



**U.S. Department of Transportation
Federal Railroad Administration**

Point Defiance Bypass Project

FINDING OF NO SIGNIFICANT IMPACT

February 2013

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1.0 INTRODUCTION

The Washington State Department of Transportation (WSDOT) is implementing a program of infrastructure improvement projects along the Pacific Northwest Rail Corridor (PNWRC) also known as the PNWRC Improvement Program. The PNWRC Improvement Program is made up of approximately 17 component projects. To fund these projects, WSDOT applied and was selected for grant funding through the Federal Railroad Administration's (FRA) High Speed Intercity Passenger Rail (HSIPR) Program.

One such component project is the Point Defiance Bypass Project (the Project or Build Alternative), WSDOT has proposed to respond to deficiencies in the existing rail operations around Point Defiance between Tacoma and Nisqually in Washington State. As part of the PNWRC Improvement Program, when combined with the other component projects, this Project would allow for two additional round trips of the Amtrak Cascades service between Seattle, Washington, and Portland, Oregon with improved reliability and reduced travel time. This Project would also support Amtrak's longer-distance Pacific Northwest passenger rail service, the Coast Starlight.

FRA and WSDOT prepared an Environmental Assessment (EA) to analyze and document whether the Project would have significant effects on the environment. This Finding of No Significant Impact (FONSI) is made based on the information in the EA and has been prepared by FRA and WSDOT to comply with the National Environmental Policy Act of 1969 (42 U.S.C § 4321) (NEPA), FRA's Procedures for Considering Environmental Impacts (64 Fed. Reg. 28545, May 6, 1999), and other related laws. WSDOT will use FRA's decision documentation and other supporting documentation to satisfy the Washington State Environmental Policy Act (SEPA) (WAC 197-11). The final version of the EA is available to the public on FRA's website at <http://www.fra.dot.gov/Page/P0212> and WSDOT's Project website at:

http://www.wsdot.wa.gov/Projects/Rail/PNWRC_PtDefiance/environmental_assessment.htm

2.0 PURPOSE AND NEED

As described above, the Project is part of the larger PNWRC. Within Washington State, the vision for the PNWRC is to "...improve intercity passenger rail service by reducing travel times and achieving greater schedule reliability in order to accommodate growing intercity travel demand..."

The purpose of the Project is to provide more frequent and reliable intercity passenger rail service along the PNWRC between Tacoma and Nisqually.

The Project is needed to address the deficiencies in the existing rail alignment around Point Defiance. The existing alignment (Puget Sound route), shared by freight and passenger rail traffic, is near capacity and therefore unable to accommodate additional intercity passenger rail service without substantial improvements. In addition, the Puget Sound route has physical and operational constraints that adversely affect both passenger train scheduling and reliability.

3.0 DESCRIPTION OF ALTERNATIVES

As part of an alternatives analysis process, FRA and WSDOT evaluated three build alternatives: the Point Defiance Bypass route, the Shoreline Alternative, and the Greenfield Alternative to identify the range of reasonable alternatives to carry forward for detailed analysis. A brief description of each build alternative follows:

- ◆ The Point Defiance Bypass route includes railroad track and support facility improvements, and the relocation of Amtrak's Tacoma Station.
- ◆ The Shoreline Alternative would make improvements along the 26-mile-long Puget Sound route between Nisqually and Tacoma. This alternative consists of adding 8 miles of new track and re-aligning 15 miles of existing track.

- ◆ The Greenfield Alternative includes six routes (Lakewood South Route, Spanaway Route, Lakewood to Tacoma Tunnel Route, Fredrickson Route, Rainer Route, and I-5 Median Route). Although each route has minor differences each would construct a new alignment and reconstruct an existing route.

Two of the alternatives (Shoreline Alternative and Greenfield Alternative) were eliminated from further study as each was determined to be impracticable and unfeasible due to technical constraints, high construction costs, and significant environmental effects.

Modifications to the proposed Project were suggested during the two-year public involvement process, including adding a Cascades station within the Lakewood or DuPont city limits, and constructing one or several grade-separated crossings. Consistent with the trip time element of the Project's purposes and need and in order to meet performance standards set by WSDOT, no additional stops are proposed. The evaluation of grade separations, as described in the EA, revealed that current and projected future traffic volumes do not warrant the construction of new grade-separated crossings.

Two alternatives are considered in the EA, the No Build Alternative and the Build Alternative.

3.1 No Build Alternative

Under the No Build Alternative, Amtrak's Cascades and Coast Starlight passenger train service would continue to use the existing Puget Sound route. The No Build Alternative includes only the minor maintenance and repair activities necessary to keep the existing Puget Sound route operational but with no extensive infrastructure improvements.

Along the Point Defiance Bypass route, the Tacoma Rail and Burlington Northern Santa Fe (BNSF) freight services would continue. The at-grade crossings at Clover Creek Drive Southwest, North Thorne Lane Southwest, Berkeley Street Southwest, 41st Division Drive, and Barksdale Avenue Southwest would not be upgraded.

Sound Transit's *Sounder* commuter passenger trains became operational in October 2012 between the Tacoma Dome Station at Freighthouse Square in Tacoma and Sound Transit's Lakewood Station (on the Point Defiance Bypass route) with up to 18 *Sounder* trains per day.

3.2 Build Alternative

The Project consists of railroad track and support facility improvements to facilitate the rerouting of Amtrak's intercity passenger rail to the Point Defiance Bypass route, and the relocation of Amtrak's Tacoma Station. The following details specific components of the Build Alternative (Figure 1).

Construct New Track Adjacent to the Existing Main Line – A new 3.5-mile track adjacent to the existing main line would be constructed from South 66th Street (Rail milepost [MP] 6.9) in Tacoma to between Bridgeport Way Southwest (Rail MP 10.4) and Clover Creek Drive Southwest (Rail MP 10.9) in Lakewood.

Reconstruct and Rehabilitate the Existing Main Line – Starting just southwest of Bridgeport Way Southwest (Rail MP 10.4) in Lakewood, the existing track would be reconstructed to a location southeast of the I-5/Mounts Road Southwest interchange (Rail MP 19.8) at Nisqually Junction.

Improvements at the At-grade Crossings – Five highway-rail grade crossings would be improved with wayside horns, gates, traffic signals and signage, sidewalks, median separators, and warning devices. These crossings include Clover Creek Drive Southwest, North Thorne Lane Southwest, Berkeley Street Southwest, 41st Division Drive and Barksdale Avenue.

Tacoma Amtrak Station Relocation – The existing Tacoma Amtrak Station would be relocated from its Puyallup Avenue location to the Tacoma Dome Station at Freighthouse Square, at 430 E. 25th Street in Tacoma. This work includes platform modifications to accommodate longer Coast Starlight trains. The proposed Freighthouse Square station would provide the same or more

parking spaces than are currently available at the Tacoma Amtrak Station. Parking would be located on a parcel near Freighthouse Square that either has parking available for lease or which can be purchased and developed into a parking lot for exclusive use by Amtrak passengers. In addition to this proposed parking, there would be some available on-street parking near the station.

Operational Changes – Amtrak’s existing Cascades and Coast Starlight passenger train service would be rerouted from the Puget Sound route along the Puget Sound shoreline to the Point Defiance Bypass route. The Project would also provide for additional Amtrak Cascades service by increasing the number of roundtrips provided per day from 4 to 6, or a total of 12 Cascades service train trips. Two (roundtrip) Amtrak Coast Starlight train trips per day would travel on the Point Defiance Bypass route. Train speed would increase from the current 30 miles per hour (mph) for *Sounder* trains to a maximum operating speed of 79 mph for all passenger trains.

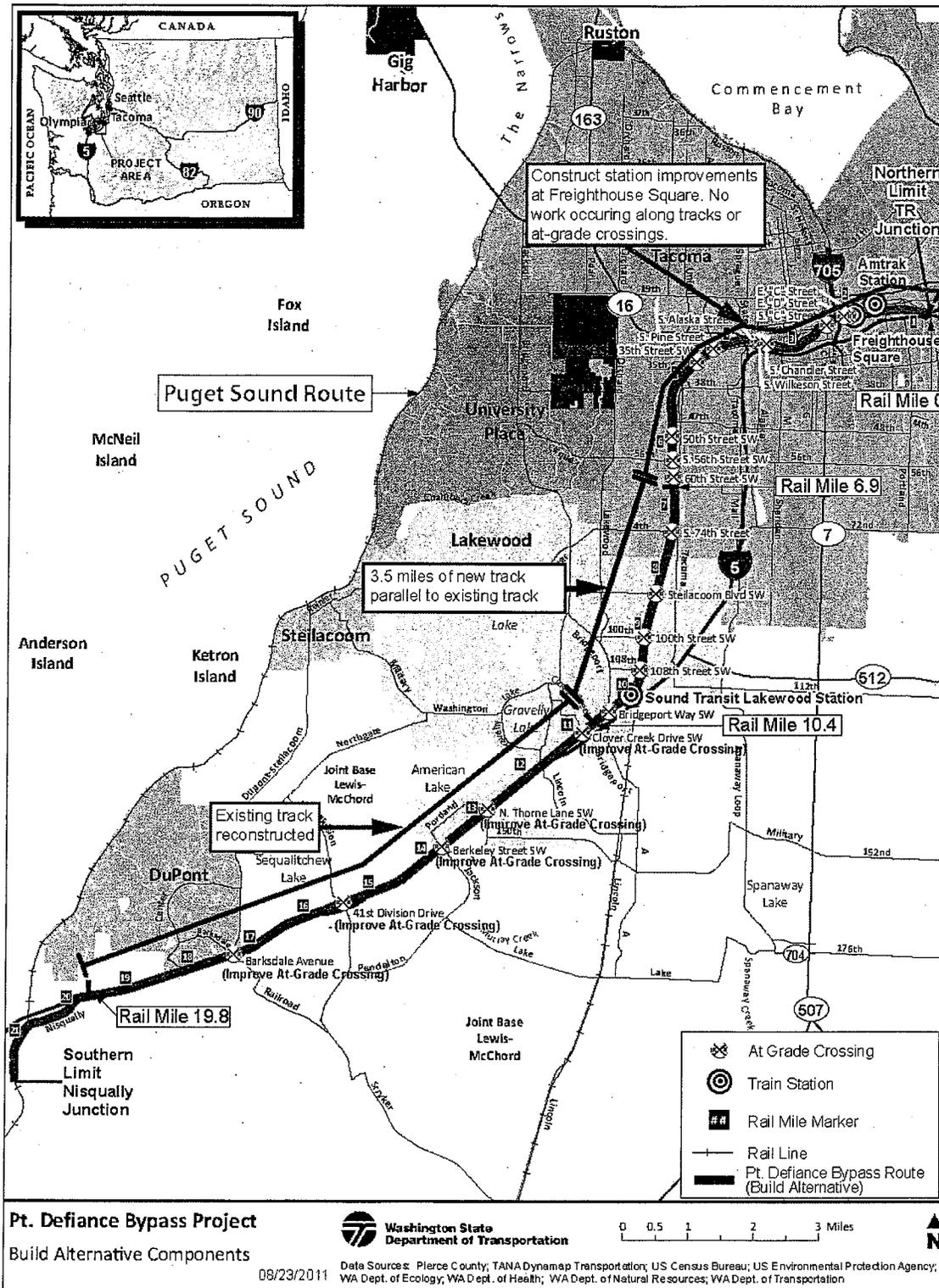


Figure 1. Build Alternative Components

4.0 SUMMARY OF EFFECTS

Environmental effects of the Build Alternative are summarized in this section.

4.1 Air Quality

The Project would not result in significant air quality impacts. Construction would result in a temporary increase in Mobile Source Air Toxics (MSAT) emissions in the study area, and temporary odors may be detected by people near asphalt paving operations. Measures will be implemented to control particulate matter emissions during construction.

Implementation of the Project would be in conformity with Clean Air Act requirements and would not cause exceedance of the National Ambient Air Quality Standards. The Project is not predicted to increase regional highway vehicle miles traveled and thus not affect regional air pollutant levels. Increased locomotive emissions resulting from increased Amtrak Cascades service frequency would be offset to a degree by the reduction in track miles traveled with the Build Alternative.

4.2 Noise

During construction, there would be localized increases in noise levels (ranging from a maximum of 71 to 98 decibels [dBA] at 50 feet). The increases in noise would be typical of those emitted from construction equipment, which range from 71 to 98 dBA at 50 feet. However, because various pieces of equipment would be turned off, idling, or operating at less than full power at any given time, average daytime noise levels would be less than the maximum noise levels indicated above. Therefore, construction noise effects on sensitive receptors are not anticipated to be significant.

Operation of the Project would not result in significant noise effects on noise sensitive receptors. Noise exposure would be generated by several sources, including passing trains, trains going over special track work (such as joints or frogs), and warning equipment (either wayside horns or on-train horns). Moderate noise impacts are predicted at two groups of sensitive receptors for the Project: Site 6M and Site 16N. Increased noise levels at noise-sensitive receptors would be caused by new warning devices (wayside horns) at signalized at-grade crossings. The use of wayside horns by both Amtrak and freight trains will replace train mounted horns with quieter wayside mounted horns that would reduce this particular source of noise. Wayside train horn volumes would be lower than the maximum noise level allowed by FRA for train-mounted horns, which is 92 dBA at 100 feet. Noise effects from wayside horns would be localized and only occur during passenger rail operations anticipated to be scheduled between the hours of 7:00am and 10:00pm.

4.3 Vibration

During construction, typical vibration-producing equipment would produce vibration levels in the range of 66 to 112 vibration decibels (VdB) at a distance of 25 feet. Construction-related vibration effects are predicted at up to 16 residences. At these residences, vibration occurrences at the higher end of the range would be above the Federal Transit Administration's (FTA) vibration impact criteria of 80 VdB. However, because of the linear nature of rail construction, activities and any resulting vibration effects would be temporary and occur infrequently. As a result, vibration effects during construction would not be significant.

During operations, vibration effects above the FTA vibration impact criteria of 80 VdB for infrequent events are predicted to occur at some locations. Additional impacts resulting from a 3 VdB or higher increase over the existing vibration levels in the corridor shared with Sound Transit *Souder* service (Lakewood Station to TR Junction) are predicted at other locations, but these would be below the FTA impact criteria of 80 VdB for infrequent events. However, because the Project would be designed and built consistent with the commitments described Section 8.0, the vibration impacts would be below the FTA vibration impact thresholds.

4.4 Transportation

During construction, some Tacoma Rail freight service would be rerouted to available Tacoma Rail tracks when portions of the Point Defiance Bypass route (south of Lakewood) are out of service. WSDOT would coordinate with Tacoma Rail to maintain continued freight access during construction. *Sounder* train service would not be affected by construction because the trains operate on adjacent tracks.

Construction vehicles would increase traffic delay during construction. Temporary lane closures and occasional weekend road closures would be required to rebuild the track and install safety improvements at the at-grade crossings. Traffic control plans for these closures would include signage and prior notice to alert local and I-5 drivers of the work. Construction activities would similarly disrupt and delay transit, pedestrians and bicyclists, and parking temporarily.

Relocating passenger rail service to the Point Defiance Bypass route would have a beneficial transportation effect by improving travel time of the Amtrak Cascades service by 10 minutes due to the shorter distance (approximately 6 miles) and because the trains will operate at higher speeds (up to 79 mph) on less congested tracks. Further benefits include improved reliability of the Cascades service by avoiding potential delays from freight trains on the Puget Sound route. Freight trains on the Puget Sound route would not be affected by relocating passenger trains to the Point Defiance Bypass route but could experience a slight benefit by removing passenger rail operations from the Puget Sound route.

No new at-grade highway or rail crossings are planned and no existing at-grade road crossings would be closed with the Build Alternative. The addition of Amtrak passenger service to the Point Defiance Bypass route would increase the number of short-term roadway blockages from train crossings throughout the day. The additional blockages would cause an increase in the overall time roadways are blocked for the Build Alternative by approximately 1 minute during the morning and afternoon peak hour. Roadway blockage by additional train crossings would also increase queue length by 2 to 4 vehicles. At some locations, the queue length would be reduced because of signal improvements.

The Build Alternative would reduce the number of intersections exceeding the Level of Service (LOS) D standards set by local jurisdictions and WSDOT from nine to eight. With the Build Alternative, several intersections experience minor impacts resulting in decreased LOS but would range between LOS A through D. The remaining intersections would experience some change in delay (seconds per vehicle) but no LOS changes.

While stopped at Freighthouse Square, the Coast Starlight train would extend beyond the existing station platform and across East C Street and East D Street. During an event at the Tacoma Dome, the dwell time of the Coast Starlight train at Freighthouse Square would result in a decline of LOS to below LOS D. The temporary blockage of these two streets would result in a decline of LOS to below LOS D during an event at the Tacoma Dome. Minimization of operational effects on traffic as a result of the Coast Starlight dwell time at Freighthouse Square, and during a Tacoma Dome event, would include implementation of a detour plan that could include static signs identifying the detour routes, dynamic message signs that identify the detour routes during a train blockage, lane striping and controller modification.

The Tacoma Amtrak Station relocation to Freighthouse Square would improve pedestrian connections between Amtrak passenger rail and transit services provided at the Tacoma Dome Station (*Sounder*, Tacoma Link light rail, and bus transit). The Build Alternative would also improve sidewalks thus improving pedestrian access and safety. Pedestrians and bicyclists would experience similar intersection delays as vehicles with the Build Alternative. Freight trains on the Puget Sound route could experience a slight benefit with the shift of passenger rail service from the Puget Sound route.

4.5 Geology and Soils

The Build Alternative would not have a significant effect on geology or soils. Use of construction best management practices (BMPs) would minimize soil disturbance and erosion during construction. Operation of the Build Alternative would not affect existing geologic hazard areas.

4.6 Water Resources

The Build Alternative would not have a significant effect on water resources. During construction, use of BMPs would minimize or avoid erosion, sedimentation, and pollutant spill effects to surface water and groundwater resources. The Build Alternative would not affect surface waters through changes in volume or water quality, because the new impervious surface area is below the thresholds outlined in the WSDOT Highway Runoff Manual (HRM). No changes would be made within the boundaries of regulated shorelines or floodplains. The operation of the Build Alternative would not affect surface waters, critical aquifer recharge, or well protection areas.

4.7 Wetlands

While construction activities associated with the Build Alternative could result in temporary effects to adjacent wetlands, the effects on the wetlands would not be significant. Construction could result in a short-term loss of wetland functions associated with habitat and water quality and ground disturbance could result in minor erosion of disturbed soils into wetlands and buffer areas, impairing vegetation and habitat. Clearing and grading activities in the vicinity of wetlands would have the potential to affect surface water quality during seasonal events when surface water is present. However, through implementation of required BMPs, effects during construction would be minimized or avoided. The operation of the Build Alternative would not affect wetlands.

4.8 Fish, Vegetation, and Wildlife

The Build Alternative would not have a significant effect on fish, vegetation, or wildlife. No in-water work is proposed and no effects to water quality are anticipated during construction or operation, thus no effects to fish would occur. Approximately 24 acres of maintained vegetation, 2.5 acres of disturbed mixed forest, and 1 acre of scattered trees would be removed as a result of the Build Alternative. These vegetation types do not support habitat for species protected under the Endangered Species Act (ESA), thus no effects to ESA-protected species would occur during construction or operation of the Project (see Appendix A for the no effect concurrence letter from the National Marine Fisheries Service). Removal of vegetation from the Project corridor during construction and maintenance during operations would have no effect on wildlife, as the quality of habitat in the Project area is poor and what little wildlife that might be present could relocate to other similarly vegetated areas in the vicinity. Visual disturbance and elevated noise are expected to be marginally higher than baseline levels during construction, thus the effects on wildlife during construction would be minimal.

4.9 Hazardous Materials

During construction there is the potential to encounter previously contaminated soil or groundwater, which could result in public health or environmental effects. Minimization measures would avoid, control, and manage effects associated with earthwork in areas where potential contamination concerns have been identified, including near the ASARCO smelter plant in Tacoma, the Lakewood Superfund Site near I-5 in Lakewood, and the Freighthouse Square area in downtown Tacoma. The Project is intended to improve passenger train operations and there would be no foreseeable increase in the freight rail transport of hazardous material as a result of the Build Alternative.

4.10 Visual Quality

Construction of the Build Alternative would have a minor effect on visual quality as construction would be relatively short in duration and not affect any single location along the tracks for a long period of time. Operational changes would increase the time trains are present and visible along the Point Defiance Bypass route. Visual impacts resulting from changes to the Freighthouse Square building and platform to accommodate use by Amtrak would be minor. The changes to the Freighthouse Square building and parking would be compatible with surrounding land uses and existing visual conditions.

4.11 Cultural and Historic Resources

The Build Alternative would have no adverse effect on cultural or historic resources present in the area of potential effect (APE), including Native American traditional cultural or ceremonial places or resources. Several historic properties have been identified in the APE, but the Build Alternative would not affect any attributes that make the properties eligible to the National Register of Historic Places. Federally-recognized tribes and the Washington State Historic Preservation Officer (SHPO) were consulted, as required by Section 106 of the National Historic Preservation Act. The SHPO concurred with the determination of no adverse effect on cultural and historic resources (see Appendix A).

4.12 Section 4(f) Resources

Section 4(f) of the Department of Transportation Act of 1966 protects certain park and recreational lands, refuges, and historic sites from being "used" in transportation projects carried out or funded by modal administrations of the U.S. Department of Transportation, including FRA. Section 4(f) resources include any publicly-owned public park, recreation area, wildlife or waterfowl refuge, or any publicly- or privately-owned historic site. No properties eligible for protection under Section 4(f) are present within the study area and therefore no Section 4(f) uses would result from the Project.

4.13 Socioeconomics

The Build Alternative would have minor temporary effects on neighborhoods and businesses adjacent to the railroad corridor during construction, including localized increases in noise and air emissions from construction activities. In general, during construction localized traffic circulation and accessibility to neighborhoods and businesses would be disrupted by construction of improvements at the at-grade crossings. However, the operation of local businesses would not be disrupted, since most construction would occur within the railroad right-of-way, away from intersections and business access locations. Construction of the Build Alternative would affect access to some public services during construction. Construction employment for the Build Alternative would be small and specialized, so there would be a minor benefit for employment and gross income.

Project Operation would have the following effects on the socioeconomic elements presented below:

Community Characteristics. The Build Alternative would not cause a direct change in the demographics, land use patterns, neighborhoods, or other related community characteristics.

Community Connectivity and Cohesion. The increased number of trains (up to 14 per day in addition to up to 18 *Sounder* trains) would reduce connectivity during train crossings of local roads. However upgrades (intersection and signal improvements) to 5 at-grade crossings would improve connectivity and safety for pedestrians, bicyclists, and vehicles as well as improve traffic flow for some intersections. The Tillicum, Woodbrook, and Nyanza neighborhoods would continue to experience some isolation because of existing geophysical separations and limitations to authorized non-vehicular access across or along the railroad tracks. Operation of the Project may increase residents' feelings of isolation in a few neighborhoods during train pass-bys, which would be very short in duration. However, overall the Project would result in more intersections with delay decreases than delay increases. Therefore, with the Project, and the proposed traffic improvements, community connectivity would experience a minor benefit.

Although there would be an increase in noise levels, the noise analysis demonstrates that the noise level effects on sensitive noise receptors would be moderate. There would be a corollary benefit from the use of wayside horns by both Amtrak and freight trains from Lakewood to Tacoma. Replacing train-mounted horns with quieter wayside-mounted horns would reduce this particular source of noise in the communities. There would be no effect in community cohesion due to noise.

Economics. The Project is not anticipated to affect property values. The rail corridor is an existing feature with portions currently used for freight and commuter service. Measures to minimize or eliminate noise and vibration would be implemented by the Project. Operation of the Project would result in a minor benefit to the limited freight operations due to safety improvements at crossings, and the replaced rail

infrastructure at the southern end. Tacoma Rail may gain improved access to Tacoma suppliers. Freight movements are independent of the Sound Transit and Amtrak operations along the Point Defiance Bypass route. There would be no change to the operation of freight trains on the Point Defiance Bypass route under the Build Alternative. Tacoma Rail and BNSF would continue to operate as many as two trains per day or as few as two trains per week. BNSF would continue to operate intermittent freight trains on the Point Defiance Bypass route to serve military transportation needs at Joint Base Lewis McCord (JBLM).

4.14 Environmental Justice

FRA and WSDOT evaluated the construction and operational environmental effects of the Project to determine whether Environmental Justice (EJ) communities would experience disproportionately high or adverse impacts. Minority/ethnic and low-income populations were identified at locations where noise and vibration effects are predicted. While the potential noise and vibration effects would affect low-income and minority/ethnic populations, the effects would not be appreciably more severe or greater in magnitude than the effect on non-minority or non-low-income populations in the vicinity of the Project. Therefore, FRA and WSDOT determined no disproportionately high or adverse effect on EJ populations would result from the Project and the Project meets the provisions of Executive Order 12898, and Title VI of the Civil Rights Act.

4.15 Land Use

Construction activities associated with the Build Alternative would not displace any existing land uses or acquire additional property aside from potential acquisitions adjacent to Freighthouse Square for parking. Such acquisitions would occur consistent with State and Federal law. Operationally, the Build Alternative is consistent with adopted land use policies. Operational effects on existing and planned land uses would result from the Tacoma Amtrak Station relocation by enhancing the accessibility to and between the modes of transportation in the downtown Tacoma area. The rail corridor would continue to be compatible with surrounding land uses. Relocation of the Cascades and Coast Starlight service to the Tacoma Dome Station at Freighthouse Square is consistent with adopted plans specific to the revitalization and redevelopment of the Tacoma Dome neighborhood and enhancing the pedestrian connection between rail services, with the goal to create economic opportunities at local, statewide, and multi-state levels by the increased reliability and frequency of alternative modes of transportation.

4.16 Public Services, Utilities, and Safety

Temporary traffic delays for emergency vehicles and school and public buses would occur during construction. Access for emergency response services would be maintained during construction. During Project operation, the addition of Amtrak services would result in minor intersection traffic delays that would result in similar effects on all public service sectors. No public services would be displaced by the Project and all services would continue to be available to individuals in the study area.

No effects are anticipated for utilities as the Project would relocate, deepen or harden utilities within railroad right-of-ways, and access for utility maintenance and upgrades would be provided to utility owners.

With the Build Alternative, 3.2 accidents for every million train crossings are anticipated. This accident rate would be a decrease in accidents from current operations along the Puget Sound route (3.6 accidents per million train crossings). The Build Alternative would also improve safety at 5 existing at-grade crossings by adding signage, wayside horns, median barriers, sidewalks, pre-signals, and more advanced signal controllers. WSDOT has not yet developed fencing plans for the project. These will be developed during final design and in collaboration with Sound Transit.

4.17 Energy

Energy is required for construction of the Build Alternative. The majority of construction emissions are from fuel combustion from equipment used on-site. Construction energy requirements are estimated to be 539,000 million British Thermal Units (Mbtu) and greenhouse gas (GHG) emissions are estimated to be 41,000 CO₂ equivalents (CO₂e).

Operation of the Build Alternative would produce 3.3 CO₂e daily. This would result in a small annual reduction in energy consumption (321 CO₂e) compared to the current alignment because the Build Alternative alignment would be shorter and allow for more energy efficient travel.

5.0 INDIRECT EFFECTS

FRA and WSDOT considered the potential indirect effects on resource areas and found that the only potential indirect effect from the Project is related to the relocation of the Tacoma Amtrak Station from Puyallup Avenue to Freighthouse Square. The relocation of Amtrak services to Freighthouse Square may indirectly influence minor redevelopment near Freighthouse Square. The redevelopment would be consistent with local zoning and approved by state and local agencies, therefore it is unlikely to result in indirect effects on the following resources: air quality, noise and vibration, public services and utilities, or energy. The redevelopment at Freighthouse Square would not result in indirect effects on fish, wildlife and vegetation, geologic and soils, wetlands, or water resources because these resources are not present. The following resources may experience a beneficial indirect effect from the redevelopment at Freighthouse Square: hazardous materials, visual quality, land use, transportation and socioeconomic and EJ.

6.0 CUMULATIVE EFFECTS

Since the Build Alternative would have no effect on air quality, geology and soils, water resources, wetlands, fish and wildlife, and cultural resources, it would not contribute to a cumulative effect on these resources.

FRA and WSDOT considered the potential for cumulative effects resulting from the Project for resources where minor effects may occur. A discussion of the potential cumulative effects for each resource area is included in Table 1. The analysis indicated that the Project would not result in significant cumulative effects.

| Resource | Cumulative Effect |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Noise | At sensitive locations north of Lakewood Station, moderate increases in noise would likely result from a combination of future Sound Transit operations and Project-related Amtrak operations. FRA and WSDOT found that the Project's contribution to noise in the area would not lead to a significant cumulative effect. |
| Vibration | Vibration effects from the Project were also considered in combination with other reasonably foreseeable actions, and WSDOT found that the Project's vibration minimization measures are adequate to prevent an adverse cumulative effect. |
| Hazardous Materials | In general, development projects improve conditions where hazardous materials are present. Therefore, this Project is not likely to contribute to a cumulative environmental effect from hazardous materials releases. |
| Visual Quality | In the context of the existing urban environment, the visual elements of the Project would not contribute to a cumulative visual effect because it would not change the visual quality of the area. |
| Vegetation | Given the urban and disturbed condition of vegetation, the Project would not contribute to an adverse cumulative effect on vegetation. |
| Land Use | The Project would not contribute to a cumulative effect on land use because its direct and indirect effects are negligible relative to the overall development in the region. |

| Resource | Cumulative Effect |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Energy | The long-term energy use associated with the Project would be reduced from current conditions. Thus, there would be a beneficial cumulative effect on energy from the Project. |
| Public Services, Utilities, and Safety | A slight beneficial cumulative effect would result since the improvements made to the intersection signals would not occur without the Project. |
| Transportation | The reasonably foreseeable future projects would improve traffic conditions in the study area. Therefore, the Build Alternative, when considered with the reasonably foreseeable future actions, would not result in significant cumulative effects on transportation. |
| Socioeconomic and Environmental Justice | In conjunction with the Project's intersection and signaling improvements and other reasonably foreseeable future projects, there would be a slight beneficial cumulative effect on community connectivity near the Berkeley Street Southwest intersection. Connectivity north of Bridgeport Way Southwest would be unchanged. The lack of connecting streets and non-motorized access across the railroad tracks, combined with increased train activity with the Project, would result in a minor contribution to the isolation associated with the cumulative effects of past and present land use and transportation patterns in the Tillicum, Woodbrook, and Nyanza neighborhoods. |
| Climate Change | The results of WSDOT's recent vulnerability assessment show the section of I-5 along the Project to have low vulnerability to climate-related threats. WSDOT is coordinating with Sound Transit on a vulnerability assessment of all Sound Transit facilities, and the project corridor appears resilient to future climate-related effects. |

7.0 PUBLIC INVOLVEMENT

Opportunities for public involvement on the Project begin with the scoping process and other outreach efforts that took place between spring 2010 and summer 2012. Materials provided at these events and briefings included electronic PowerPoint presentations, Project maps, photos and videos, fact sheets, and illustrated Project timelines. FRA and WSDOT's efforts for the EA included outreach to a wide variety of stakeholders along the Project corridor, including meetings with state and local agencies, neighborhood associations, farmers markets, city councils, and elected officials.

The EA was issued by FRA and WSDOT for public review on October 9, 2012 for a period of 30 calendar days (comment period closed on November 9, 2012). A total of 62 comments on the EA were received from individuals or agencies, including comments from 1 federal agency, 2 state agencies, 1 regional agency, and 5 local agencies. Copies and responses to the comments are included in Appendix B.

8.0 ENVIRONMENTAL COMMITMENTS

The environmental commitments described below have been identified as the practicable means to avoid and minimize effects from the Project.

| Resource | Commitments |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Air Quality | <ul style="list-style-type: none"> ◆ Spraying water and operating water trucks on haul roads to reduce dust and particulate matter (PM₁₀) emissions. ◆ Covering and/or wetting materials on-site and during transport, or providing adequate freeboard (space from the top of the material to the top of the vehicle) to reduce PM₁₀ emissions. ◆ Providing wheel washers to remove PM that vehicles would otherwise carry off-site. ◆ Removing PM (mud and windblown dust) deposited on paved roadways. ◆ Properly maintaining construction equipment with required pollution-control devices. |

Table 2. Environmental Commitments

| Resource | Commitments |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Noise | <ul style="list-style-type: none"> ◆ Ensure all construction activities comply with local noise regulations, including no nighttime work unless a variance is obtained. ◆ Use artificial barriers (e.g. baffles, or stockpiles of construction materials) to shield against construction noise. ◆ Strategically place stationary equipment, such as compressors and generators, to reduce effects on noise-sensitive receivers during construction. ◆ During construction, equip each internal combustion engine with a manufacturer-recommended muffler. ◆ Use vibratory or hydraulic insertions for pile driving, or use drilled shafts in place of pile driving at locations determined during final design. ◆ During operations, use wayside horns at the at-grade crossings to limit the sounding of on-train horns and reduce the area exposed to train warning sounds. |
| Vibration | <ul style="list-style-type: none"> ◆ Use of track treatments (such as resiliently supported ties, or ballast mats) to reduce the vibration transmitted to the ground and reduce vibration effects on below FTA vibration impact criteria. |
| Transportation | <ul style="list-style-type: none"> ◆ Development of a traffic control plan with local jurisdictions to minimize traffic delays and periodic lane or access revisions during construction of at-grade crossing improvements. ◆ Development of framework with Tacoma Rail and BNSF to ensure rail freight deliveries meet customer needs during construction. ◆ WSDOT will coordinate with local jurisdictions regarding the construction schedule, construction areas, and detour routes during Project development to minimize community disruption including for events such as the US Open. ◆ Implementation of a detour plan that may include static signs identifying detour routes and/or dynamic message signs that identify the detour routes during a train blockage at Freighthouse Square. ◆ FRA and WSDOT would provide additional modeling detail and design at the C and D Street intersections as part of the Final Design process. |
| Geology and Soils | <ul style="list-style-type: none"> ◆ Preparing and following a Temporary Erosion and Sediment Control (TESC) Plan to implement proper erosion control and surface water runoff BMPs. ◆ Paving or permanently restoring disturbed areas as soon as possible. ◆ Designing temporary excavation slopes to prevent surface sloughing and shallow landsliding. ◆ Designing all fill and pavement areas to drain away from construction areas and prevent ponding of water and softening of subgrade soils. ◆ Limiting cut slopes to 2 horizontal feet to 1 vertical foot (2H:1V) or using retaining walls, and including permanent drainage facilities designed for anticipated water flows. |
| Water Resources | <ul style="list-style-type: none"> ◆ Prepare and implement a Construction Stormwater Pollution Prevention Plan (CSWPPP) to serve as the overall construction stormwater minimization plan. The CSWPPP would include provisions for prevention and management of spills in both construction and staging areas, and control sediment from ground disturbing activities. |

Table 2. Environmental Commitments

| Resource | Commitments |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Wetlands | <ul style="list-style-type: none"> ◆ Clearing limits would be clearly marked and protected with construction fencing. ◆ Various sediment control BMPs would be used to remove sediment prior to any stormwater runoff leaving the site. ◆ Exposed soils would be stabilized to prevent erosion (i.e., hydroseeding, straw wattles). ◆ A temporary erosion control blanket would be placed immediately after seeding, fertilizing, and mulching. ◆ All on-site pollutants, including waste materials and demolition debris, would be handled and disposed in a manner that does not cause contamination of stormwater. ◆ On-track vehicle/machinery maintenance and fueling locations would be established away from aquatic resources. ◆ Any on-site fuel storage would have secondary containment equal to 150 percent of storage capacity. ◆ All waste oils and machinery fluids would be removed by a maintenance vehicle when they are generated. No waste oils or fluids would be stored on-site. ◆ Application of chemicals such as fertilizers and pesticides would be conducted in a manner and at application rates that would not result in loss of chemicals to stormwater runoff. ◆ Highly turbid or contaminated dewatering water would be handled separately from stormwater and not allowed to enter local drainage systems. |
| Fish, Wildlife, and Vegetation | <ul style="list-style-type: none"> ◆ Confine construction activities to the minimum area necessary. ◆ Develop and implement a TESC Plan and CSWPPP for clearing, vegetation removal, grading, ditching, filling, embankment compaction, or excavation. The BMPs in the plans would be used to control sediments from ground-disturbing activities. ◆ For construction activities that occur within 200 feet of surface water or wetland habitat as identified by the Project biologist, use BMPs to ensure that no foreign material, such as railroad ballast or other material, is side cast, and to control and prevent sediments from entering aquatic systems. ◆ Native species would be used for reseeding where possible. ◆ Minimize removal of native vegetation to the greatest extent possible. |
| Hazardous Materials | <ul style="list-style-type: none"> ◆ Performing site-specific hazardous material investigations where and when necessary. ◆ Preparing and implementing a project-specific hazardous material management plan. ◆ Preparing and implementing a CSWPPP. ◆ Preparing and implementing a TESC Plan, including dust control measures as described for Air Quality. ◆ Preparing and implementing a Spill Prevention, Containment, and Countermeasures Plan (SPCCP). ◆ Coordinating with Ecology during acquisition and construction for work completed within the environmental restrictive covenant at Freighthouse Square. |
| Visual Quality | <ul style="list-style-type: none"> ◆ Maintain existing vegetation at the edge of the railroad right-of-way to screen the rail line at locations determined during final design and in coordination with the rail line owners (Tacoma Rail, BNSF, and Sound Transit). ◆ Enhance vegetative buffers and screening where the rail line is adjacent to residential and institutional properties at locations determined during final design and in coordination with the rail line owners. ◆ WSDOT will coordinate with Pierce County and other local jurisdictions regarding the construction schedule, construction areas, and detour routes during Project development to minimize community disruption including for events such as the US Open attendees. |

Table 2. Environmental Commitments

| Resource | Commitments |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cultural Resources | <ul style="list-style-type: none">◆ Prepare an inadvertent discovery plan and obtain approval from the Washington Department of Archaeology and Historic Preservation (DAHP) prior to construction. If during construction, unanticipated cultural deposits, artifacts, or human remains are encountered, work in the vicinity would be halted and local law enforcement officials and DAHP staff would be contacted immediately. |
| Public Services, Utilities, and Safety | <ul style="list-style-type: none">◆ WSDOT will coordinate and communicate with public service providers, including school districts, emergency service organizations, and agencies such as Sound Transit to ensure they are fully informed of construction progress and identify ways to minimize delays.◆ Coordination with utility owners to determine conflicts and a suitable resolution to avoid or minimize disruption. This would include coordination with the local fire department if there would be effects on fire suppression water and/or pressure.◆ Post construction schedules near affected crossings and provide the information to local newspapers for publication or to the local jurisdictions for distribution by mail to residents and businesses in the area. Project construction updates could also be posted on WSDOT's project website.◆ Continue the Operation Lifesaver program training on track safety for community members and continue to work with communities to ensure there are safe routes that avoid the illegal use of the railroad right-of-way for pedestrians and non-vehicular travel. |
| Energy | <p>Measures to reduce energy use would be employed during construction, which would also reduce GHG emissions:</p> <ul style="list-style-type: none">◆ Limited equipment idling.◆ Encouraging construction workers to carpool.◆ Locating staging areas near work sites.◆ Scheduling the delivery of materials during off-peak hours to allow trucks to travel to the site with less congestion and at fuel-efficient speeds. <p>Operationally, additional fuel efficiency would be realized with the use of the new models of locomotives that are 10 to 12 percent more energy efficient than currently used locomotives.</p> |

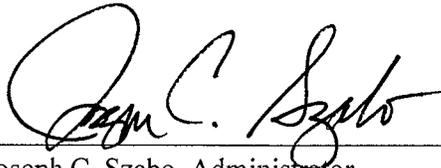
9.0 CONCLUSION

As described in the EA and further in this FONSI, the Project would improve travel time of the Amtrak Cascades service by 10 minutes and decrease train delays, allowing for more frequent and reliable intercity passenger rail, which would be a benefit for Amtrak operations and passenger rail riders along the PNWRC. The Project would also result in a slight benefit to freight trains on the Puget Sound route from removing passenger rail from the Puget Sound route.

The improvement of several at-grade crossings would improve safety by adding signage, wayside horns, median barriers, sidewalks, pre-signals, and more advanced signal controllers. Upgrades to intersections and signaling would maintain or improve overall traffic flow at substandard intersections. Replacing train-mounted horns with quieter wayside-mounted horns would reduce this particular source of noise in the communities.

Relocating the Tacoma Amtrak Station to Freighthouse Square would improve pedestrian connections between Amtrak passenger rail and transit services provided at the Tacoma Dome Station (*Sounder*, Tacoma Link light rail, and bus transit).

The FRA finds that the Point Defiance Bypass Route Project EA satisfies the requirements of FRA's NEPA "Procedures for Considering Environmental Impacts" (64 FR 28545, May 26, 1999) and NEPA (42 USC § 4321) and the Project would have no foreseeable significant impact on the quality of the human or natural environment provided it is implemented in accordance with the commitments identified in this FONSI. As the Project sponsor, WSDOT is responsible for ensuring all environmental commitments identified in Section 8.0 above are fully implemented. The EA provides sufficient evidence and analysis for FRA to determine that an environmental impact statement is not required for the Project as presented.



Joseph C. Szabo, Administrator
Federal Railroad Administration

3/1/13
Date

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