

Chapter 3 Developing the Alternatives

For many years, the State of Washington has regarded improving the movement of freight and reducing conflicts among commercial trucks, rail operations, passenger vehicles, bicyclists, and pedestrians along the SR 519 corridor as its highest priority freight mobility project (Freight Mobility Strategic Investment Board [FMSIB], 2006; Washington State Transportation Commission [WSTC], 2006). In a 1997 EA for SR 519 improvements, followed by a Finding of No Significant Impact (FONSI), FHWA and WSDOT studied a broad array of project options and identified a preferred alternative (U.S. Department of Transportation [USDOT] et al., 1997). The preferred alternative was a couplet in which eastbound traffic from the Seattle waterfront would be routed along South Atlantic Street to I-5 and I-90, and westbound traffic from I-5 and I-90 would be routed to the Seattle waterfront along South Royal Brougham Way. At the time of the 1997 EA and FONSI, the Seattle Kingdome was still in use, and Safeco Field, Qwest Field Event Center, and Qwest Field had not been built.

WSDOT planned construction of the SR 519 couplet in two phases, with Phase 1 featuring the new eastbound connection from the Seattle waterfront over the rail lines to the I-5/I-90 freeway system, and Phase 2 constructing a grade-separated westbound connection from I-5/I-90 over the rail lines to the Seattle waterfront.

While Phase 1 construction was under way, major new sport facility and event center developments in the stadium area substantially changed the project setting. WSDOT and the project partners decided to postpone the project and redesign Phase 2 to be compatible with the new buildings and changed

A **couplet** is a pair of arterial roadways moving one-way traffic in opposite directions.

traffic conditions in the stadium area. This EA evaluates WSDOT’s proposed Phase 2 design for SR 519—called the project—and the No Build Alternative.

What was Phase 1 of the SR 519 project?

In 2004, WSDOT opened Phase 1 of the SR 519 project, consisting of the South Atlantic Street railroad overpass (Edgar Martinez Drive South) and a new eastbound on-ramp from South Atlantic Street to I-5 and I-90. The overpass separates road and railway traffic at Third and Fourth Avenues South and improves access to the freeway system from important waterfront facilities such as the Port of Seattle terminals, railroad freight yards, and the Washington State Ferries terminal at Colman Dock.



South Atlantic Street railroad overpass built as part of SR 519 Phase 1

The Phase 1 project had four main components which:

- Provided the eastbound connection from the waterfront to I-5 and I-90 via South Atlantic Street
- Removed the old eastbound I-90 ramp on Fourth Avenue South
- Made improvements to South Atlantic Street between First Avenue South and the Alaskan Way South/East Marginal Way intersection
- Constructed the South Weller Street Pedestrian Bridge

When Phase 1 opened, eastbound freight, ferry, and event traffic moved more freely, because connections from the Port of Seattle, waterfront, and stadium area to the freeway system were improved.

How was the Phase 2 design developed?

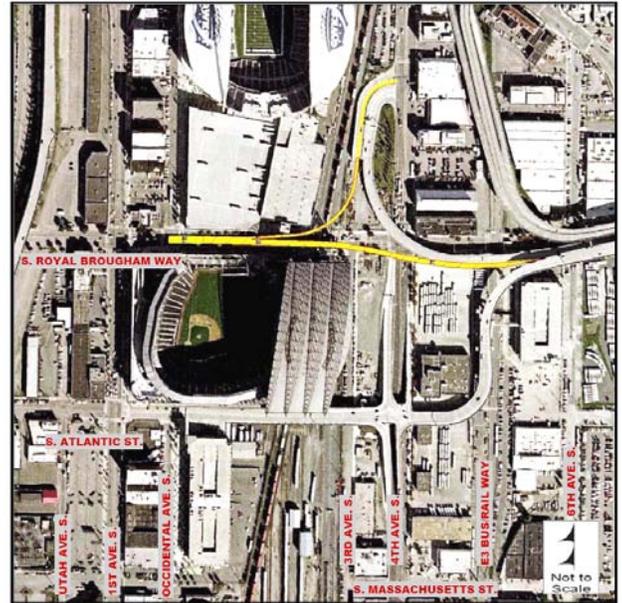
The east-west couplet concept presented in the 1997 EA envisioned two parallel overpasses above the railroad tracks near Third and Fourth Avenues South, with the eastbound crossing on South Atlantic Street and the westbound crossing on South Royal Brougham Way. The overpasses would have been far enough south of the Kingdome to avoid interference with event traffic and pedestrian activity. But with the opening

of Safeco Field and Qwest Field Event Center in 1999, demolition of the Kingdome in 2000, and the opening of Qwest Field in 2002, the project setting changed substantially, as shown in the illustration at right. The original westbound concept (shown in yellow) would have channeled trucks and cars exiting the freeway system as a stream of through-traffic between Qwest Field Event Center and Safeco Field.

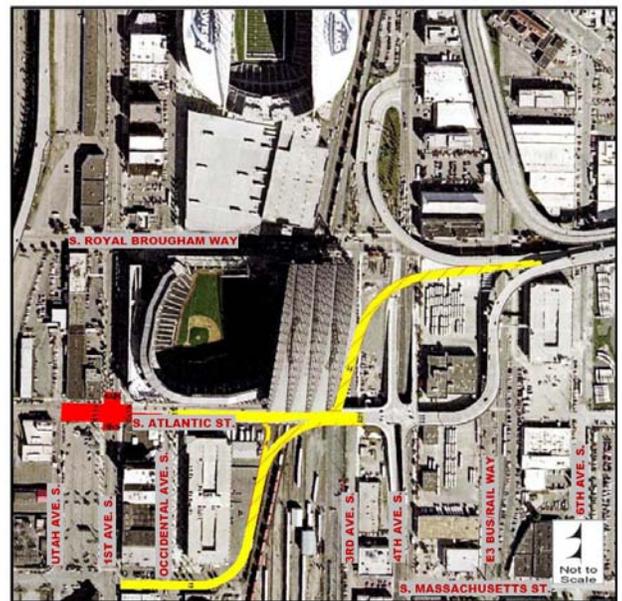
The project setting had changed sufficiently to warrant a new look at the proposed improvements. WSDOT suspended the Phase 2 design effort in 2002 to re-evaluate the project and provide an opportunity for consultation with other agencies and local stakeholders. This process led to the conclusion that the original Phase 2 design had become inconsistent with the evolving nature of the project setting.

WSDOT initiated a feasibility study to examine options for an alternative concept to the original Phase 2 design. The goal was to identify one or more new design concepts that would fulfill the functional requirements of the original design but also meet the needs of stakeholders in the increasingly complex project setting. Construction of the new stadium and event center facilities had intensified conflicting uses of the project site by trucks and BNSF Railway freight trains serving the Port of Seattle terminals, commuter traffic, Amtrak and Sound Transit passenger rail traffic, bicyclists, and pedestrians.

In April 2006, WSDOT released the *SR 519 Phase 2 Feasibility Assessment* report (KPF et al., 2006). The feasibility study examined 21 design options, including many that had been considered in the 1997 EA. It recommended a concept, shown at right, that modified the original Phase 2 design by moving the westbound connection southward to South Massachusetts Street. This concept departed from the earlier design, which had used South Royal Brougham Way. The recommended concept, which routed



Original Phase 2 concept from the 1997 EA, in yellow, superimposed on a 2006 photograph



Phase 2 concept recommended in the 2006 feasibility assessment report

westbound traffic considerably farther to the south, did not achieve consensus among the stakeholders.

With FHWA's concurrence, WSDOT, the City of Seattle, and the Port of Seattle convened a 30-day design workshop in July 2006 for key project proponents and stakeholders. The goal of the workshop was to develop three viable SR 519 Phase 2 concepts for inclusion in a cost-risk assessment. Three concepts were developed and advanced for more detailed evaluation:

- Option A: Royal Brougham Corridor
- Option B: Atlantic Corridor
- Option C: Local Improvements

Option A: Royal Brougham Corridor

Option A, shown at right, used South Royal Brougham Way as the westbound corridor. It included the following design elements:

- A new grade-separated crossing over the BNSF Railway tracks at South Royal Brougham Way would serve westbound traffic from I-90 and I-5, and local westbound traffic from Fourth Avenue South. A new elevated intersection would provide access to the new elevated crossing. This concept would add two new lanes along the existing Fourth Avenue South off-ramp. The new two-lane, westbound elevated crossing would provide access to the Qwest Field Event Center garage and return to grade at Occidental Avenue South.
- A new separate pedestrian structure would provide passage for pedestrians and cyclists over the BNSF Railway tracks at South Royal Brougham Way. Design of the pedestrian ramp would not preclude connections to Safeco Field and to the Qwest Field Event Center parking garage.



Option A: Royal Brougham Corridor

- The intersection of First Avenue South and South Atlantic Street would be improved by widening the intersection to add an additional turn lane to each approach.

Option B: Atlantic Corridor

Option B, shown at right, included the following design elements:

- A new elevated two-lane ramp would connect westbound I-90 to the South Atlantic Street overpass (Edgar Martinez Drive South). The new South Atlantic Street connection would serve westbound freeway traffic from I-90 and I-5 and would stem from the existing Fourth Avenue South off-ramp. The new ramp would be entirely elevated, passing over Fourth Avenue South and connecting to the South Atlantic Street elevated structure east of Safeco Field. Westbound I-90 and southbound I-5 traffic would have the option to access either Fourth Avenue South or South Atlantic Street, whereas northbound traffic exiting from I-5 would be limited to the new ramp leading to South Atlantic Street.
- A new elevated loop-ramp structure would transport vehicle, bicycle, and pedestrian traffic over the BNSF Railway tracks at South Royal Brougham Way. The two-lane, two-way elevated crossing would provide access to the Qwest Field Event Center parking garage and return to grade at Occidental Avenue South. Design of the pedestrian ramp would not preclude connections to Safeco Field and to the Qwest Field Event Center parking garage.
- The intersection of First Avenue South and South Atlantic Street would be widened to add an additional turn lane to each approach.



Option B: Atlantic Corridor

Option C: Local Improvements

Option C, shown at right, included the following design elements:

- A new elevated loop-ramp structure would transport vehicle, bicycle, and pedestrian traffic over the BNSF Railway tracks at South Royal Brougham Way. The two-lane, two-way elevated crossing would provide access to the Qwest Field Event Center parking garage and return to grade at Occidental Avenue South. Design of the pedestrian ramp would not preclude connections to Safeco Field and to the Qwest Field Event Center parking garage.
- Improvements to the elevated intersection of Fourth Avenue South and South Atlantic Street would include adding an extended right-turn pocket to the southbound approach from Fourth Avenue South.
- The intersection of First Avenue South and South Atlantic Street would be improved by widening the intersection to add an additional turn lane to each approach.



Option C: Local Improvements

How were the options evaluated to select the project?

During the 30-day design workshop in July 2006, the participants studied and refined Options A, B, and C, as previously discussed. The workshop conducted operational analyses of the three options to determine the relative performance of each and to provide information for the design refinement process.

In the fall of 2006, WSDOT conducted a cost-risk assessment to develop a cost comparison of the alternatives and to quantify risks associated with each option that could affect its cost. During the same period, WSDOT also conducted a series of intensive workshops to evaluate the three options. On November 2, 2006, the process ended in the selection of

Option B: Atlantic Corridor as the project, eliminating Option A: Royal Brougham Corridor and Option C: Local Improvements.

Option A: Royal Brougham Corridor was eliminated for a variety of reasons, including inferior operational performance in comparison with Option B, concerns over perceived impacts on the South Royal Brougham Way corridor west of the BNSF Railway tracks, and issues related to the design of the adjacent Alaskan Way Viaduct and Seawall Replacement Project from South Holgate Street to South King Street.

Option C: Local Improvements had initially been advanced for further consideration on the assumption that it could be implemented as an early stage of Option B: Atlantic Corridor. Evaluated as a stand-alone project, however, Option C was eliminated because it did not adequately address traffic and freight mobility needs.

What alternatives does this EA evaluate?

This EA examines two alternatives:

- The **Build Alternative** (described in detail in Chapter 4), which will construct:
 - A new I-90 off-ramp to the South Atlantic Street overpass (Edgar Martinez Drive South)
 - A South Royal Brougham Way railroad overpass, connecting Third Avenue South to Occidental Avenue South and including a two-lane elevated arterial with bicycle lanes and an elevated pedestrian walkway
 - Improvements to the intersection of South Atlantic Street and First Avenue South, making it easier for trucks to turn into the intersection and to cross First Avenue South
- The **No Build Alternative**, which will not make the transportation improvements listed above.

The project team evaluated the No Build Alternative to establish a baseline for comparing the effects associated with the project. Under the No Build Alternative, only routine

The SR 519 Phase 2 Project’s Environmental Process

Step 1: Discipline Reports and Technical Memoranda

Each of the 8 discipline reports and 3 technical memoranda describes the topic’s existing conditions, the expected effects of the alternatives, and how undesirable effects will be mitigated.



Step 2: Environmental Assessment

Following a public and agency scoping process, the EA briefly explains the purpose and need for the action, describes the project and No Build Alternative, and provides sufficient evidence and analysis of effects to determine whether to prepare an EIS or a Finding of No Significant Impact (FONSI).



Step 3: Public and Agency Review

The EA is made available to the public and agency representatives for 30 days, during which they are invited to review and comment. During the review period, WSDOT and FHWA hold a public hearing to provide an opportunity for the public to ask questions and provide comments.



Step 4. FONSI or EIS

A FONSI or an EIS is prepared. A FONSI presents the reasons why an action will not have a significant effect on the environment, and therefore does not require the preparation of an EIS. The FONSI also presents responses to public comments received on the EA. Based on the analyses and project feedback received to date, WSDOT and FHWA anticipate preparing a FONSI for the SR 519 Phase 2 project.

activities such as road maintenance, repair, and minor safety improvements would occur between now and 2030.

The No Build Alternative does not satisfy the purpose or meet the need stated in Chapter 2. Therefore, it is not the preferred course of action.

How has the public been involved?

WSDOT and FHWA have involved the public in the SR 519 Phase 2 project through a range of activities including a public scoping meeting and an ongoing public outreach program.

Public Scoping Meeting

WSDOT and FHWA invited the public to participate in a public scoping meeting in open-house format on June 6, 2007. Members of the public talked with the project engineers and planners directly responsible for preliminary project design and environmental documentation. They provided spoken and written comments at the meeting and during a public comment period.

Following the meeting, WSDOT and FHWA reviewed the comments, which included mainly questions about effects on traffic, stadium events, and public transportation during construction, and how traffic patterns in the study area would change after the project is built and in service. The meeting provided a basis for ensuring that the EA addressed issues of importance to the public.

Ongoing Public Outreach

WSDOT and FHWA are conducting an ongoing public outreach program to keep members of the public informed about the SR 519 Phase 2 project through website postings, public meetings, presentations to community groups and businesses, and providing project information in multiple languages. The project website is continually updated with the latest information about the project. It can be accessed at: <http://www.wsdot.wa.gov/Projects/SR519/>

The project team conducts public outreach visits and briefings to establish dialogue with disadvantaged or low-income populations in the study area. For example, these have included

What is public scoping?

The public scoping process is designed to:

- Inform the public of proposed actions and alternatives.
 - Gather comments to help identify potential environmental impacts.
 - Help ensure that the environmental documents consider reasonable alternatives.
 - Identify issues or concerns important to the local community.
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meetings at St. Martin de Porres Shelter, Bread of Life Mission, and the Compass Center to discuss project concepts and gather feedback. The team also held a social service briefing with providers of low-income housing and social services. At each meeting, the project team described the SR 519 Phase 2 project, and participants had an opportunity to ask questions and provide input. WSDOT and FHWA will continue public outreach throughout project design and construction.

How have government agencies been involved?

Government agencies have had a major role in developing the SR 519 Intermodal Access Project. At the start of Phase 2 in early 2007, WSDOT and FHWA invited the U.S. Environmental Protection Agency, Federal Transit Administration, Washington State Department of Ecology, King County Department of Transportation, Seattle Department of Transportation, and the Port of Seattle to be cooperating agencies on the project. The Federal Transit Administration, King County Department of Transportation, Seattle Department of Transportation, and Port of Seattle agreed to be cooperating agencies on the project. On June 6, 2007, WSDOT and FHWA convened an agency scoping meeting to provide these and other agencies the opportunity to question project managers, engineers, and environmental scientists and planners about the Phase 2 project, and to provide input to the project team through spoken and written comments to help ensure that the EA scoping process would cover all relevant topics and issues.

Beyond the agency scoping meeting, WSDOT and FHWA have involved government agencies in the project through regular meetings, document reviews, and ongoing consultation to address issues on an as-needed basis. In 2007, WSDOT and FHWA briefed the Transportation Committees of the U.S. Senate and House of Representatives on the SR 519 project.

The project team meets regularly with King County and City of Seattle representatives to coordinate SR 519 Phase 2 construction planning and engineering design to minimize

short-term construction effects and bring maximum benefit to Seattle during the project's long-term operation. Similarly, project team members met with the Port of Seattle regularly during the NEPA process, and these meetings will continue as design and construction advance. Coordination with the County, City, and Port has been a key factor in developing a design that will best serve current and future County and City transportation requirements and Port facilities and operations.

How has WSDOT involved tribes?

Tribes can help identify cultural and natural resource issues that might affect tribal members or cultural resources important to the tribes. WSDOT and FHWA are committed to respectful, effective consultation and communication with tribes in recognition that project activities may affect tribal rights and interests. National Historic Preservation Act (NHPA) Section 106 (implemented by 35 CFR 800) and WSDOT Executive Order E1025.00 on Tribal Consultation (February 19, 2003) both require tribal consultation.

WSDOT initiated tribal consultation for SR 519 Phase 2 in April 2007 with the Suquamish Tribe, the Muckleshoot Indian Tribe, the Tulalip Tribes, the Snoqualmie Tribe, and the Confederated Tribes and Bands of the Yakama Nation.

WSDOT is also coordinating with the Duwamish Tribe, a non-federally recognized tribe, concerning the SR 519 Phase 2 project. Correspondence relating to tribal involvement in the SR 519 Phase 2 project is presented in Appendix C.