INTRODUCTION

This section, prepared in conjunction with Makers Architecture and Urban Design, investigates the urban design issues related to the five conceptual SR 519 Phase 2 construction alternatives. These alternatives are:

- **Alternative A**, which would connect SR 519 westbound traffic to South Atlantic Avenue just east of Safeco Field.
- **Alternative B**, which would connect eastbound traffic to South Atlantic Street via a South Massachusetts Street on ramp.
- **Alternative A + B**, which would combine Alternatives A and B into a single project providing both east- and westbound access via South Atlantic Street.
- **SR 519 Phase 2 Original Design**, which projects for comparative analysis the construction of the original Phase 2 component of the SR 519 project. This alternative would have connected SR 519 westbound traffic directly to South Royal Brougham Way.

URBAN DESIGN CHARACTERISTICS

The above alternatives have a diverse array of physical components and visual impacts. Alternatives A, B, and A + B would have significantly less visual impact on the adjacent community because their new construction would be screened by existing buildings and roadway structures. Alternative C, with a longer elevated structure spanning the South Atlantic Street Bridge, would have the most significant visual impact. This alternative would span existing elevated structures and would be visible from most surrounding streets and adjacent buildings. The SR 519 Phase 2 Original Design alternative would have had a significant visual impact along a portion of the north facade of Safeco Field. It would also have had significant impacts on the function, image, and pedestrian character of South Royal Brougham Way. None of the alternatives, however, would place new construction elements where existing view corridors, significant buildings, or historic structures would be physically impacted by construction of the SR 519 ramps.

The most significant contextual design issues associated with these alternatives are related to their ability to work with and support the larger land use, street-level circulation, pedestrian corridor, and new development opportunities in the adjacent community. The most significant of these contextual design issues are:

1. The future configuration and use of South Royal Brougham Way and whether that street will remain a major westbound arterial or become a local-access-only street that is closed to through traffic.
2. The need for a grade-separated pedestrian crossing at South Royal Brougham Way for pedestrians accessing Safeco Field, Qwest Field, and the Exhibition Hall to and from the east. This need will be expanded when construction of the light rail Stadium Station on Fifth Avenue South two blocks east of Safeco Field is completed.
3. Maintenance of Occidental Way South as the primary pedestrian corridor for fans approaching the area from the north and how this corridor connects to south downtown and the adjacent Stadium and Historic Districts.
4. The development of 1st Avenue South as a major urban corridor, running from downtown through the project area and continuing south. Improvements needed at the South Atlantic Street/1st Avenue South intersection (Alternative A) and at the South Massachusetts Street/1st Avenue South intersection (Alternative B) would impact 1st Avenue South's development and pedestrian access to the stadiums from the south.
5. The need to coordinate access routes to and from the waterfront with Alaskan Way Viaduct replacement plans and the Port of Seattle's freight mobility needs.
6. The capability to support potential air rights development over the railroad tracks east of Qwest Field.

URBAN DESIGN ISSUES

Occidental Avenue South

Pioneer Square Policies, City of Seattle Comprehensive Plan Policy PS-P3: Recognize the importance of the Occidental corridor as the "center" of the neighborhood.

The Pioneer Square Historic District's Neighborhood Plan (a component of Seattle's Comprehensive Plan) designates Occidental Avenue South as a significant neighborhood feature. The street is a primary pedestrian route, extending from Pioneer Square (Yesler Street) to Safeco Field. The street serves stadium and event fans arriving from downtown Seattle and parking areas to the north. Its function as a pedestrian corridor will continue to evolve, and its character will be influenced by several new projects. These include:

- A new mixed-use building (including a new waterfront trolley maintenance facility) facing on Occidental Mall between Washington and Main Streets.
- Plans by the Seattle Department of Parks & Recreation to redesign and revitalize Occidental Park with new paving, landscape improvements, etc., to make the park a more user-friendly public space.
- Ongoing plans to develop market-rate housing with ground floor retail on a portion of Qwest Field's north parking lot.

- Renovation and expansion of the Johnson Building (formerly the Seattle Plumbing Building) for market-rate housing by the Historic Seattle Preservation and Development Authority.
- Completion of several other ongoing and planned building renovation projects in the area.
- Completion of the Silver Cloud Inn, currently under construction at the intersection of 1st Avenue South, Occidental Avenue South, and South Royal Brougham Way.

Occidental Avenue South is also a key access feature for Qwest Field (ticketing and entry gates), the Exhibition Hall (main ground-floor entry), and Safeco Field (north entry gates).

None of the alternative SR 519 ramp configurations analyzed is expected to directly impact Occidental Avenue South's function as a pedestrian corridor north of South Royal Brougham Way. However, if traffic volumes on South Royal Brougham Way were to increase significantly (in the original SR 519 Phase 2 design, for example), the Royal Brougham/Occidental intersection would need to be redesigned to allow a safe, efficient connection to Safeco Field. A major urban design consideration for coordination in all potential alternatives is how this intersection, and South Royal Brougham Way itself, interacts as coordinated and mutually supportive pedestrian and public access facility.

The Occidental Avenue South corridor is shown in Figure 7-1.

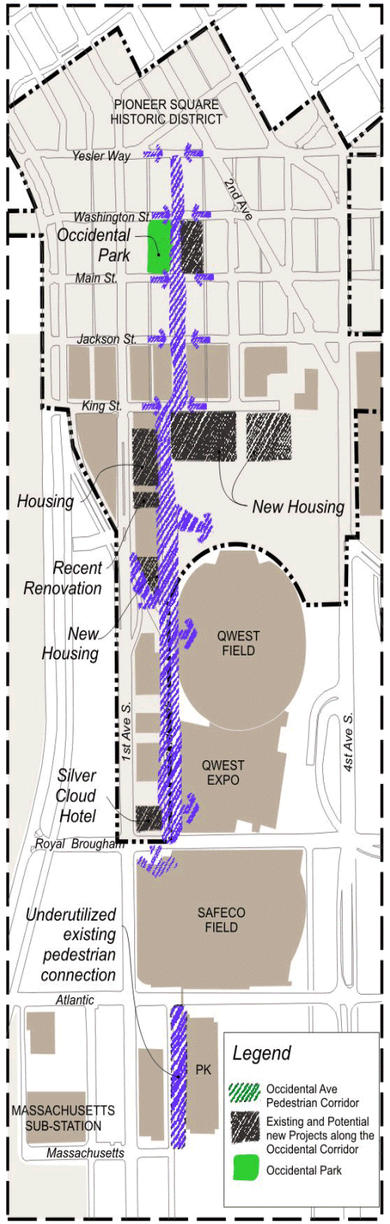

Figure 7-1: Occidental Ave S. Corridor

ADDITIONAL FEATURES

South Royal Brougham Way

The future of South Royal Brougham Way is a key element in the development of new SR 519 ramp alternatives. Several important operational options for South Royal Brougham Way are included in the alternatives analysis. These include:

- **Option A:** No I-5 or I-90 access ramp would connect directly to South Royal Brougham Way. (This eliminates the SR 519 Phase 2 Original Design as a potential westbound ramp alternative.)
- **Option B:** South Royal Brougham Way would be closed to through traffic to eliminate the surface crossing of the Burlington Northern tracks and mainline. The street would remain open on either side of the railroad to provide service and access to adjacent facilities. A grade-separated pedestrian and local access vehicular connection would be provided at the railroad crossing.
- **Option C:** South Royal Brougham Way may remain open but with reduced traffic carrying capacity.

Pedestrian Bridge and Grade-Separated Railroad Crossing at South Royal Brougham Way

A grade-separated railroad crossing (pedestrian or vehicular) on South Royal Brougham Way is not included as a component of any of the new alternatives being analyzed. Addressing a vehicular overpass serving 4th Avenue South and South Royal Brougham Way traffic is difficult from a design perspective given the need to provide adequate clearance over the railroad tracks while staying clear of the existing overhead and surface ramps on 4th Avenue South.

Existing pedestrian access and circulation are shown in Figure 7-2.

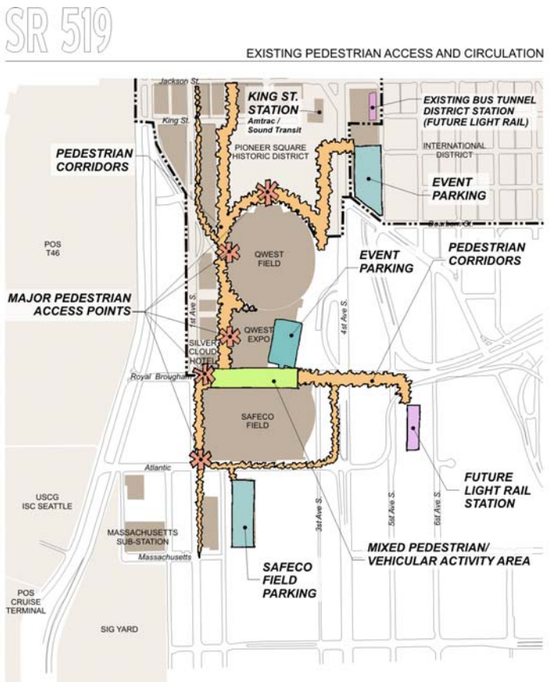

Figure 7-2: Existing Pedestrian Access and Circulation

The development of an effective grade-separated pedestrian crossing will require more than simply bridging the tracks. If, for example, South Royal Brougham Way remains open to some amount of surface vehicular traffic, most pedestrians would simply walk across at street level rather than climb up to a bridge, simply to go back down on the other side. To be truly effective, a pedestrian bridge will need to deliver the user to a desirable upper-level location. The design and construction of an effective, safe, and attractive facility with a truly functional purpose could include some or all of the following features:

- Providing easy pedestrian access to the bridge from east of 4th Avenue South and the light rail Stadium Station, located approximately one block to the east.
- Direct access to the concourse level of Safeco Field and Qwest Field Exhibition Hall to take users closer to their desired destination.
- Direct grade-separated access between Safeco Field and the Qwest Field Exhibition Hall and garage.
- Future connections to potential air rights development over the railroad tracks east of Qwest Field, as well as a future concourse-level connection to Qwest Field.

Potential future pedestrian connections are shown in Figure 7-3.

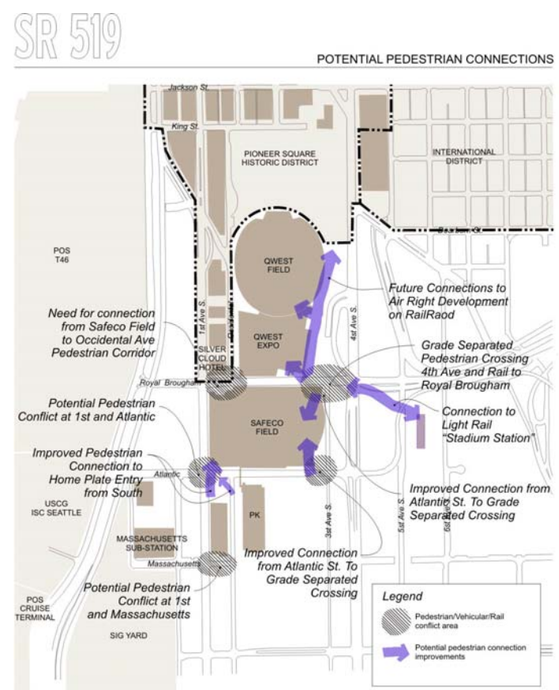

Figure 7-3: Potential Pedestrian Connections

SR 519 Phase 2 Original Design

The Phase 2 original design would have provided a westbound ramp directly to South Royal Brougham Way. The ramp would have been elevated over the railroad tracks and would have touched down next to Occidental Avenue South. The plan was simple and efficient from a traffic capability and construction point of view. It had, however, several potential urban design considerations associated with its implementation. These include:

- The original design would have potentially created significant vehicular/pedestrian conflicts along South Royal Brougham Way and at the Occidental Avenue South and 1st Avenue South intersections. Pedestrian access to the north entrance of Safeco Field (Occidental Avenue South) would have been mixing with large volumes of westbound traffic arriving from I-5 and I-90 via the SR 519 off-ramp. This situation is in potential conflict with the local planning concept of Occidental Avenue South as a major pedestrian corridor connecting Pioneer Square and south downtown through the Stadium District to Safeco Field.
- It would have required construction of a grade-separated pedestrian railroad crossing to allow South Royal Brougham Way to be closed to through traffic at this location.
- The westbound ramp would have had potential visual impacts on Safeco Field by encroaching on some of the field's views of downtown Seattle. These ramps would also have masked part of the field's north facade and might have conflicted with certain pedestrian entry points.
- South Royal Brougham Way west of the railroad tracks would have been a major arterial at both event and non-event times. Some adjacent property owners and stakeholders feel South Royal Brougham Way should respond to the Stadium District as a more neighborhood-oriented service street.

- The original physical design would have significantly increased the traffic volumes (westbound) on the north side of Safeco Field. With existing traffic (eastbound) on South Atlantic Street and 1st Avenue South, the traffic pattern introduced by this design would have had Safeco Field surrounded by heavy vehicular traffic on three of its four sides. The addition of traffic on South Royal Brougham Way would also have tended to create a traffic barrier separating Safeco Field from other Stadium District facilities to the north.

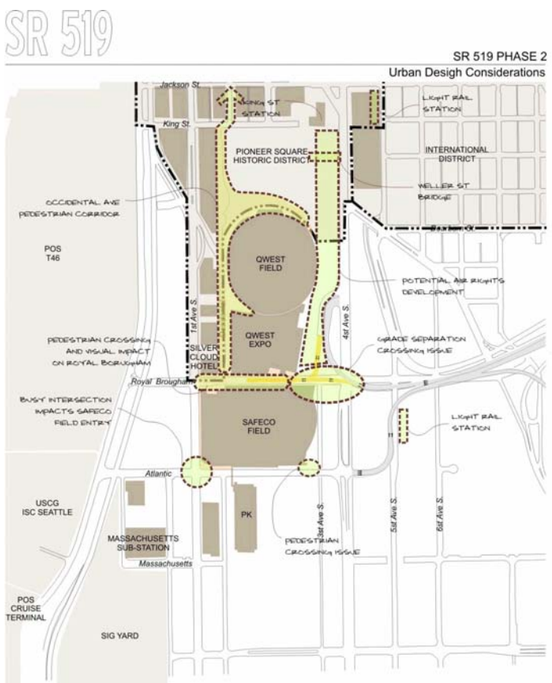

Figure 7-4: Design Considerations

Westbound Off-Ramp to South Atlantic Street (Alternative A)

The westbound SR 519 ramp in Alternative A is proposed to join South Atlantic Street just east of Safeco Field. In this alternative, South Atlantic Street would remain two-way. Pedestrians leaving Safeco Field and heading east on South Atlantic Street would cross westbound ramp traffic at its junction with South Atlantic Street, creating potential pedestrian/vehicular conflicts at this intersection. Some options for mitigating this conflict are:

- A signal at this intersection to allow pedestrians to continue east on South Atlantic Street to 4th Avenue South.
- Encouraging fans to exit on the Royal Brougham side of Safeco Field. This option would only be effective if an attractive grade-separated pedestrian crossing of the railroad tracks and 4th Avenue South is constructed on Royal Brougham and the elevated crossing is directly accessible from the concourse level of Safeco Field, Qwest Field, and the Exhibition Hall.

In terms of visual impact, Alternative A would have elevated ramp construction. The elevated ramp, however, would be visually screened from the south by the South Atlantic Street parking, from the north by the 4th Avenue South off-ramp, and from the west by Safeco Field and the Exhibition Hall.

Intersection of South Atlantic Street and 1st Avenue South (Alternative A)

Alternative A would increase the volume of two-way traffic on South Atlantic Street and would add significant activity to the South Atlantic Street/1st Avenue South intersection. This intersection, the location of the home plate entry to Safeco Field, has significant game-day pedestrian activity along with vehicular traffic. Even after the proposed 1st Avenue South and South Atlantic Street improvements were incorporated, increased vehicular traffic associated with a new westbound off-ramp would bring additional congestion and the need to resolve pedestrian conflicts at this location.

Urban design considerations for Alternative A are shown in Figure 7-5.

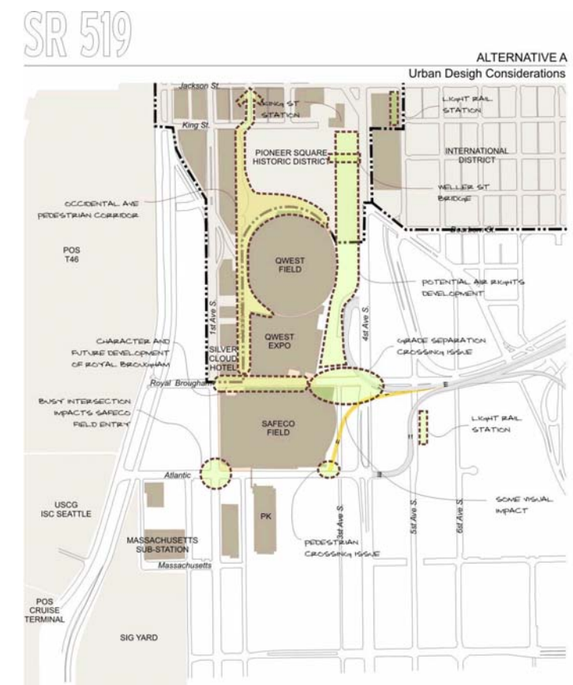

Figure 7-5: Alternative A Urban Design Considerations

Eastbound Ramp from South Massachusetts Street (Alternative B)

Alternative B would reduce traffic volumes at the South Atlantic Street and 1st Avenue South intersection by moving eastbound traffic to a new Massachusetts-to-South Atlantic Street ramp. In this option, only the South Massachusetts Street ramp would be

constructed, and the westbound ramp (Alternative A) would not be built. The visual impact of this ramp would be limited because the low-level structure would be hidden behind existing buildings. At the same time, the ramp would be harder for new users to find because of its less visible location.

Since eastbound traffic would enter at South Massachusetts Street, its intersection with 1st Avenue South would need both traffic and pedestrian improvements to reduce potential conflicts. There has been discussion of improving other pedestrian connections south of

Safeco Field in addition to the 1st Avenue South route. There seems little opportunity for major pedestrian access improvements in this area. Occidental Avenue has a developed pedestrian corridor on the west side of the existing parking garage. The corridor has no viable connection across South Atlantic Street at its north terminus. (Some users may use the existing pedestrian bridge that connects the garage to Safeco Field.) The south end of the walkway dead-ends at South Massachusetts Street, across from a warehouse/industrial use. This walkway has very little apparent usefulness as a pedestrian connection.

The South Massachusetts Street ramp would connect to the south side of South Atlantic Street east of Safeco Field. If a sidewalk is included in the ramp design, its main purpose would be to serve pedestrians headed for non-stadium destinations because there would be no good way to cross South Atlantic Street except at 1st Avenue South and 4th Avenue South. In no way should a sidewalk be constructed on this ramp that might encourage users to cross South Atlantic Street at any place other than at a controlled intersection.

Urban design considerations for Alternative B are shown in Figure 7-6.

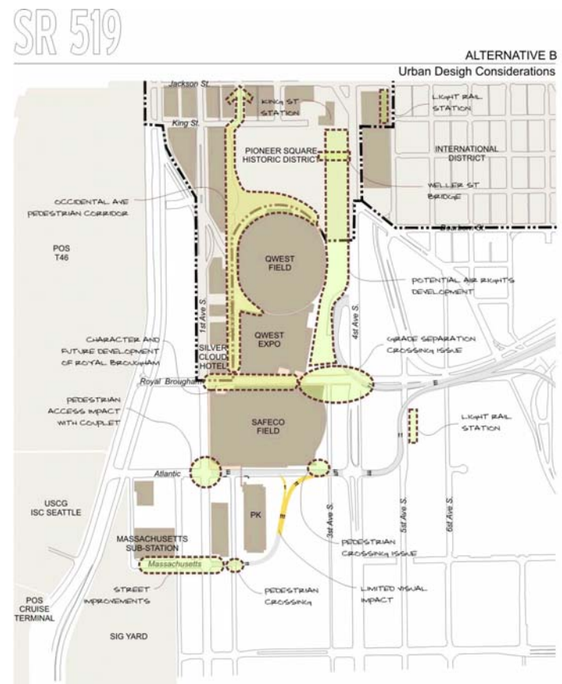

Figure 7-6: Alternative B Urban Design Considerations

WESTBOUND OFF-RAMP AT SOUTH ATLANTIC STREET WITH EASTBOUND RAMP FROM SOUTH MASSACHUSETTS STREET (ALTERNATIVE A + B)

This alternative's pedestrian access issues are similar to those of Alternative A, at the westbound ramp junction with South Atlantic Street. It would also require a similar response to pedestrian access issues at the 1st Avenue South and South Massachusetts Street intersection. Its most significant benefit would be the reduction of traffic at the 1st Avenue South/South Atlantic Street intersection by moving eastbound traffic to South Massachusetts Street. This option would have the potential to reduce traffic volumes on South Atlantic Street and, therefore, improve intersection congestion as well.

The visual impact of this alternative would be similar to that of Alternatives A and B, with most elevated construction screened by existing roadway structures or buildings. Urban design considerations for the alternative are shown in Figure 7-7.

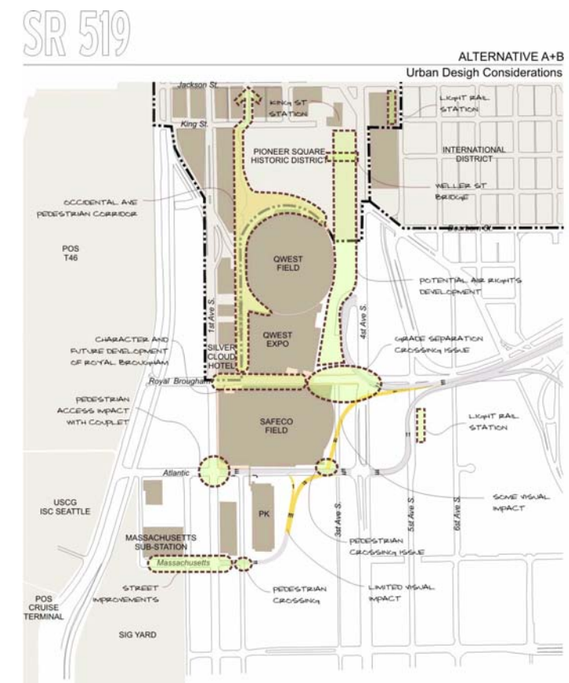

Figure 7-7: Alternative A + B Urban Design Considerations

URBAN DESIGN SUMMARY

The following discussion summarizes the potential urban design impacts of the five proposed alternatives. The criteria listed represent general urban design issues that emerged during this analysis. They are not intended to provide a detailed analysis of all potential land use, planning, or physical design considerations associated with each alternative. Their intent is to reflect the general urban design issues related to the feasibility analysis of each alternative. These issues will be refined in greater detail during the project's later phases. Their order is not based on their individual importance or priority ranking.

1. Presents a roadway and access layout that is intuitive and easy for the driver to understand and use.

   Alternative Comparison
   Alternative A - Good
   Alternative B - Fair
   Alternative A + B - Good
   SR 519 Phase 2 Original Design - Good

   Discussion
   - Alternatives A, A + B, and SR 519 Phase 2 Original Design have a simple, efficient layout that would be easy for the driver to understand.

2. Allows safe, efficient pedestrian connections between key arrival and destination points, including parking garages, bus and transit facilities, and sports stadiums.

   Alternative Comparison
   Alternative A - Fair
   Alternative B - Good
   Alternative A + B - Good
   SR 519 Phase 2 Original Design - Fair/Poor

   Discussion
   - Most existing pedestrian routes would remain unchanged, although some ramp configurations would bring either more or less vehicular activity, and potential conflicts to some intersections.
   - Alternatives A and A + B would both have westbound ramps that connect to South Atlantic Street just east of Safeco Field. These ramps would make eastbound pedestrian connections on South Atlantic Street to 4th Avenue South just east of Safeco Field difficult. A light-controlled intersection might be required to address this situation.
   - Alternatives A and A + B would add traffic and turning movements at the intersection of 1st Avenue South and South Atlantic Street. Potential pedestrian conflicts would need to be addressed along with planned traffic improvements at this intersection.
   - The SR 519 Phase 2 Original Design alternative would potentially have created significant vehicular/pedestrian conflicts along South Royal Brougham Way and at the Occidental Avenue South and 1st Avenue South intersections. Pedestrian access at the north entrance to Safeco Field (Occidental Avenue South) would have been mixing with large volumes of westbound traffic arriving from I-5 and I-90 via the SR 519 off-ramp. A grade-separated pedestrian crossing of the railroad tracks at South Royal Brougham Way would have been an integral part of this alternative.

3. Minimizes the potential for pedestrian and vehicular conflicts, including at-grade rail crossings, street intersections, driveways, and loading docks, specifically addressing the at-grade crossings at 4th Avenue South and South Royal Brougham Way.

   Alternative Comparison
   Alternative A - Grade-separated pedestrian crossing not required but highly desirable
   Alternative B - Grade-separated pedestrian crossing not required but highly desirable
   Alternative A + B - Grade-separated pedestrian crossing not required but highly desirable
   SR 519 Phase 2 Original Design - Grade-separated pedestrian crossing required

   Discussion
   - None of the alternatives would incorporate an integrated grade-separated pedestrian crossing at South Royal Brougham Way (4th Avenue South and the Burlington Northern railroad tracks). The need for this crossing exists—regardless of which alternative is preferred—remains an issue to be pursued jointly by all project stakeholders.

4. Minimizes new construction and makes maximum use of existing roadways and infrastructure.

   Alternative Comparison
   Alternative A - Good
   Alternative B - Good
   Alternative A + B - Good
   SR 519 Phase 2 Original Design - Good

Discussion

- Alternatives A, B, and SR 519 Phase 2 Original Design would have an efficient construction program. Either Alternative A or B could also act as the first phase for the future implementation of Alternative A + B.
- Alternative A + B represents the full implementation of Alternatives A and B. It would incorporate the construction of Alternatives A and B as one integrated project, thereby combining the construction requirements of both projects.

5. Is consistent with Alaskan Way Viaduct replacement options.

Alternative Comparison

Alternative A - Good

Alternative B - Good

Alternative A + B - Good

SR 519 Phase 2 Original Design - Good

Discussion

- All alternatives have the potential to be consistent with Viaduct replacement options.

6. Minimizes traffic impacts on significant existing structures, historic properties, and adjacent residential development, including access restrictions and noise.

Alternative Comparison

Alternative A - Fair

Alternative B - Good

Alternative A + B - Good

SR 519 Phase 2 Original Design - Fair/Poor

Discussion

- Alternative A would add additional traffic on South Atlantic Street adjacent to Safeco Field but reduce vehicular impacts on South Royal Brougham Way, as would Alternatives B and A + B.
- There would be no expected additional traffic impacts on adjacent historic structures from these alternatives.
- The SR 519 Phase 2 Original Design alternative would have been constructed adjacent to Safeco Field. It would have significantly increased the traffic volumes on the north side of Safeco Field. With existing traffic on South Atlantic Street and 1st Avenue South, the additional traffic brought by this construction would have meant Safeco Field would have been impacted by significant vehicular traffic on three of its four sides. The addition of traffic on South Royal Brougham Way would also have tended to create a vehicular barrier between Safeco Field and the other Stadium District facilities to the north.

7. Minimizes the physical and visual impact of new roadway construction on significant structures and historic properties, including Safeco Field, Quest Field Exhibition Hall, and adjacent historic buildings.

Alternative Comparison

Alternative A - Good

Alternative B - Good

Alternative A + B - Good

SR 519 Phase 2 Original Design - Poor

Discussion

- Alternatives A, B, and A + B would not physically impact views of significant existing structures or adjacent historic buildings.
- The SR 519 Phase 2 Original Design alternative would have had some potential visual impacts on the north facade of Safeco Field, and there was concern that the ramp construction would have affected existing views from inside the stadium toward downtown Seattle. There was also a concern that the exit ramp's architecture might not have been in scale with or visually compatible with the architectural character of Safeco Field and adjacent structures.

8. Supports area land use objectives as defined in the Seattle Comprehensive Plan (SODO and Pioneer Square neighborhoods).

Alternative Comparison

Alternative A - Good

Alternative B - Good

Alternative A + B - Good

SR 519 Phase 2 Original Design - Fair/Poor

Discussion

- All alternatives would offer access and transportation components that would support adjacent and larger areas land use and Seattle Comprehensive Plan objectives. Alternatives A, B, and A + B would have the potential to create a land use transition zone separating the Stadium District from the industrial uses to the south.

- Because it would have increased traffic volumes on South Royal Brougham Way, the SR 519 Phase 2 Original Design alternative would have had some impact on development of the streetscape character and type of land use needed to create a pedestrian atmosphere along the southern end of the Occidental Avenue South corridor.

Grade-Separated Crossing of BNSF Track at South Royal Brougham Way

Alternatives

Three alternative grade-separated pedestrian concepts were evaluated in this feasibility analysis. These were:

Alternative 1: Light Rail Station to Stadium

This alternative provides a continuous grade-separated pedestrian bridge from the light rail station on 5th Avenue South over 4th Avenue South and the BNSF tracks. The bridge provides direct connections to the Safeco Field mezzanine and the Qwest Field Exhibition Hall and garage. Access from the west is via stairs and existing elevators in the Qwest Field garage. *Potential conflicts exist between this bridge configuration and potential SR 519 (Alternative A) ramp configurations.*

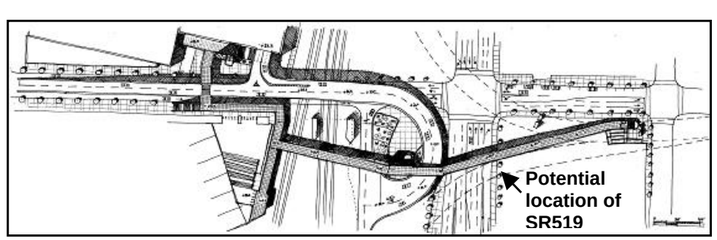

Figure 7-8: Light Rail Station to Stadium

Alternative 2: East of 4th Avenue South

This alternative provides grade-separated access from east of 4th Avenue South over 4th Avenue South and the BNSF tracks. It also provides direct connections to the mezzanine level of Safeco Field and the Qwest Field Exhibition Hall and garage. Access from the west is the same as Alternative 1, using stairs and existing elevators in the Qwest Field garage.

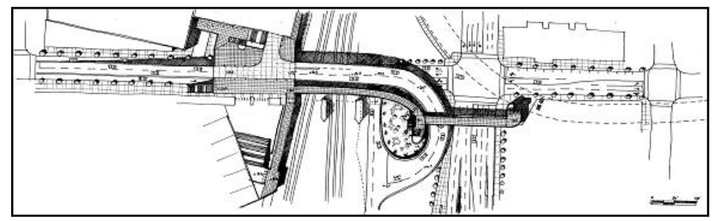

Figure 7-9: East of 4th Avenue South

Alternative 3: West of 4th Avenue

This alternative begins on the west side of 4th Avenue with grade-separated access over the BNSF tracks. It provides the same connections to Safeco Field and the Qwest Field Exhibition Hall and garage as Alternatives 1 and 2. Access from the west is also the same as in Alternatives 1 and 2.

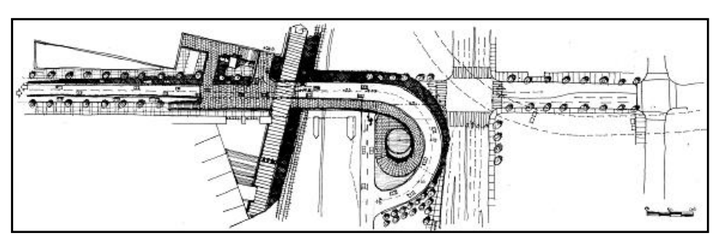

Figure 7-10: West of 4th Avenue

All alternatives can be built independently or in coordination with the vehicular connector as shown in Figures 7-11 and 7-12 representing Alternative 3.

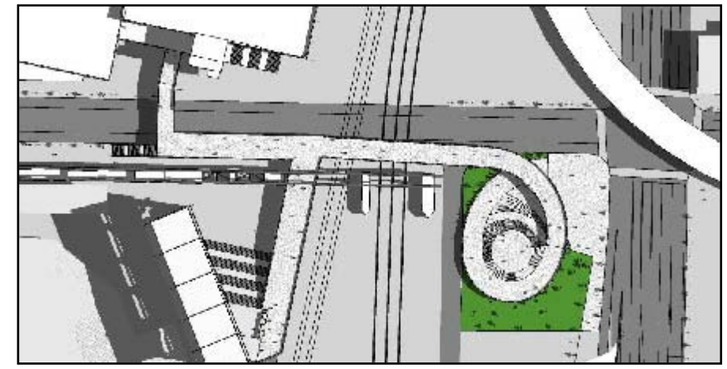

Figure 7-11: Alternative 3 – Phase 1, Pedestrian Connection

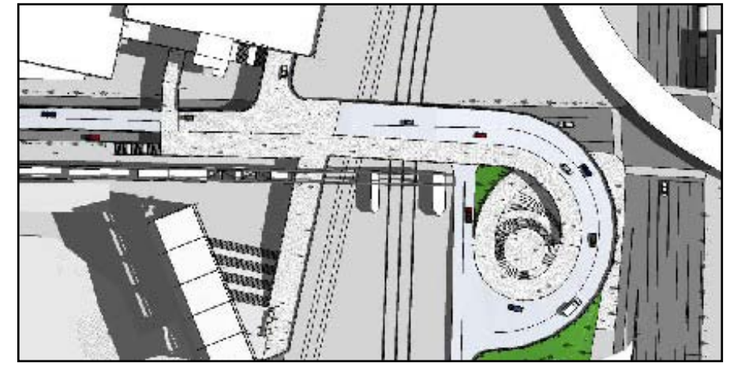

Figure 7-12: Alternative 3 – Phase 2, Pedestrian and Vehicular Connection

Assumptions

Each alternative was developed using the following planning/design assumptions:

- Vehicular Connectors: A vehicular connector (bridge) will be constructed in coordination with the pedestrian bridge. This connector will provide 2-lane grade-separated vehicular access over the BNSF tracks at South Royal Brougham Way. The preferred connector concept illustrated in Figure 7-11, begins south of South Royal Brougham Way on 3rd Avenue South and loops over the tracks, returning to grade east of Occidental Avenue South. The loop configuration selected was the preferred concept of several connector alternatives evaluated in this study. Due to space limitations and tight turning radii, a 40-foot wide vehicular bridge is assumed to allow two-lane access on the loop portion of the connector. The roadway narrows to 30 feet west of the BNSF tracks. Grade-level service traffic is provided on South Royal Brougham Way via two surface lanes on either side of the bridge structure west of the BNSF tracks.

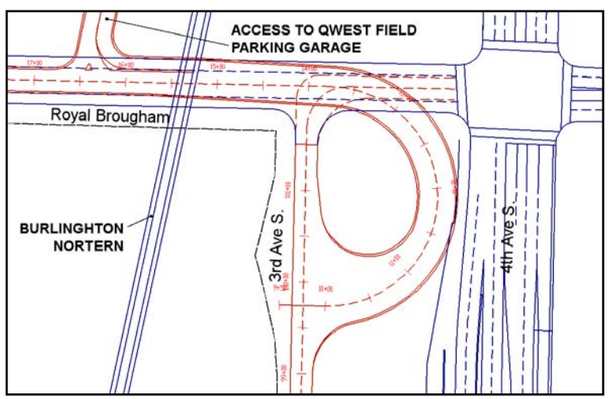

Figure 7-13: Vehicular Connectors

- Coordinated Construction: The vehicular and pedestrian connector bridges are to be planned so they may be constructed either at the same time or as separate, but coordinated, projects.
- Handicapped Access: Handicapped access to the pedestrian bridge will be by either ramps or elevators. Ramp slopes are planned to allow access via a continuous 5 percent maximum slope.
- Rail Clearances: Both bridges will provide a minimum of 23 feet 6 inches of clearance over the BNSF tracks.
- Pedestrian Bridge Width: To accommodate event crowds, the pedestrian bridge is planned to provide a 20-foot wide pedestrian corridor except at vertical access points where stair-elevator combinations have separate service requirements.
- Other Considerations: Two other important urban design considerations were included in this feasibility analysis. These were:
  - *Pedestrian Zone:* To provide access to both Safeco Field and the Qwest Field Exhibition Hall and garage, the elevated connector will need to cross South Royal Brougham Way from south to north. This includes a pedestrian crossing of the vehicular lanes. This connection should be designed as a pedestrian priority area.
  - *Architectural Context:* Both the vehicular and pedestrian bridges will be part of the urban design context established by the presence of Safeco Field and the Qwest Field Exhibition Hall. The bridges' design should echo that theme and not be conceived as carrying the image of a roadway structure into this setting. The structures should draw visual themes from the steel work, trusses, and materials of Safeco Field to establish a compatible, contextually sensitive character.

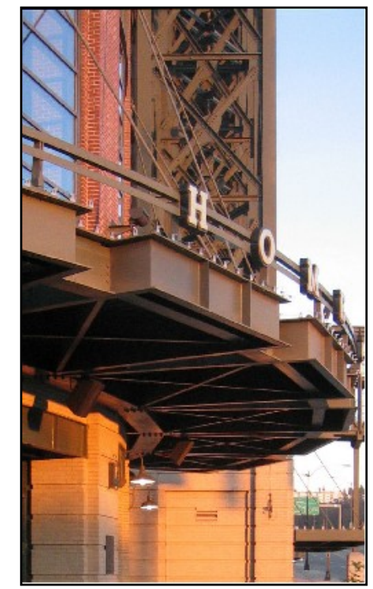

Figure 7-14: Materials of Safeco Field

Comparison of Alternatives

Each of the pedestrian ramp alternatives was comparatively evaluated for several functional, access, cost, and urban design criteria. The following evaluation matrix illustrates the application of these criteria to each of the three alternatives.

FUNCTION	Alt 1	Alt 2	Alt 3
Provides grade-separated access over the BNSF tracks.	λ	λ	λ
Provides grade-separated access over 4th Avenue.	λ	λ	
Meets railroad and roadway clearance requirements.	λ	λ	λ
Can be built in coordination or independently of the vehicular connector.	λ	λ	λ
Connects to both Safeco and Qwest Field facilities.	λ	λ	λ
Meets handicapped access requirements.	λ	λ	λ
Allows visual surveillance of pedestrian areas from surroundings for safety.			λ
Provides surge/spillout space for accommodating peak use crowds.			λ
Provides adequate pedestrian capacity with the fewest access constructions.			λ
Coordinates with all future SR 519 ramp and roadway configurations.		λ	λ
COST			
Has the potential for least total construction cost.			λ
Can be built on existing, publicly owned land or rights-of-way. No new acquisition or rights-of-way are required.			λ
Requires fewest stairs or elevators for user access, including handicapped/context-sensitive design.			λ
AESTHETICS/CONTEXT-SENSITIVE DESIGN			
Reduces visual impact from elevated bridge construction.			λ
Provides simple, direct pedestrian routes.			λ
Has best potential for contextual fit with surroundings (character and materials).			λ

Table 7-1 – Comparison of Alternatives

Summary

Of the three primary alternatives selected for analysis (several other pedestrian bridge concepts were evaluated and discarded for functional, cost, or construction issues), Alternative 3, the "West of Fourth Avenue" alternative, has the most potential for refinement. Its strengths include:

- Least Cost to Construct: Alternative 3 is shorter in length and does not require the installation of additional elevators for handicapped access. Only one additional stairway is needed to provide access from Royal Brougham Way on the west. Alternative 3 can also be built without additional land or right-of-way acquisition. By using land in the center of the vehicular loop, the ramp makes good use of space that would be isolated by that facility's construction.
- Functional Capacity: The Alternative 3 access ramp is not encumbered by stair or elevator capacity constraints. The ramp widens as it descends, allowing space at its base to accommodate a surge of users at event times. It also provides the shortest and most direct pedestrian connection of the three alternatives.
- Security: The Alternative 3 access ramp and stairs are visible from Fourth Avenue South and from the vehicular connector. Its only nonvisible connecting components are the existing elevators in the Qwest Field parking garage.
- Bridge Route and Access: Alternatives 1 and 2 have large bridge structures and less direct routes to their destinations. They also require access points with stairs and elevators both east and west of Fourth Avenue to adequately serve all pedestrian approach routes. Alternative 3 concentrates this access at a single location.

  To clear the vehicular loop, the bridges in Alternatives 1 and 2 must swing south and rise to a height of approximately 30 feet above Fourth Avenue, increasing pedestrian access issues. Alternative 1 would also cross above the Metro bus yard to the east and, depending on its location, the bridge may also conflict with the future ramp construction options being evaluated for westbound I-90 traffic.
- Coordination: Alternative 3 coordinates well with the loop vehicular crossing concept and can be built either as an integral part of that project or as an independent but coordinated project.

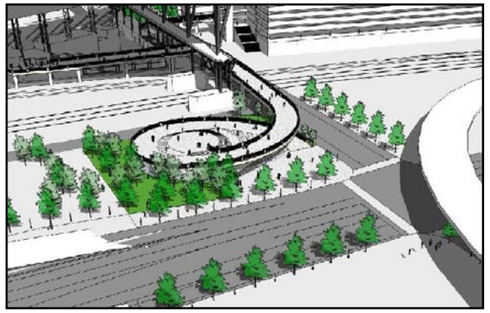

Figure 7-15: Phase 1 – Pedestrian Connection

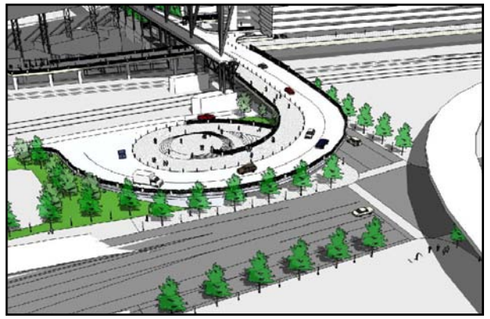

Figure 7-16: Phase 2 – Vehicular Access Alongside pedestrian bridge

- Aesthetics and Contextual Design: By being the shortest of the pedestrian bridges, Alternative 1 has the least elevated construction, and by being parallel with the vehicular roadway, the least visual presence. It can be designed as a simple, unobtrusive structure with an architectural image and materials consistent with Safeco Field and other adjacent buildings.

  Alternatives 1 and 2 have long elevated structures and add visual clutter to an already complex visual setting. Both lack the simplicity of form and function available in Alternative 3.

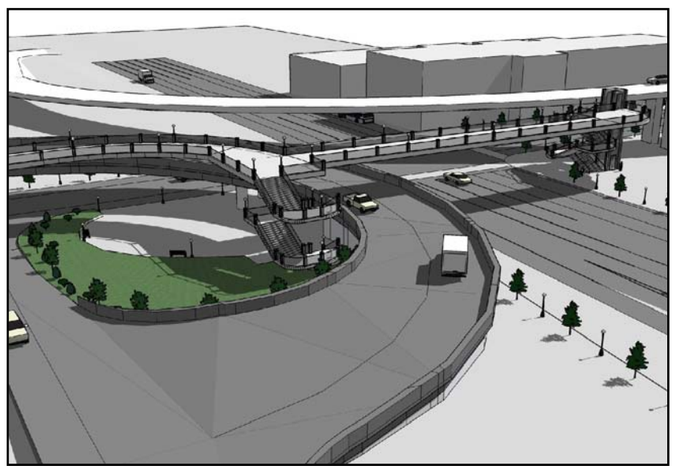

Figure 7-17: Alternative 2 – Bridge Connecting to East Side of 4th Avenue South with Two Stair-Elevator Towers

Alternative 3 also has the potential to allow the landing space at its east end to be developed as a pleasant, attractive public space for its users.

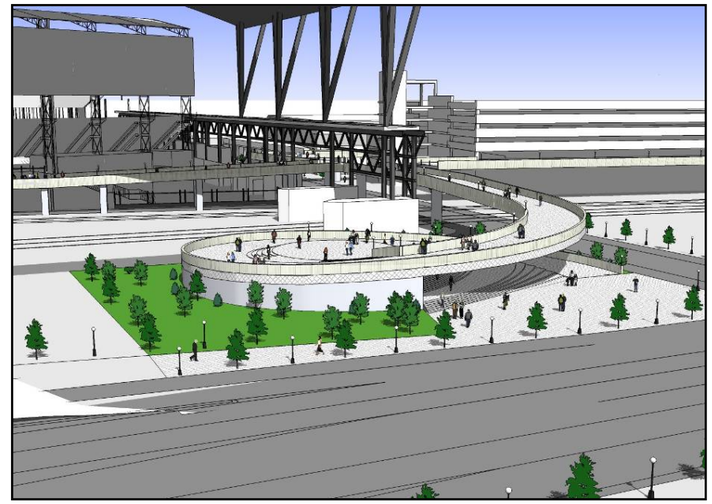

Figure 7-18: Alternative 3 – Plaza Space at 4th Avenue South and South Royal Brougham Way

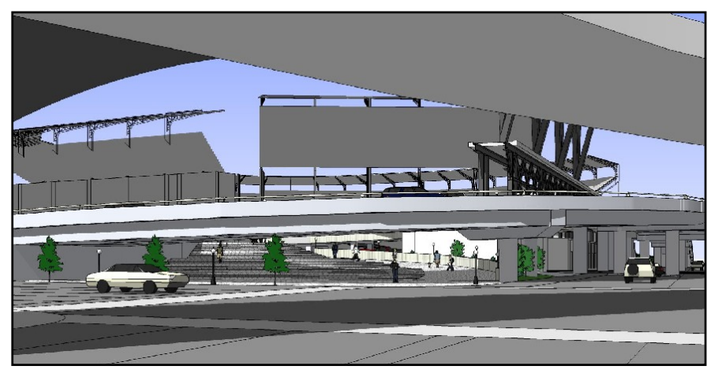

Figure 7-19: Alternative 3 – View West from 4th Avenue South and South Royal Brougham Way

Figure 7-20: Alternative 3 – View East from South Royal Brougham Way

- Coordination with Architectural Context: The following photographs illustrate urban design images from Safeco Field that can be incorporated into the pedestrian bridge or loop design. Incorporation of these or similar urban design elements into the structural components and urban design elements of the new bridges will help blend the new construction with the existing architectural setting.

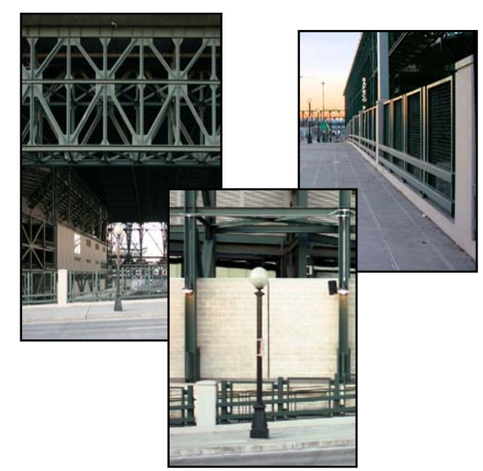

Figure 7-21: Typical Architectural Features of Safeco Field

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