Exhibit No. _____
Docket No. TR-100127
Witness: Kevin M. Jeffers, P.E.

BEFORE THE WASHINGTON STATE
UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION, Petitioner, v. CENTRAL PUGET SOUND REGIONAL TRANSPORTATION AUTHORITY; and CITY OF LAKEWOOD, Respondents.	DOCKETS TR-100127, TR-100128, TR-100129, and TR-100131 *(Consolidated)*

WRITTEN DIRECT TESTIMONY OF

Kevin M. Jeffers, P.E.

STAFF OF
WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
State Rail and Marine Office

April 16, 2010

KEVIN M. JEFFERS testifies as follows:

I submit this testimony in support of the Washington State Department of Transportation's petitions in the above-referenced dockets.

Q. Please state your name and business address.

A. My name is Kevin M. Jeffers, P.E., and my business address is 310 Maple Park Drive Southeast, P.O. Box 47407, Olympia, Washington 98504-7407. My business email address is jefferk@wsdot.wa.gov.

Q. By whom are you employed and in what capacity?

A. I am employed by the Washington State Department of Transportation (WSDOT), State Rail and Marine Office as the Rail Engineering Manager.

Q. What are your duties as the Rail Engineering Manager?

A. I provide rail engineering expertise on behalf of WSDOT in support of projects involving rail-related improvements. These include projects that benefit the Amtrak *Cascades* service and projects that involve grade crossing upgrades and closures. I also serve as the project manager for several projects including the Point Defiance Bypass Project.

Q. How long have you been providing rail engineering expertise and managing rail projects for WSDOT?

A. Over 11 years.

Q. Please state your professional experience to provide testimony in this proceeding.

A. I have been a Professional Engineer, licensed with the State of Washington, since 1994. Since 1998, I have worked on a wide variety of rail-related improvements as both a project manager and engineer. Most have included grade safety improvements, grade crossing replacements, grade separations, or crossing closures. I have also worked on nineteen main line capacity improvement projects involving complex operational issues similar to the improvements proposed in Lakewood and DuPont.

Q. Have you presented testimony before this Commission in other cases?

A. Yes. I testified in *BNSF Railway v. Snohomish County*, WUTC Docket No. TR-090121, regarding the closure of Logan Road north of Stanwood, Washington.

Q. What is the purpose of your testimony?

A. My testimony provides the background of the State of Washington's rail passenger program, its legislative authority, our long range plan and goals for rail passenger service, and the Point Defiance Bypass Project, as necessary in order to understand the importance to the public of modifying the at-grade crossings of Clover Creek Drive SW, North Thorne Lane SW, and Berkeley Street SW in Lakewood and Barksdale Avenue SW in DuPont.

I. WASHINGTON STATE DEPARTMENT OF TRANSPORTATION'S RAIL PASSENGER PROGRAM

Q. What is the Washington State intercity rail passenger program?

A. WSDOT's intercity rail passenger program, commonly known as Amtrak *Cascades* service, was established to provide safe, fast, frequent, and reliable rail passenger service between Portland, Seattle, Vancouver, British Columbia (BC), and ten intermediate cities. Amtrak and WSDOT operate several daily Amtrak *Cascades* passenger trains between Portland, Seattle, Bellingham, and Vancouver, BC. Currently there are four daily round trips between Portland and Seattle, serving the communities of Vancouver, WA, Kelso/Longview, Centralia, Olympia/Lacey, Tacoma, and Tukwila. There are also two daily round trip trains between Seattle and Vancouver, BC, with service to Edmonds, Everett, Stanwood, Mount Vernon, and Bellingham. These services are provided under an operating agreement between the State of Washington and Amtrak.

Q. How did Washington State's intercity rail passenger program begin?

A. The vision of reduced travel times and better passenger rail service in the Pacific Northwest began in the late 1980s when the Washington State Legislature funded a program to improve rail depots across the state. In 1991 the Washington State Legislature directed

WSDOT to develop a comprehensive assessment of the feasibility of developing a high-speed ground transportation system in the state of Washington.

In October 1992, the *High Speed Ground Transportation Study* was delivered to the Governor and the Legislature. This study confirmed the feasibility of developing high-speed rail between Portland, OR, Seattle, WA, and Vancouver, BC.

Following release of this study in April 1993, WSDOT was directed to develop "high-quality intercity passenger rail service . . . through incremental upgrading of the existing [Amtrak] service" (Revised Code of Washington (RCW) Chapter 47.79). The Legislature believed that this step-by-step approach would help build a "rail culture" in the region that would eventually make rail a competitive and viable alternative to automobile and regional air travel.

In October 1992, the U.S. Department of Transportation's Federal Railroad Administration (FRA) designated the Pacific Northwest Rail Corridor as one of five high-speed rail corridors in the United States. The 466-mile long rail corridor stretches from Eugene, OR to Vancouver, BC, Canada. This designation helps our region compete for potential federal funds to assist the State with planning and implementing improved passenger and freight rail service throughout the corridor.

Q. What is the purpose of the intercity rail passenger program?

A. Freight and passenger rail is an important part of our State's transportation system. Moving people and goods by rail is safer and friendlier to the environment than adding traffic to our already congested highways. Improvements to the State's rail system, whether funded by the private sector or the public sector, can help mitigate the impacts of our growing economy and population in many ways such as by reducing highway congestion and maintenance costs.

The purpose of Washington State's passenger rail program is to:

- Provide a viable, cost-effective travel mode that significantly increases options for intercity travel;
- Respond to the direction given in RCW Chapters 47.79 and 47.82 to develop high quality passenger rail service through the incremental upgrading of the existing service;
- Develop faster, more frequent, safe and reliable Amtrak *Cascades* service that requires little or no operating subsidy;
- Reduce the overall impacts of transportation improvements on local communities and the environment; and
- Increase safety throughout the corridor, and to team with our partners and customers to provide more efficient, predictable, reliable, and cost-effective movement of people and goods.

Q. What type of future service is WSDOT planning?

A. Washington State plans to incrementally improve Amtrak *Cascades* service based on market demand, partnership investment, legislative authorization, and funding availability. Improvements to track, safety systems, train equipment, and stations will reduce travel times, increase train frequency, and improve safety and reliability. WSDOT's current Long Range Plan for Amtrak *Cascades* serves as a blue print for the development of intercity passenger service through 2023 and beyond.[1] The Point Defiance Bypass Project is identified in the document as one of the projects required to expand service between Seattle, WA and Portland, OR. The Amtrak *Cascades* Mid-Range Plan outlines rail corridor and service development options through 2017. (*See* Exhibits KJ02 and KJ02a for the complete Mid-Range Plan and Appendices.) The Point Defiance Bypass Project is one of the projects included in all four options discussed in the document.

[1] For a more detailed discussion, please see the Executive Summary of the Long Range Plan, attached hereto at Exhibit KJ01.

In 2009, as part of the federal American Recovery and Reinvestment Act (ARRA), the U.S. Department of Transportation's Federal Railroad Administration (FRA) offered a call for projects for the High-Speed Intercity Passenger Rail (HSIPR) Program. The program is designed to stimulate the economy and create jobs as well as to improve both high-speed rail and intercity passenger rail corridors. The funds are available for projects through September 2017.

In February 2010, the FRA announced that the State of Washington is to be awarded $590 million in funds with the stated goals of increasing the intercity passenger rail service between Seattle, WA and Portland, OR from four daily round trips to six daily round trips, shortening the travel time between Seattle and Portland by 6 minutes and increasing reliability of the service to a minimum of 88 percent on-time between Seattle and Portland. The Point Defiance Bypass Project is one of the projects required to meet the goals of the grant.

Q. Is WSDOT developing the Amtrak *Cascades* program by itself?

A. Rail corridor development is a cooperative effort of many entities, including the states of Oregon and Washington, Burlington Northern Santa Fe (BNSF), Union Pacific Railroad, Amtrak, Sound Transit, the province of British Columbia, ports, local communities, and ticket-buying passengers.

Throughout the program, WSDOT and these organizations and agencies are continually reviewing system improvements and negotiating the funding arrangements for these improvements.

Q. What work has already been done?

A. Over the past fifteen years, the states of Washington and Oregon have commissioned a series of feasibility studies to assess the practical problems, costs, and benefits of providing public investment to upgrade the corridor for safe, faster, more frequent, and reliable passenger rail service.

In addition, a number of major capital improvement projects have been completed. These are listed below and include web links for those projects for which WSDOT produced a project web page:

- Seattle-Blaine traffic control and rail replacement
- Swift siding construction http://www.wsdot.wa.gov/projects/rail/swiftcustoms/
- Custer/Cherry Point yard tracks and siding
- Bow siding extension
- Burlington track relocation
- Ferndale siding extension
- Mount Vernon siding Phase I http://www.wsdot.wa.gov/projects/rail/pnwrc_mtvernonsiding/
- English siding extension
- Amtrak Seattle Maintenance Facility equipment
- Titlow and Ruston crossovers http://www.wsdot.wa.gov/projects/rail/pnwrc_titlow/
- Felida and Woodland crossovers
- Purchase of three Talgo-built passenger trains
- Centennial crossover http://www.wsdot.wa.gov/projects/rail/pnwrc_centennial/;
- Winlock crossovers http://www.wsdot.wa.gov/projects/rail/winlockcrossovers/
- Tenino crossovers http://www.wsdot.wa.gov/projects/rail/pnwrc_tenino/
- New station construction and improvements http://www.wsdot.wa.gov/projects/rail/stanwoodstation/

These capital improvement projects allowed new and improved rail passenger services to be added. These included:

1994: Second daily Seattle-Portland round trip added;

1995: Seattle-Vancouver, BC service reestablished;

1998: Third daily Seattle-Portland round trip added;

25 minute travel time reduction between Seattle and Portland;

1999: New Talgo trainsets go into service as Amtrak *Cascades* Seattle-Bellingham service starts;

2003: WSDOT purchases third Talgo trainset;

2004: Master Corridor Agreement with BNSF;

2005: Total Amtrak Cascades ridership surpasses 600,000;

2006: Fourth Seattle-Portland round trip added; and

2009: Seattle–Bellingham Service extended to Vancouver, BC, creating a second Seattle–Vancouver BC round trip.

Q. What is Washington State's vision for Amtrak *Cascades* service in the Long Range Plan?

A. The goal of the program is to incrementally improve rail passenger service by increasing frequency of service and reducing trip time. Rail passenger service between Seattle, WA and Portland, OR would increase from four to thirteen round trips per day. Vancouver, BC to Seattle service would increase from two to four trains per day, three of which will continue on to Portland. In addition, the estimated travel times would be reduced. Travel time from Seattle to Portland would decrease by an hour—from three and one half hours to two and one half hours; travel time from Seattle to Vancouver, BC would be reduced from four hours to just under three hours; and travel time from Vancouver, BC to Portland would be reduced from seven and one half hours to approximately five and one half hours.

Q. What are our State's "building blocks" and how will they be put in place?

A. Following the Legislature's directive, WSDOT's Long-Range Plan for Amtrak *Cascades* (Exhibit KJ01) uses an incremental approach that allows the State of Washington to add faster, more frequent Amtrak *Cascades* service based on market demand, partnership investment, and legislative authorization.

In order to ensure that public funds are expended in the most efficient manner, the long-range plan identifies all of the construction projects necessary to achieve WSDOT's service goals as depicted in the Long-Range Plan. Each construction project is designed to solve a particular problem within the corridor. These projects are then grouped into "building blocks" that must be constructed in the sequence described in this plan. Each successive "building block" adds upon the preceding investments and allows WSDOT to add more daily trains, improve schedule reliability, and reduce travel times in a methodical and rational way. These "building blocks" ultimately become the daily timetables that the traveling public will rely upon once a "block" of construction projects has been completed. This planning approach combines methods commonly used by intercity rail planners in Europe with the incremental approach sought by the State Legislature.

Q. How will this program benefit the citizens of Washington now and in the future?

A. The public funds invested to support faster and more frequent Amtrak C*ascades* service will offer the citizens of Washington a number of benefits in the years ahead. The service will provide a viable alternative to automobile and regional air travel, while supporting improved freight rail mobility within the state of Washington.

Continued implementation of the Amtrak *Cascades* program will help ease our region's growing pains in a cost-effective manner. The efficient movement of people and goods within the region is crucial to the State's ability to compete in world markets, to protect the environment, and to maintain a high quality of life. At full build out of the rail passenger program, the system could carry 3 million riders per year, with no public operational subsidy.

Q. What options are discussed in the Amtrak *Cascades* Mid-Range Plan?

A. The mid-range plan, completed in 2008 (*See* Exhibit KJ02), outlined four options for policy makers to consider. Option 1 was to complete current projects then under construction but not to expand or improve the service beyond the current 2008 levels. Option 2 included completion of current projects under construction and purchase of equipment to increase daily

service to five round trips between Seattle and Portland and two round trips between Seattle and Vancouver, BC. Option 3 included completion of current projects under construction, purchase of additional equipment, and building other projects to increase daily service to six round trips between Seattle and Portland and two round trips between Seattle and Vancouver, BC. Option 4 involved completion of current projects under construction, purchase of additional equipment, and building other projects to increase daily service to eight round trips between Seattle and Portland and two round trips between Seattle and Vancouver, BC.

The Point Defiance Bypass project was identified as required for in all four options.

II. THE POINT DEFIANCE BYPASS PROJECT

Q. What is the Point Defiance Bypass Project?

A. Currently, passenger trains run along the highly curved water-level route from Nisqually, through Steilacoom, and through a series of tunnels under Point Defiance to Tacoma. There are two tracks over most of the water level route, except near the tunnels where the tunnel height requires a one and one half mile long segment of single track. The existing route is bordered tightly between the water and tall bluffs. The highly curved tracks throughout the water level route force passenger and freight trains to travel at speeds as low as 30 mph. Passenger trains can achieve the maximum speed of 79 mph only over five of the 28-mile water level route. The slow speeds and the single track section through the tunnels create rail traffic congestion. The congestion and the occasional mud slides from the bluff above the tracks also make the route unreliable. Further, the congestion on the existing route limits capacity to expand passenger rail service because it does not have the capacity to handle additional trains. The proximity of the route to the water and bluffs and the more than 4,500 ft. of tunnels leave no room for additional tracks.

The Point Defiance Bypass Project will re-route passenger trains away from the water-level route to a lightly used route through DuPont, Lakewood, and south Tacoma. It is a two phase project that will improve rail service between Seattle and Portland. The bypass is

six miles shorter than the water level route, will have less freight congestion, and will allow passenger trains to travel at 79 mph for nearly two-thirds of the 22-mile bypass route. Sound Transit, as owner of the rail line, is directing the first phase of the construction at the same time as they are building improvements to allow Sounder commuter rail trains to service Lakewood. This first phase, currently under construction, will result in realignment of the track from 100th Street SW to the future Sounder commuter rail station in Lakewood. In addition, new warning devices and crossing surfaces, including the crossing surfaces for a second track, will be installed at 74th Street SW in Tacoma and at four locations in Lakewood—Steilacoom Blvd. SW, 100th St. SW, 108th St. SW, and Bridgeport Way SW. The second track is part of the second phase, but installing the crossing surfaces for the second track during the first phase (before the construction of the connecting track) will minimize disruption at these locations by completing all of the crossing surface work at once.

The second phase will construct the second track from just south of 66th Street SW in Tacoma to just south of Bridgeport Way SW in Lakewood, a total of about 3.5 miles. From the end of the second track to Nisqually, the rail line will be upgraded with new subgrade (roadbed), ballast, concrete ties, and continuously welded rail for about 10 miles. This southern portion of phase two will include the upgrade of the approaches, crossing surfaces, and warning devices for the at-grade crossings of Clover Creek Drive SW, North Thorne Lane SW, and Berkeley Street SW in Lakewood; 41st Division Way SW on Joint Base Lewis McChord (JBLM), and Barksdale Avenue SW in DuPont. It will also make improvements to the connection to the BNSF Railway main line at Nisqually Junction.

Once complete, the Amtrak *Cascades* trains will be able to take advantage of improvements Sound Transit is making between Lakewood and their Tacoma Dome Station in Tacoma and re-route all Amtrak trains onto the bypass route. The bypass route essentially adds a third main track, primarily dedicated to passenger trains between Nisqually and Tacoma. This improves capacity to the rail network and allows for additional Amtrak

Cascades service. The completion of this project and another project in Vancouver will allow the addition of a fifth Seattle-Portland round trip. Once two additional projects in Kelso and Kalama are complete, a sixth Seattle-Portland round trip can be added. This bypass route is also several miles shorter which will result in shorter travel time by six minutes, 4 percent of the current Seattle-Portland travel time.

Q. How does the Point Defiance Bypass Project fit in with the development plans for the Pacific Northwest Rail Corridor?

A. The Point Defiance Bypass Project is an incremental improvement to the overall Amtrak *Cascades* program. It is a building block towards meeting the goals contained in the long-range plan of faster and more frequent Amtrak *Cascades* service. It will allow for two more round trips for passenger trains between Seattle and Portland, as well as reduce the trip time and improve reliability.

Q. Is demand for the Amtrak *Cascades* service growing?

A. Amtrak *Cascades* service has grown substantially since it started in 1993. That year, fewer than 95,000 passengers rode Amtrak between Seattle and Portland. In 2009, more than 750,000 riders traveled on Amtrak *Cascades* trains between Eugene, OR and Vancouver, BC. Amtrak *Cascades* service frequently experiences sold out conditions on weekends, holidays, and during the summer. Surveys of Amtrak *Cascades* passengers indicate that riders want more frequent rail passenger service.

Q. How is the Point Defiance Bypass Project funded?

A. The project is currently funded with nearly $97 million in State funds and over $3 million in federal highway funds originally appropriated by the Washington State Legislature in 2003 with additional funds appropriated in 2005 and 2007. Due to current economic conditions, and in the absence of the federal ARRA monies discussed below, the project's spending plan will not allow the second phase of construction to begin until July 2013 at the earliest and would delay completion until 2019.

However, as previously stated, in February 2010, the FRA announced that the State of Washington is to be awarded $590 million in ARRA funds to increase the intercity passenger rail service between Seattle and Portland from four to six daily round trips, shortening the travel time between Seattle and Portland by 6 minutes, and increasing reliability of the service to a minimum of 88 percent on-time service between Seattle and Portland. The Point Defiance Bypass Project is one of the projects required to meet the goals of the grant.

As part of the grant application submitted in October 2009, WSDOT requested that $91.6 million of the FRA grant be applied to the Point Defiance Bypass Project to accelerate the schedule for the second phase of construction. WSDOT requested the FRA make those funds available as soon as possible to take advantage of a very competitive bidding climate and to spur the addition of 635 construction jobs.

Up to $5.7 million of the project budget is for the grade crossing improvements at Clover Creek Drive SW, North Thorne Lane SW, and Berkeley Street SW in Lakewood; 41st Division Way SW on Joint Base Lewis McChord (JBLM), and Barksdale Avenue SW in DuPont.

Q. What is the anticipated timeline for the project?

A. The schedule has recently accelerated with the inclusion of FRA grant funds in the project. WSDOT anticipates the FRA grant funds will be made available to the project as early as June 2010. In order to move through the construction advertisement (ad) and award process, the earliest I anticipate construction will begin is September 2010. Depending on weather and other factors that can be difficult to predict, construction could be completed in 18 to 24 months. Once completed and the track and signals are certified by the railroad operators, passenger trains currently routed on BNSF railroad to the east would be re-routed onto the bypass route, even if additional service is not added at that time.

Q. How do the proposed crossing modifications at Clover Creek Drive SW, Berkeley Street SW, North Thorne Lane SW, and Barksdale Avenue SW fit in with the overall project?

A. As will be addressed in greater detail by other witnesses in this matter, the current signal systems at Berkeley Street SW, North Thorne Lane SW, and Barksdale Avenue SW are outdated and designed for slow speed train operation. Clover Creek Drive SW is currently a passive crossing. The proposed modifications will alleviate the need to close any of these crossings and will still allow the passenger trains to pass through at speeds up to 79 mph, while minimizing the risk to vehicle and pedestrians using those crossings.

III. ENVIRONMENTAL PROCESS

Q. Did WSDOT undertake an environmental process as part of this project?

A. Yes. An Environmental Assessment under the National Environmental Policy Act (NEPA) was started in July 2006. Technical studies, called "Discipline Reports" were started at the time and were completed by March 2008. The resource areas examined in each Discipline Report are:

1. Air Quality
2. Cultural Resources (Historic and Archeological)
3. Disruptions and Relocations
4. Energy
5. Fish, Vegetation, and Wildlife
6. Geology and Soil
7. Hazardous Materials
8. Hydrology and Water Quality
9. Land Use
10. Noise and Vibration
11. Public Services and Utilities

12. Social Elements (including Environmental Justice)

13. Traffic and Transportation

14. Visual Quality; and

15. Wetlands.

These Discipline Reports are summarized in the project's Environmental Summary attached hereto as Exhibit KJ03.

Public and agency outreach efforts for the Point Defiance Bypass Project began in the fall of 2006 and continued into 2008. Both the National Environmental Policy Act (NEPA) and the State Environmental Policy Act (SEPA) require that project proponents notify citizens, tribes, and agencies about a proposed project which could have impacts to the natural or built environment and to give them opportunities to comment on what should be considered in preparation of the environmental review. The first phase of outreach entailed public, agency, and tribal scoping for the project's environmental process. Scoping is a formal step early in the environmental review process that allows the public, tribes, and agencies to identify issues and concerns related to a proposed project.

As the technical work for the Environmental Assessment was nearing completion, WSDOT and the Federal Highway Administration (FHWA) jointly determined that the Point Defiance Bypass Project is categorically excluded from NEPA under 40 C.F.R. 1508.4 because it meets certain criteria as defined under FHWA guidelines: it does not induce significant impacts to planned growth or land use for the area; it does not require the relocation of significant numbers of people; it does not have a significant impact on any natural, cultural, recreational, historic or other resource; it does not involve significant air, noise, or water quality impacts; it does not have significant impacts on travel patterns; nor does it otherwise, either individually or cumulatively, have any significant environmental impacts (23 C.F.R. 771.117).

In addition to meeting the categories above, the project does not include any of the circumstances that the FHWA has determined to require additional analysis beyond a Categorical Exclusion (CE): it does not result in significant environmental impacts; it does not create substantial controversy on environmental grounds; it does not have significant impact on properties protected by section 4(f) of the DOT Act or section 106 of the National Historic Preservation Act; and is not inconsistent with any federal, state, or local law, requirement, or administrative determination relating to the environmental aspects of the action (FHWA 1987).

Under NEPA and FHWA regulations, if a proposed action is determined to be categorically excluded from NEPA, then neither an Environmental Assessment (EA) nor an Environmental Impact Statement (EIS) is required. For the Point Defiance Bypass Project, WSDOT prepared a Documented Categorical Exclusion (DCE), which includes a standard FHWA Environmental Classification Summary, and supporting technical material that demonstrates that the project will not result in significant impacts. The Documented Categorical Exclusion was officially issued by FHWA on May 5, 2008, and is attached hereto as Exhibit KJ04.

After the Documented Categorical Exclusion was issued by FHWA, WSDOT—as the lead agency under SEPA—formally adopted the NEPA documents under WAC 197-11-630 and issued a Determination of Non-Significance (DNS) on August 1, 2008 (Exhibit KJ05). The Determination of Non-Significance states that the proposed project does not have a probable significant adverse impact on the environment and that an Environmental Impact Statement (EIS) is not required under RCW 43.21C.030(2)(c). WSDOT issued the Determination of Non-Significance under WAC 197-11-340(2).

Q. Who was the lead agency for that process?

A. Under Washington's State Environmental Policy Act (SEPA), any agency that proposes to take an official action is required to perform an environmental review to identify any

benefits and/or impacts which may result from the action. As such WSDOT is the lead agency on the Point Defiance Bypass Project for the purposes of SEPA.

At the federal level, pursuant to the National Environmental Policy Act (NEPA), an environmental review must be performed if the proposed action is being implemented by a federal agency, requires a federal permit, or has federal funding. In this case, two federal agencies have authority over the project, the Federal Highway Administration (FHWA) and the Federal Railroad Administration (FRA). The two agencies agreed that the FHWA should serve as the lead agency under NEPA and guide the NEPA review.

Q. Has the environmental process been completed?

A. Yes. The environmental process was completed when FHWA issued the Documented Categorical Exclusion on May 5, 2008, and 14 days after WSDOT issued the Determination of Non-Significance on August 1, 2008, according to WAC 197-11-340.

Q. What were the findings?

A. They found that the project does not induce significant impacts to planned growth or land use for the area; does not require the relocation of significant numbers of people; does not have a significant impact on any natural, cultural, recreational, historic or other resource; does not involve significant air, noise, or water quality impacts; does not have significant impacts on travel patterns; or does not otherwise, either individually or cumulatively, have any significant environmental impacts. In addition, the project does not include any of the circumstances that the FHWA has determined to require additional analysis beyond a Categorical Exclusion (CE): it does not result in significant environmental impacts; does not create substantial controversy on environmental grounds; does not have significant impact on properties protected by section-4(f) of the DOT Act or section 106 of the National Historic Preservation Act; and is not inconsistent with any federal, state, or local law, requirement, or administrative determination relating to the environmental aspects of the action.

IV. ALTERNATIVE CROSSING CONFIGURATIONS

Q. Under what statutory authority does WSDOT petition the UTC?

A. WSDOT asks the UTC to exercise the authority granted in RCW 81.53.261 to consider the petitions filed herein under Dockets TR-100127, TR-100128, TR-100129, and TR-100131, and to enter an order deeming that the public safety requires the construction of the safety devices and other modifications to those crossings as set forth by WSDOT in its petitions.

Q. Did WSDOT consider filing a petition requesting the UTC order the construction of an over-crossing or an under-crossing at one or more of these crossings?

A. Both the railroad and the affected roadways currently exist and already meet at-grade. So, the requirement in RCW 81.53.020 that requires newly constructed railroads that cross existing highways, and newly constructed highways that cross existing railroads, to be grade separated where practicable, is not applicable. WSDOT elected not to request authorization to construct over-crossings or under-crossings because, as set forth below, constructing grade separations at this crossing is not feasible within available funding.

Q. Can you briefly describe the factors that caused you to conclude that it is not feasible to separate grades at one or more of these intersections?

A. Safety and cost. WSDOT examined whether the existing at-grade crossings could be improved to allow the passenger trains to move across them at 79 mph. As the initial designs were prepared, WSDOT examined the addition of flashing lights, traffic gates, median separator curbs, and wayside horns along with improving crossing surfaces at Clover Creek Drive SW, North Thorne Lane SW, and Berkeley Street SW in Lakewood, and Barksdale Avenue SW in DuPont. At Clover Creek Drive SW, North Thorne Lane SW, and Berkeley Street SW, WSDOT also examined widening the approaches and crossing surface. At North Thorne Lane SW and Berkeley Street SW, WSDOT also examined broadening the turning radii for the Interstate 5 on and off ramps. At North Thorne Lane SW, Berkeley Street SW, and Barksdale Avenue SW, WSDOT examined improvements to traffic signal controllers and

interfaces to prevent queuing of traffic onto the tracks from adjacent intersections and from the nearby military security check points. As the testimony of Mr. Berger and Mr. Stewart shows, the crossing improvements proposed improve safety to an acceptable state.

The other factor examined is cost; WSDOT examined the relative costs of grade separating the at-grade crossings. WSDOT has a plan to build a grade separation at North Thorne Lane SW as part of the larger SR 704 – Cross Base Highway. That overall project would move a significant amount of traffic from the I-5/SR 512 interchange to the North Thorne Lane interchange. In one phase, the project would rebuild and raise the interchange and eliminate the at-grade crossing. Although this phase of the SR 704 – Cross Base Highway is not yet funded, the most reasonable option for grade separating that crossing would be to do so as proposed in the SR 704 project. From that plan, we know that it would cost about $246 million in 2006 to grade separate just that one crossing.

At Berkeley Street SW in Lakewood, and Barksdale Avenue SW in DuPont, the most economical grade separation would be to raise the rail line over roadways. In order to provide the required clearance over the roadway, the rail line would need to be at least 30 ft. above the roadway, and would require specially-designed walls to support the heavy freight rail loading. In order to safely traverse the 30 ft. or more climb, the grade of the rail line would need to be less than 1 ft. of rise per for every 100 ft. of distance. This grade would require construction of walls that would extend up to 3,000 ft. in both directions. The over-crossing necessary to carry both passenger and existing freight trains would be long enough to require a heavy plat girder bridge or an even more costly through-truss bridge. I estimate this would cost between $30 and $70 million at each location (up to $140 million in total). Grade separating these crossings is simply not financially feasible.

At Clover Creek Drive SW, WSDOT did not consider a grade separation of any kind. The volume of traffic would not warrant even the lowest cost grade separation. WSDOT

considered closure of that crossing more practicable in the event that it could not safely remain open with appropriate modifications.

Q. Why do you think the modifications in the petitions are the more appropriate way to address public safety and convenience for these crossings?

A. As I have stated earlier in my testimony, the proposed modifications will provide an adequate and feasible level of safety and convenience for motorists while allowing the passenger trains to be re-routed onto the bypass route. Thus WSDOT asks the UTC to enter an order deeming that the public safety requires the construction of the safety devices and other modifications to those crossings as set forth by WSDOT in its petitions.

Q. Does this conclude your testimony?

A. Yes, it does.

I declare under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct to the best of my knowledge.

DATED this 16TH day of April, 2010, at OLYMPIA, Washington.

KEVIN M. JEFFERS