel and mode shift from automobile usage after the construction of a high-quality bicycle and pedestrian facility across the Columbia River. Based on these two methods, **future active transportation trips across the bridge in the moderate estimate scenario are estimated to be between 740 and 1,600 per day.**”

Final SEIS [Transportation Technical Report Appendix F](#)

Response to Submission 15: Margaret Tweet (May 5, 2026)

15-8

In Conclusion...

A 24-hour observation of a **single day** of active transportation on I-5 Bridge was inflated by reference to a study in another area. In turn, this inflated estimate is the basis for future forecasts.

15-9

Is this the kind of insufficient data for existing conditions on which to base the IBR project estimated to cost \$15-17 Billion?

Is this the kind of work we should expect from consultants being paid at least \$293 Million tax dollars including a guaranteed 32% Profit Margin?

WSDOT and ODOT should have invested in repairing the Permanent Traffic recorders for an accurate, up to date average count of traffic, pedestrians, and bicycles on I-5 Bridge.

Paying costly consultants for counting and literature research as a substitution for actual data counts seems inadequate.

The General Engineering Consultant for IBR, WSP, has contracts for at least \$293.5 Million for IBR work.

See [Outrageous 32% WSP profits for IBR consulting](#)

"Oregon Department of Transportation (ODOT) and Washington Department of Transportation (WSDOT) contracted with [WSP](#), which is an international, multi-billion consulting firm advising the two agencies on transportation projects, large and small. (Former) Interstate Bridge Replacement Program (IBR) Administrator Greg Johnson was a [former](#) WSP senior vice president. He hired his former employer to act as the General Engineering Consultant (GEC) for the current effort to replace the bridge. WSDOT and ODOT agreed and signed a lucrative contract.

The Sept. 2020 WSP contract indicated they would be paid \$44 million in a 5-year contract. They agreed to the following: ***The GEC will provide the IBRP with the resources needed to advance the program through NEPA completion (Record of Decision) and pre-construction. This will include providing a Program Manager, in addition to discipline-specific resources and personnel to develop and deliver a program of this complexity.***"

WSP Contract with WSDOT & ODOT for IBR			
Completion			Contract 12435
Date	Date	Amount	Scope of Work
9/4/2020	12/31/2025	\$44 Million	Final FEIS & ROD
10/4/2021	6/30/2027	\$54 Million	Additional Engineering S-1
6/29/2022		\$74 Million	Additional Engineering S-2
11/30/2022		\$83.5 Million	Additional Engineering S-3
6/29/2023		\$213.5 Million	Additional Engineering S-4
5/13/2024		\$233.5 Million	Additional Engineering S-5
4/25/2025		\$293.5 Million	Additional Engineering S-6

Hourly Rates: Hourly rates are comprised of the following elements - Direct (Raw) Labor, Indirect Cost Rate [138.27% & 106.10%], and Fixed Fee 32% (Profit)

15-1

Public transit is required to seek federal funding from the Federal Transit Administration (FTA). Bus or bus rapid transit (BRT) could meet this requirement; however, light-rail transit (LRT) was included in the Modified Locally Preferred Alternative (LPA) instead of BRT for a variety of reasons. Please see Transportation Standard Response M.32: Light-Rail Extension in Appendix S2 of the Final Supplemental Environmental Impact Statement (SEIS), which describes why LRT was included in the Modified LPA. The Modified LPA (now the Amended Selected Alternative) also includes improvements for bus and express bus service, in addition to LRT.

A bicycle and pedestrian path is not specifically required in order to receive federal funding, but consideration of that transportation mode is consistent with Federal Highway Administration (FHWA) and FTA environmental regulations (see 23 Code of Federal Regulations Part 771.105(c)). Substandard bicycle and pedestrian facilities is one of the six transportation needs identified in the purpose and need statement for the IBR Program (see Chapter 1 of the Draft and Final SEIS) because the existing facility includes narrow bicycle and pedestrian paths that do not meet current design standards. Because improving bicycle and pedestrian facilities is a project need, the build alternative for the IBR Program includes such improvements.

15-2

The Southwest Washington Regional Transportation Council (RTC) is a National Environmental Policy Act (NEPA) joint lead agency and has participated in the preparation of the Draft and Final SEIS. The RTC has had opportunities to review the Draft and Final SEIS to contribute to the technical adequacy of the analysis. The Draft and Final SEIS are not distributed outside NEPA joint lead and cooperating agencies until each joint lead agency signs with its approval of the document. Legislators, councilors, and other elected officials received access to the Draft and Final SEIS at the same time as the general public. The Final SEIS was published on April 17, 2026, which occurred after the RTC board meeting on February 3, 2026, as noted in this comment. At that meeting, representatives from the IBR Program presented information to the RTC board about the Program and the Final SEIS. The RTC board meeting packet included a briefing memorandum from the RTC Executive Director that outlined the findings that RTC staff had made to support its planned signature on the Final SEIS.

FHWA and FTA are required to publish notices of availability of environmental impact statements, including the Draft and Final SEIS for the IBR Program, in the Federal Register. Similarly, the Washington State Department of Transportation (WSDOT) is required to publish all NEPA and Washington State Environmental Policy Act (SEPA) documents, including the Draft and Final SEIS for the IBR Program, in the Statewide SEPA Register. Publication of notices in other media are discretionary, but the IBR Program distributed notifications through the Program website, as well as many print, radio, and social media platforms, and community engagement activities, to reach the public. More detail on the Program's public outreach is provided in Appendix B, Public Involvement, in the Final SEIS.

Additional information about access to the Draft SEIS is described in the Public Involvement Standard Response J.16: Draft SEIS Accessibility in Appendix S2 to the Final SEIS.

15-3

See Public Involvement Standard Response J.19: Past Voting – Light-Rail Transit and Transportation Standard Response M.39: Transit Safety and Security in Appendix S2 of the Final SEIS.

15-4

Section 2.5.3 and Appendix D of the Draft and Final SEIS detailed the evaluation and selection of LRT as the high-capacity transit (HCT) mode across the Columbia River. As described in those sections, the IBR Program is a continuation of the Columbia River Crossing (CRC) project that was suspended in 2014. The CRC Draft Environmental Impact Statement (EIS) evaluated two HCT modes: BRT and LRT. A Selected Alternative was identified in the CRC Final EIS and Record of Decision, which included extension of LRT from the Expo Center MAX Station in Portland to Clark College in Vancouver.

See Transportation Standard Response M.32: Light-Rail Extension in Appendix S2 of the Final SEIS, for more information about analysis since the CRC project that resulted in the inclusion of LRT in the Amended Selected Alternative.

15-5

The American Association of State Highway and Transportation Officials standards provide a “typical” and a recommended minimum bicycle/pedestrian lane width, but best design practices also encourage consideration of site-specific factors such as the length of a trail if there are no accessible adjacent areas for stopping or refuge, grades (here approximately 4%), the appropriate ways to separate bicycle users from pedestrians and others, and the presence of adjacent fixed objects. The pathway width evaluated in the Draft and Final SEIS is a conceptual design assumption for the purpose of establishing an environmental footprint to evaluate potential environmental impacts of the bridge options as part of the Modified LPA. Details of the widths or various components on the bridge, including the SUP, would continue to be refined as the Program continues into more detailed design, which includes potential measures to reduce environmental impacts and improve cost-effectiveness and public benefits.

15-6

As described in the Transportation Technical Report (TTR) and Appendix F to the TTR published with the Draft and Final SEIS, bicycle and pedestrian counts were collected in 2022 because historical counts from base year 2019 were not available. The malfunctioning of the counters was a long-term issue that could not be fixed quickly and needed funding to be permanently repaired.

The 2022 counts were collected in October, a month that typically experiences average bicycle and pedestrian usage and does not show the seasonal fluctuations of summer and

winter counts. As noted in the TTR and its Appendix F, the October 2022 count was impacted by poor weather (wildfire smoke) on the date of collection. Therefore, the count needed to be adjusted to develop a typical average day condition for comparison, to account for the impacts of wildfire smoke on users. The adjustment to the October 2022 count was described in detail in Appendix F and included consideration of a literature review of smoke impacts on active transportation users in Seattle during smoke events. The literature review was a reasonable source to adjust counts impacted by smoke events because it summarized impacts to counts during smoke events versus without smoke events in similar climate locations and facilities. The final factored 2022 counts were compared with historical counts of users across the Interstate Bridge and were similar to historical counts when the counters were working, as stated in the TTR. Therefore, there was no need to collect new counts once the counters were back up and running in 2024 because the adjusted October 2022 counts were in alignment with other historical counts. Collecting counts during average month conditions, such as October, is standard industry practice and is in alignment with the data from the commenter that shows other months, including summer and winter, showing seasonal variations.

The existing bridge has substandard active transportation facilities, so the number of existing users would not reflect the number of users of the future facility that would be brought up to standards, providing a higher level of comfort, accessibility, and safety. To determine the number of future users, the future 2045 active transportation forecasts used the adjusted October 2022 baseline count, as well as incorporated other data on trips that could be converted to active transportation users if the facilities met standards. These 2045 active transportation forecasts are described in detail in Appendix F to the TTR.

15-7

Please refer to the response to Comment #15-6.

15-8

Please refer to the response to Comment #15-6 for information on the active transportation counts collected for the IBR Program.

As described, the counts were collected in October. This is typically an average month that does not experience the seasonal fluctuations of summer or winter counts. Active transportation users will fluctuate by season, as stated in the comment, but using average months in data collection and impact analysis is standard practice in the industry.

15-9

Please refer to the response to Comment #15-6 about the methodology used to develop existing and future active transportation user counts.

The use of consultants is common on large transportation projects.

Appendix G.2

NON-SUBSTANTIVE SUBMISSIONS

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Record #16

Submission Date : 4/17/2026

First Name :

Last Name : Anonymous

Submission Input : This bridge is just fine - there is zero need to replace it.

Population is decreasing, people are driving less. You are just trying to make growth happen again, but it's not going to!

Total boondoggle.

Submission Source : General Info Email

Record #17

Submission Date : 4/17/2026

First Name :

Last Name : Anonymous

Submission Input : SHUT IT ALL DOWN. COMPLETELY.
UNTIL YOU GET IT THROUGH YOUR THICK SKULL THAT VANCOUVER
DOES NOT WANT YOUR CRIME-TRAIN, NOR DO WE WANT TO PAY TRI-
MET'S O&M COSTS.
MAYOR annie ogle AND THE CITY CLOWNCIL DO NOT SPEAK FOR THE
MAJORITY OF VANCOUVER RESIDENTS.
BUILD A TUNNEL AND SAVE A HELLUVA LOT OF MONEY!!!!

Submission Source : General Info Email

Record #18

Submission Date : 4/25/2026

First Name :

Last Name : Anonymous

Submission Input : I do not support a toll on this new bridge with a MAX line. I do however support a Toll only to pay for project for X amount of years. Then once paid for the toll to be removed.

Submission Source : General Comment Form

Record #19

Submission Date : 4/28/2026
First Name :
Last Name : Anonymous
Submission Input : Totally against this public ripoff. The wasted \$\$\$ should be investigated.
Submission Source : General Comment Form

Record #20

Submission Date : 4/29/2026
First Name :
Last Name : Anonymous
Submission Input : I would like to get on the MAX at the Rosa Parks station and ride it to Vancouver, Washington's water front.
Submission Source : General Comment Form

Record #21

Submission Date : 4/29/2026
First Name :
Last Name : Anonymous
Submission Input : I would not like to have light rail in Vancouver. Its a cost we can not afford for an inefficient method.
Submission Source : General Comment Form

Record #22

Submission Date : 4/17/2026
First Name : Richard
Last Name : Birke
Submission Input : Bad idea. I continue to oppose the expensive, neighborhood-destroying, unpopular and ultimately traffic-increasing expansion. You are in someone's pocket. Sent from my iPhone
Submission Source : General Info Email

Record #23

Submission Date : 5/14/2026

First Name : Phillip

Last Name : Gagnier

Submission Input : I saw an argument for a tunnel instead of a bridge get shot down. Because of excessive distance to daylight at 6 percent typical maximum grade. With the federal government as one of the partners it would seem logical that they would be highly interested in raising that grade to 9 percent and using a segmented tunnel system. The cost, time and money saved by doing this would only be exceeded by the lessened disruptions. Being able to keep in place an existing bridge while building the tunnel for all traffic would be an enormous win for all. Please look at ways to be creative, not dismissive. The team would be an enormous hero and all negative past would be forgotten within kind of option.

Submission Source : General Comment Form

Record #24

Submission Date : 4/17/2026
First Name : Ralph
Last Name : Gigantelli
Submission Input : Hmm, an unsolicited email from the government. You clowns have screwed up this project for decades now. I will die before groundbreaking starts because no one wants light rail except local government. Well have you seen how democratic leadership has ruined the west coast? Just make sure there are plenty of camping locations on that new bridge of yours. You would want to leave your houseless voters out of the new planned bridge.
Submission Source : General Info Email

Record #25

Submission Date : 4/23/2026
First Name : Jake
Last Name : Hallahan
Submission Input : The new bridge should be beautiful. Think the new parts of PDX— stunningly beautiful to view, be in, and be welcomed by. Something the rivals the golden gate or St. John’s bridge should be built at such an iconic crossing.
Submission Source : General Comment Form

Record #26

Submission Date : 4/17/2026
First Name : Mike
Last Name :
Submission Input : No light rail, voters have decided.
Submission Source : General Info Email

Record #27

Submission Date : 4/29/2026
First Name : Jeff
Last Name : Posey
Submission Input : Hi,

Vancouver can not fiscally afford light rail, or a costly bridge replacement (e.g. we cant afford to educate our children).

Light rail should not be included in the project.

The bridge works fine, i drive it often. The only time transit is at capacity is when Vancouver commuters travel to work. The rest of the day buses, and trains will be empty.

Trimet cant afford their current budget. Oregon, Washington, DC. Nobody has money for frivolous spending.

Sincerely,

Jeffrey Posey

Get Outlook for iOS<<https://aka.ms/o0ukef>>

Submission Source : General Info Email

Record #28

Submission Date : 4/17/2026
First Name : Ernie
Last Name : Suggs
Submission Input : The only people who want Light rail, is Oregon, to help pay for their debt and Vancouver.
No one else in Clark county wants it or the tax burden.
Ernie
Submission Source : General Info Email

Record #29

Submission Date : 4/17/2026

First Name : Kirk

Last Name : VanGelder

Submission Input : And the will of the people is being ignored once again! This is maddening! We have said NO to Light Rail repeatedly and with a LOUD VOICE, and still you ignore us! Shameful!

Very sincerely,

Kirk VanGelder
Irate Citizen, Taxpayer, and Voter!

Submission Source : General Info Email

Appendix G.3

PROPERTY AND BUSINESS OWNER SUBMISSIONS

Index

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Record #31

Submission Date : 4/20/2026

First Name : Janay

Last Name : Gladman

Submission Input : Hello, my name is Janay Gladman. I was just calling to get more information about this I-5 bridge replacement. We got a letter in the mail regarding our home. I'm about ready to be putting new flooring in my house and I'm curious if I'm not going to do that now. I need somebody to call me back as soon as they can. My phone number is ###-###-####. Have a good day.

Submission Source : Voicemail/Phone

Record #32

Submission Date : 4/22/2026

First Name : Janay

Last Name : Gladman

Submission Input : Hello, my name is Janay Gladman. I'm calling about the I-5 bridge replacement. We got a letter in the mail, and I need some more information about it because I am putting flooring in my home and now I am wondering if I should not, because I have no clue what you guys are doing. So I need to know. Please call me back, ###-###-####. It's kind of a, you know, urgent matter for our family to understand what's going on and get this done. This is a couple times I've called. This might be a different number I've called, but I was also told I get a call back today and I know it's only 11, but I don't see that happening because the last time I had a call, nobody called me back. So please call me back, ###-###-####.

Submission Source : Voicemail/Phone

Record #33

Submission Date : 4/23/2026

First Name : Janay

Last Name : Gladman

Submission Input : Hello, I have been trying my hardest to get in contact to talk to somebody. My name is Janay Gladman and my phone number is ###-###-####. I am getting call backs but it is becoming not for the right matter. I need to get a hold of somebody who knows more information about the I-5 bridge replacement. I need to know what's going to go on with my house, my yard, everything. It's putting me in a stressful situation because we are not getting much information and we live here. So, I have a baby, I am trying to add stuff to my home, trying to make it the best I can, and now we get a letter in the mail saying that they are either going to take our house, our yard, or alley way, or what. I need to know what's going on. So if somebody can please call me back. ###-###-####. Thank you.

Submission Source : Voicemail/Phone

Record #34

Submission Date : 4/27/2026
First Name : Chris
Last Name : Hesla
Submission Input : Hi, my name is Chris Hesla, and I'm calling because we just bought a property along the replacement route, and all legal notices have gone to the previous owner. My phone number is ###-###-####. My email is *****@gmail.com. If you could contact me, that would be great. Thank you.
Submission Source : Voicemail/Phone

Record #35

Submission Date : 4/20/2026
First Name : Ryan
Last Name : Luke
Submission Input : Hello

It looks like my business is listed as possibly losing nearly 4 acres in this project. I have not been contacted. I am the manager at Manheim @ XXXXXXXXXXXXXXXX, XXXXXX. Please contact me or provide the name and phone number of someone I can speak with about the details that may affect my business.

Ryan Luke
General Manager
Manheim Portland
m: ###-###-####

Submission Source : General Info Email

Record #36

Submission Date : 4/20/2026
First Name : Avril
Last Name : Zielin-Brodey
Submission Input : Hi. I own the duplex at ### ***** Street in Vancouver, Shumway district. Please can you tell me what the impact will be on my particular property and where in all this paperwork I can find that information? Thank you.
Avril Zielin-Brodey
Submission Source : General Comment Form

Record #37

Submission Date : 4/20/2026
First Name : Avril
Last Name : Zielin-Brodey
Submission Input : Hi.
I own the property at v in Vancouver, Shumway district, and it seems this property will be impacted by the bridge construction. Please can you tell me what exactly the impact on this particular property will be and where I can find that specific information in all the reports? Thank you.
Avril Zielin-Brodey
Submission Source : General Info Email