

Environmental Justice Technical Memorandum  
S. Holgate Street to S. King Street  
Viaduct Replacement Project  
Environmental Assessment



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## ATTACHMENTS

### A Community Interview Questions

## ACRONYMS

ADA	Americans with Disabilities Act
AWV	Alaskan Way Viaduct
DOT	U.S. Department of Transportation
EIS	environmental impact statement
FHWA	Federal Highway Administration
NEPA	National Environmental Policy Act
Project	SR 99: S. Holgate Street to S. King Street Viaduct Replacement Project
SODO	South of Downtown
SR	State Route
WSDOT	Washington State Department of Transportation

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## Chapter 1 SUMMARY

This technical memorandum for environmental justice addresses the SR 99: S. Holgate Street to S. King Street Viaduct Replacement Project (the Project). Executive Order 12898 mandates that federal agencies work to identify and address disproportionate and adverse effects of their programs and activities on low-income and minority populations. Federal Highway Administration (FHWA) guidelines require an environmental justice analysis be made to determine if a project would have a disproportionately high and adverse effect on minority and low-income populations.

This memo is created specifically for the Project. However, it is part of ongoing efforts to include minority and low-income populations in the planning process and conclusions relating to the Alaskan Way Viaduct (AWV) and Seawall Replacement Program's potential effects. The AWV Program is currently composed of the Moving Forward projects, which include column safety, electrical lines relocation, north-end viaduct improvements, south-end viaduct replacement, and transit enhancements. The Moving Forward projects will repair or replace about half of the seismically vulnerable viaduct. The public outreach and environmental justice efforts began during scoping and development stages for the Alaskan Way Viaduct and Seawall Replacement Program preceding this Project. These efforts are outlined in Appendix J of the Alaskan Way Viaduct and Seawall Replacement Project 2004 Draft Environmental Impact Statement (EIS) and 2006 Supplemental Draft EIS (WSDOT et al. 2004, 2006).

The Project has already identified many steps to avoid, minimize, or mitigate any adverse effects on minority and low-income populations. Further measures could be taken to address community concerns as they arise. The Project will continue to work directly with social service providers to avoid, minimize, or mitigate disproportionate adverse effects on minority and low-income populations. With advance planning before construction and adaptation during construction, most of the potential effects identified to date, including air quality, transit, parking, access, noise, and visual effects, could be avoided, minimized, or mitigated.

Outreach activities that have occurred include public meetings, community briefings, electronic newsletters, and interviews with social service providers (see Chapter 4). Project concerns of these organizations are summarized in Section 4.1 of this memorandum, as well as their suggestions to avoid, minimize, or mitigate those issues. Many service providers cited construction and traffic effects during both construction and operation as primary

concerns. Outreach to these groups is ongoing and will continue through all phases of the Project to ensure that their needs are identified and addressed to the extent possible.

## 1.1 Project Description

The Project would replace the existing stacked viaduct structure between S. Holgate Street and S. King Street. At S. Holgate Street, State Route (SR) 99 would transition from an at-grade, side-by-side roadway to an aerial, side-by-side roadway crossing over S. Atlantic Street and the BNSF tail track. SR 99 would return to a side-by-side, at-grade roadway for a short distance north of S. Royal Brougham Way. SR 99 would then transition to a stacked, aerial structure that would match with the existing stacked viaduct at about S. King Street. A new northbound off-ramp and southbound on-ramp would be added at S. Atlantic Street. The new ramps would improve access to the study area. The proposed U-shaped undercrossing would substantially improve vehicular access to Terminal 46. Pedestrian and bicycle paths would be included. A remote holding area for Seattle Ferry Terminal traffic would be added between S. Royal Brougham Way and S. King Street along the east side of SR 99.

## 1.2 Affected Environment

The study area is the core of where potential social effects from the Project would be felt. The study area for this environmental justice analysis is south of the downtown core. Beginning in the south, it extends from S. Walker Street north to S. Washington Street and from the Duwamish River and Elliott Bay east to Fourth Avenue S. This area is within the neighborhood planning areas for the Greater Duwamish Manufacturing/Industrial Center and the Pioneer Square neighborhood. Land use types in the study area are mostly industrial but include interspersed commercial, retail, and residential uses. Safeco and Qwest Fields, major league baseball and football stadiums, compose the northeastern portion of the study area.

Approximately 667 people reside in this area of mixed land uses. The population is slightly more diverse and ethnic than the rest of Seattle, though few households have limited English proficiency. Most residents are adults, and very few are children. Almost half live alone. Household income is substantially below the city's median, and almost half of the population lives at or below the poverty level. Annual surveys also document a substantial homeless population in the study area. Several social service providers operate shelters and support services in the study area.

The north end of the study area nearest to Pioneer Square is likely to see the development of many apartments and condominiums priced at or above market rate. The area is expected to continue to attract a diverse population, including minorities, but household incomes would be substantially higher than for most of the area's current residents. The area south of S. Royal Brougham Way is anticipated to maintain its heavy commercial, industrial, and manufacturing land uses.

### 1.3 Operational Effects and Mitigation

Once completed, the Project would improve pedestrian and bike access along the SR 99 corridor. By building a crosswalk at S. Atlantic Street and Alaskan Way S., the Project would provide pedestrians with safe access to both the St. Martin de Porres Shelter and the U.S. Coast Guard facilities. It is expected that vehicle and public transit traffic will increase with or without the Project; however, after the Project is completed, connectivity between area locations would be improved. Access to residential properties, businesses, and traffic patterns in the study area would be similar to current conditions. Because the Project is located in an industrial area with the existing viaduct structures, the Project's built condition would result in noise levels similar to existing conditions.

Project effects also include permanent loss of approximately 1,267 parking spaces. The Project would result in a reduction of approximately 820 off-street parking spaces, 418 long-term on-street spaces, and 29 short-term on-street spaces. Although this is a large number of spaces, the average weekday utilization rate is approximately 37 percent, leaving roughly 4,100 off-street spaces available within 0.25 mile of the parking that the Project would remove, so adverse effects should not be significant (PSRC 2006).

This parking is used by commuters, local area residents, and public event parking. In addition, the long-term parking areas are used by homeless and low-income individuals who live out of their cars. Homeless individuals without cars may also use these and adjacent areas for places to camp. The activity has been noted; however, overnight camping is not considered legal and therefore is not addressed by the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.

Most of these effects are likely to be short-term as people and service providers adjust to changes in transportation infrastructure. It is important to keep in mind the special considerations of minority and low-income populations, including disabilities, economic disadvantages, and language and cultural barriers that may hinder transitions and changes. Continued community outreach and communication will be a crucial part of avoidance,

minimization, and mitigation of adverse effects. Section 6.2 identifies infrastructure considerations as well as community outreach and communication activities that should occur prior to the opening of the new facilities to educate and prepare the public for changes in their community.

## 1.4 Construction Effects and Mitigation

Compared to the overall population of Seattle, minority and low-income populations could be disproportionately affected during construction because they and the organizations serving them are heavily reliant on public transit and have limited alternative means of transportation. The organizations serving these populations are also reliant on transit, as well as overall accessibility for the delivery of supplies, staff, and emergency services. On the other hand, the transportation management strategies being planned for the construction period, such as increasing the number of transit vehicles and extending service hours, may be successful in preserving reliable service and should benefit those who rely on public transportation.

The St. Martin de Porres Shelter is of particular concern, being located immediately next to construction at S. Massachusetts Street and Alaskan Way S. However, by ensuring vehicular and pedestrian access to the shelter, the primary construction effects could be minimized and avoided. In addition, construction noise and vibration would be monitored, and the Project would apply for a noise variance from the City for any construction that occurs at night.

The potential effects the Project could have on minority-owned businesses also needs to be considered for the environmental justice determination. Four minority-owned businesses are located on streets where traffic volumes and congestion are expected to increase during construction. These conditions could make access to the businesses more difficult for customers and potentially affect sales. Five other minority-owned businesses are located farther from the Project and may experience similar effects but to a lesser degree.

Portions of the aerial structures of the existing viaduct are used by homeless people for shelter. Because this activity is not considered legal, it is not protected by the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. Further discussion and details related to this issue are noted in Chapters 5, 6, 7, and 9.

Maintaining ongoing community outreach and open communication with service providers would help minimize, avoid, and mitigate adverse effects of the Project.

## 1.5 Environmental Justice Determination

Minority and low-income populations could be disproportionately affected during the construction of the Project if measures are not taken to ensure transit service and access for emergency services. However, with advance planning, close communication with service providers, and adaptation during construction, it is expected that potential effects identified to date could be avoided, minimized, and mitigated such that the effects would not fall disproportionately on minority and low-income populations. It is important to keep in mind the special considerations of minority and low-income populations, including disabilities, economic disadvantages, and language and cultural barriers that may hinder transitions and changes. Most of these effects are likely to be short-term as people and service providers adjust to changes in transportation infrastructure during construction or after the completion of the Project. It is important to monitor social effects during construction and continue coordination with service providers throughout planning and construction of the Project.

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## Chapter 2 METHODOLOGY

The methods used to conduct this environmental justice analysis draw from the methods and actions conducted during previous scoping and planning for the Alaskan Way Viaduct and Seawall Replacement Program. The following steps were taken to analyze effects of this Project on minority and low-income populations:

- The study area was defined, and a census tract block group that approximates the area was identified (census tract 93 block group 2 covers most of the study area).
- Preliminary identification of minority and low-income populations was made using data from the U.S. Census Bureau and local social service providers. In addition, demographic data and discussion with service providers demonstrate that the study area has a larger percentage of the population with some form of disability than the city of Seattle as a whole.
- The study area population was compared to the population that would benefit from the Project and the population of the city of Seattle. The benefit area consists of approximately 21 percent of the total population of Seattle and primarily includes areas within, adjacent to, and directly north and south of the AWV corridor. This includes both neighborhoods and industrial areas served by the Project.
- The public involvement plan was designed to ensure inclusiveness of minority and low-income populations. The plan includes outreach at public events, posting information along the AWV corridor, and communication with social service providers. Project team members, including planners and communications specialists, interviewed service providers to further identify low-income or minority populations in the project area as well as potential effects the Project would have on their clients.
- Potential effects of the Project have been identified during planning stages. The project team has assessed whether these effects would fall disproportionately on minority and low-income populations. It is important to note that this determination is based on information available at this time. If new issues come to light, efforts will be made to avoid, minimize, and mitigate any potentially adverse effects. The assessment is qualitative, using the professional judgment of planners and social scientists, drawing on the understanding of the project area gained from service provider interviews and direct observations. The

results of other environmental analyses are included by reference and summarized only as needed to support the findings of this memorandum.

- Potential mitigation measures were identified and developed to address any actions of the Project that may have disproportionate adverse effects on minority and low-income populations.

The construction effects and mitigation measures listed in this memorandum draw from different disciplines whose evaluations are contained in the following technical memoranda (contained in Appendix G) and discipline reports prepared for the Project:

- Social Resources Technical Memorandum
- Noise and Vibration Technical Memorandum
- Land Use and Shorelines Technical Memorandum
- Parks and Recreation Technical Memorandum
- Relocations Technical Memorandum
- Public Services and Utilities Technical Memorandum
- Economics Technical Memorandum
- Air Quality Discipline Report (Appendix E)
- Transportation Discipline Report (Appendix F)

Accurately predicting effects to homeless people is inherently difficult. The specific individuals found in the area may change in response to external factors, such as availability of supporting services and general economic conditions. Due to the transient nature of the homeless population, it is important to have continuous communication with the homeless and the service providers they use, as new homeless people could arrive in the area at anytime. Further, some homeless people have substance dependency or mental health problems that prevent them from responding rationally to changes in their environment. Reasonable measures should be made to ensure the safety of the homeless population.

Results of ongoing public outreach efforts will provide further information on potential project effects and help determine effective mitigation measures. This memorandum describes the Project's actions to include historically disenfranchised low-income, minority, and disabled populations in the planning and decision-making process. To be consistent with the underlying principles of the National Environmental Policy Act (NEPA), Executive Order 12898, and Title VI of the Civil Rights Act, outreach to and involvement of these populations must continue beyond the environmental process through design and construction, until the Project is completed.

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## Chapter 3 STUDIES AND COORDINATION

In 1994, concern over low-income and minority populations bearing a disproportionate share of adverse health and environmental consequences led President Clinton to issue Executive Order 12898, focusing federal agency attention on environmental justice issues. The U.S. Department of Transportation (DOT) and FHWA responded by developing environmental justice implementing orders to address these concerns. The fundamental principles of environmental justice are:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.
- To ensure the full and fair participation by all potentially affected populations in the transportation decision-making process.
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

This environmental justice analysis is consistent with federal guidance provided by FHWA (FHWA 2003) and procedures developed by Washington State Department of Transportation (WSDOT) (WSDOT 2007). The following additional federal, state, and City of Seattle regulations are relevant to environmental justice and were used to guide this study:

- National Environmental Policy Act (NEPA).
- DOT Order 5610.2: Environmental Justice to Address Environmental Justice in Minority Populations and Low-Income Populations.
- Title VI of the Civil Rights Act of 1964.
- 23 USC 109(h).
- Governor's Executive Order 93-07: Affirming Commitment to Diversity and Equity in the Service Delivery and in the Communities of the State.
- Seattle Municipal Code Chapter 25.05 for implementing the State Environmental Policy Act (SEPA).
- Seattle Municipal Code Chapter 14.04: Fair Employment Practices.
- Seattle Municipal Code Chapter 14.08. Unfair Housing Practices.

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## Chapter 4 PUBLIC INVOLVEMENT ACTIVITIES

Public outreach for the Project will be ongoing, and special efforts will be made to include minority and low-income populations throughout the study area. According to the 2000 census, approximately 667 people reside in the study area. The study area also has a number of social service providers, three of which (St. Martin de Porres Shelter, Lutheran Compass Center, and Bread of Life Mission) provide shelter beds for the homeless. Local service providers have been consulted with multiple times during the planning process for the Alaskan Way Viaduct and Seawall Replacement Program.

The environmental justice evaluation for this Project builds on the previous public outreach conducted for the Program. The text below describes the efforts made to date to ensure that populations in the study area are involved in the decision-making process. For additional information on public outreach activities, see the Public Involvement Technical Memorandum.

### 4.1 Interviews

Social resources, including social service providers, are located in the study area. One-on-one interviews for the AWV Program began in 2001. The interviews that have been conducted in the study area from 2001 through 2007 are listed in Exhibit 4-1. These interviews were held to ensure that these organizations are engaged in the decision-making process and to discuss their concerns and potential effects on their property and/or operations. Questions were posed to the agency to understand its purpose, clients, and operations, and agency representatives were given the opportunity to discuss the potential issues that the Project might present. Most of the interviews were conducted with the executive director and/or program manager of the organization. The list of questions used to guide each interview is provided in Attachment A.

Interviews conducted for both the entire AWV Program and this Project helped the project team understand the population within the project area, learn of potential adverse effects, and identify ways to keep minority and low-income populations and the social service providers they depend on informed and involved in the Project. Summaries of the interviews that occurred with service providers in the study area are provided in Exhibit 4-1. This table summarizes some interviews that predate the current Project; those discussions were based on a larger project area with a longer construction period. After this Project's preliminary conceptual design became available in October 2007, discussion of this Project was included in meetings and interviews with service providers.

Potential mitigation or other actions to address concerns raised during these interviews have been developed in some cases. Measures and actions to avoid or reduce adverse effects will be developed through continued coordination with these organizations as project planning proceeds. Exhibit 4-1 documents the concerns service providers had about potential effects on their services or the disadvantaged populations they serve. Exhibit 4-1 also documents ideas service providers had for resolution and potential mitigation measures for dealing with these concerns. The concerns and resolution columns do not necessarily correspond. For example, service providers may have mentioned concerns without ideas for resolution and vice versa.

Most representatives wanted to be a part of future social services briefings. The interviews listed below reflect both meetings that occurred recently during outreach specifically for the current Project and previous outreach for the AWV Program that is important and relevant to consider specifically for this Project. Social service providers within the study area have been included, along with nearby providers who had comments related to the Project or serve disadvantaged populations in the study area. These organizations will continue to be involved through project planning and design.

**Exhibit 4-1. Interviews with Social Service Providers, 2002–2007**

Organization/ Date(s)	Potential Concerns of Service Providers	Recommendations by Providers for Resolution or Potential Mitigation Measures
St. Martin de Porres Shelter, October 30, 2002, October 03, 2003, June 2, 2005, October 26, 2006, July 18, 2007	<ul style="list-style-type: none"> <li>• Access to shelter during construction for vehicles and pedestrians using shelter services.</li> <li>• Traffic levels on Alaskan and E. Marginal Ways S. after construction and effects on access to shelter.</li> <li>• Construction effects on the shelter. Clients are transported to and from the shelter by bus early in the morning and in the evening.</li> <li>• 30 to 40 percent of the shelter guests choose to walk and their safety is a concern.</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure consistent access during construction.</li> <li>• Maintain safe pedestrian routes between the shelter and Pioneer Square area during construction.</li> <li>• Pedestrian crossing at Alaskan Way S. and S. Atlantic Street would be very beneficial.</li> <li>• Consider a traffic signal at S. Massachusetts Street and Alaskan Way S. to assist vehicles leaving the site. This would also benefit the Coast Guard maintenance yard.</li> <li>• Update the shelter on any issues that relate to the homeless population and cooperate with service providers to address any issues.</li> </ul>

**Exhibit 4-1. Interviews with Social Service Providers, 2002–2007 (continued)**

Organization/ Date(s)	Potential Concerns of Service Providers	Recommendations by Providers for Resolution or Potential Mitigation Measures
<p>St. Martin de Porres Shelter, October 30, 2002, October 03, 2003, June 2, 2005, July 18, 2007 (continued)</p>	<ul style="list-style-type: none"> <li>• Construction may require detours that are not as convenient for shelter guests choosing to walk.</li> <li>• Traffic delays affecting the bus that transports shelter guests.</li> <li>• Increased tourist traffic along the corridor.</li> <li>• Current congestion at S. Massachusetts Street and Alaskan Way S.</li> <li>• Unsheltered persons stay up all night to protect themselves and sleep during the day. This hinders their ability to be conscious of activities (construction/closures) around them during the day.</li> <li>• Homeless use state highways and overpasses for shelter.</li> <li>• Service outages.</li> </ul>	<ul style="list-style-type: none"> <li>• Post project information in advance in multiple languages.</li> <li>• Personal items found by construction workers should be handled with care and disposed of without direct contact..</li> <li>• Improved power infrastructure serving the area that would benefit from updates.</li> </ul>
<p>Lutheran Compass Center, August 5, 2003, August 3, 2005, July 10, 2006, July 24, 2007</p>	<ul style="list-style-type: none"> <li>• Access to the buildings on Western Avenue and S. Washington Street for visitors, residents, and staff.</li> <li>• Access to transit if routes are relocated from First and Second Avenues S. during construction.</li> <li>• Noise and vibration from construction.</li> <li>• Maintaining access for clients at all times.</li> <li>• Loss of ADA parking space and load/unload zone located underneath the viaduct in front of main entrance. Operation Sack Lunch is a program that borrows Compass Center's kitchen to make lunches and then uses the loading zone to load the lunches into their van for distribution.</li> <li>• Many service providers with limited resources share facilities to provide the program services they do.</li> </ul>	<ul style="list-style-type: none"> <li>• Place posters in advance to notify people of upcoming work.</li> <li>• Give program director several weeks' notice of construction activities.</li> <li>• Provide social service briefings.</li> <li>• Light the construction area to discourage trespassing.</li> <li>• Secure construction sites well.</li> <li>• Increase police patrols during construction.</li> <li>• Designate another space near the center for ADA parking and load/unload.</li> </ul>

Exhibit 4-1. Interviews with Social Service Providers, 2002–2007 (continued)

Organization/ Date(s)	Potential Concerns of Service Providers	Recommendations by Providers for Resolution or Potential Mitigation Measures
Bread of Life Mission, August 19, 2003, June 16, 2005, August 15, 2007	<ul style="list-style-type: none"> <li>• Effects on facility during construction due to proximity of building to the viaduct, including access to the building.</li> <li>• Daytime and nighttime construction noise, although they are used to it.</li> <li>• Increased traffic would affect guests.</li> <li>• Many homeless sleep under the viaduct.</li> <li>• Access to Mission throughout the day is important for deliveries.</li> </ul>	<ul style="list-style-type: none"> <li>• Conduct sweeps of the construction area to locate homeless people prior to construction.</li> <li>• Use signage (in multiple languages; e.g., Spanish) to communicate construction activities.</li> <li>• Social service briefings.</li> </ul>
Lazarus Day Center, November 12, 2003, May 23, 2005	<ul style="list-style-type: none"> <li>• Client access to center.</li> <li>• Increased congestion for services, deliveries, and staff.</li> <li>• Effects to transit service.</li> <li>• Staff commutes would be affected, especially with sports stadiums nearby.</li> </ul>	<ul style="list-style-type: none"> <li>• Maintain access during construction.</li> <li>• Early notification of construction-related changes to bus service, road closures, etc.</li> </ul>
Pioneer Square Clinic, January 16, 2004, May 16, 2005	<ul style="list-style-type: none"> <li>• Increased congestion for services, deliveries, and staff.</li> <li>• Traffic safety during construction.</li> <li>• Delays in response times for emergency vehicles.</li> <li>• Displacement of people who live under the viaduct.</li> <li>• Access to ferries.</li> </ul>	<ul style="list-style-type: none"> <li>• Maintain bus schedules and facilitate traffic flow.</li> <li>• Maintain access during construction.</li> <li>• Provide more shelter space for homeless.</li> </ul>
Downtown Emergency Service Center, May 23 and 24, 2005	<ul style="list-style-type: none"> <li>• Displaced homeless may try to sleep in construction areas.</li> <li>• Construction disruptions would affect everyone. Pedestrians, especially the homeless, who often carry all their belongings, would be affected.</li> <li>• Construction would increase staff commute times and decrease parking.</li> </ul>	<ul style="list-style-type: none"> <li>• Consider building more housing for the homeless.</li> </ul>
Department of Social and Health Services, February 23, 2006	<ul style="list-style-type: none"> <li>• Construction effects, especially to public transportation.</li> <li>• Dangerous construction zones.</li> </ul>	<ul style="list-style-type: none"> <li>• Notify people about route changes at bus stops.</li> <li>• Fence off dangerous construction zones.</li> </ul>
Chief Seattle Club, April 5, 2006	<ul style="list-style-type: none"> <li>• Impacts to facilities during utility relocation</li> <li>• Concerned about homeless peoples who live under the viaduct.</li> </ul>	<ul style="list-style-type: none"> <li>• Employment opportunities for homeless and low-income peoples to work on the construction of the Project.</li> </ul>

### Exhibit 4-1. Interviews with Social Service Providers, 2002–2007 (continued)

Organization/ Date(s)	Potential Concerns of Service Providers	Recommendations by Providers for Resolution or Potential Mitigation Measures
OK Hotel Apartments, July 27, 2007	<ul style="list-style-type: none"> <li>• Service outages.</li> </ul>	<ul style="list-style-type: none"> <li>• Notification given before service outages.</li> <li>• Maps of available parking for tenants during construction.</li> </ul>
Lighthouse for the Blind, November 5, 2007	<ul style="list-style-type: none"> <li>• Blind individuals have a specific path that they've learned to navigate, and pedestrian detours or changes in bus routes would affect blind individuals.</li> <li>• Construction fences or barriers could be potential cane breakers. The bottom 2 to 3 feet of these barriers should be solid.</li> </ul>	<ul style="list-style-type: none"> <li>• Notify Lighthouse for the Blind and service providers for the blind about detours well in advance of construction.</li> <li>• Make the bottom 3 feet of construction barriers or fencing solid (e.g., tarp, wooden boards).</li> <li>• Make sure these detours don't go through parking lots, are marked clearly with caution tape (not cones), and have few turns.</li> <li>• When creating new paths, raised edges such as curbs are helpful to follow paths. It's also important to avoid ditches or drop-offs next to walking paths.</li> </ul>
Mission to Seafarers, November 7, 2007	<ul style="list-style-type: none"> <li>• Construction traffic or changes to access affecting the Mission's ability to reach ships berthed around Elliott Bay.</li> </ul>	<ul style="list-style-type: none"> <li>• Maintain access during construction.</li> </ul>

ADA = Americans with Disabilities Act

## 4.2 Community Briefings

Project team members will continue to visit existing organizations to provide an update on the Project and solicit public questions and comments. The project team conducts dozens of community briefings a month to inform interested organizations and their constituents of the Project. This is in addition to the one-on-one interviews and public meetings that have been conducted for the Project. The briefings listed in Exhibit 4-2 were coordinated for organizations that serve traditionally underrepresented populations. Exhibit 4-2 lists the date, location, concerns mentioned, and potential mitigation measures noted during these community briefings. The project team has hosted two social service briefings for the AWV Program to date at 210 Alaskan Way S., the location of the Compass Center. Over 100 organizations located in and around downtown were invited to attend the briefings. The International District Forum is a monthly meeting hosted by the Inter\*Im Community Development Association that includes social service agencies, businesses, and neighborhood organizations.

## Exhibit 4-2. Community Briefings

Location	Potential Concerns	Resolution or Potential Mitigation Suggested by Service Providers
International District Forum, September 10, 2007	<ul style="list-style-type: none"> <li>• Businesses in the International District are vulnerable to traffic changes.</li> <li>• Traffic congestion and detours around the International District could negatively affect local businesses. Communication regarding construction and traffic alerts could decrease business as well.</li> </ul>	<ul style="list-style-type: none"> <li>• Construction detours should give drivers alternative routes through downtown rather than deterring people from the area.</li> </ul>
210 Alaskan Way S., Multiple Service Providers, August 30, 2006 and September 27, 2007	<ul style="list-style-type: none"> <li>• Minority and disadvantaged populations depend on public transportation.</li> <li>• Service providers' clients have special needs that need to be taken into account, like low literacy rates and mental illness.</li> <li>• Potential effects during construction, primarily on noise, air quality, and emergency response time.</li> <li>• Safety issues to be aware of and public safety of homeless persons.</li> <li>• Movement of illegal activities around downtown.</li> </ul>	<ul style="list-style-type: none"> <li>• Communicate changes in bus routes and schedules in advance; use basic language.</li> <li>• Bi-weekly emails and "hot sheets" for service providers to display for their clients.</li> <li>• Make sure construction site is well marked and fenced off.</li> <li>• Follow-up briefings for service providers' staff.</li> <li>• Secure construction areas.</li> <li>• Brief construction workers on potential safety concerns.</li> <li>• Work with police and social service providers to recognize movement of drug activity.</li> <li>• Transitioning homeless persons out of construction zone.</li> <li>• Work with local job training organizations to identify ways to hire local low-income/homeless persons.</li> </ul>

### 4.3 Public Meetings

Public meetings have been held throughout the AWW Program to establish a dialogue with the community, solicit public input, and answer questions. Three public meetings to discuss this Project were held. These meetings used an open house format, some with presentations, so the public could talk with members of the project team.

Press releases, community calendars, posters, and postcards were used to notify the public of upcoming meetings. The project team sent out press

releases to major publications, including those that provide information in languages other than English, and media outlets to inform the public about the Project and public meetings. The information was published in the *International Examiner*, *Seattle Post-Intelligencer*, and *Seattle Daily Journal of Commerce*.

In addition to sending postcards to contacts on the Project's distribution list, posters and postcards advertising the public meetings were posted throughout the project area. Postcards announcing scoping meetings were sent to approximately 5,000 residents and businesses in West Seattle and the SODO area and were also distributed at the social service provider interviews and community briefings. Posters were placed in approximately 40 locations in the same areas.

Meetings were held at locations within the study area or in areas that benefit from the use of SR 99 to ensure that property owners, tenants, service providers, and neighbors in the project area were able to attend. Meeting facilities were selected based on their convenience to the community (e.g., schools, churches, and community centers) and proximity to transit routes and availability. Notification materials included information about transit routes available to reach the meeting location. All meeting facilities were Americans with Disabilities Act (ADA) accessible.

Public meetings held to discuss the Project are listed below:

- August 22, 2007, Grand Central Arcade, Pioneer Square (Open house to provide information about upcoming construction in the neighborhood and to solicit feedback).
- September 24, 2007, Starbucks Support Center (Scoping meeting for the Project).
- September 26, 2007, Madison Middle School, West Seattle (Scoping meeting for the Project).

Comment cards were available for the attending public to complete, and verbal comments were also taken and recorded on comment forms if members of the public were unable to fill out their own comment cards. Input from the meetings and public comments were considered as the Project was developed.

#### **4.4 Project Fact Sheets and Translated Information**

In early 2006, the general project folio and the alternatives comparison folio for the AWV Program were translated into Spanish, Traditional Chinese, Vietnamese, and Tagalog. These four languages meet the limited English

speaking population threshold, at least 5 percent, that requires translation not just for the project area, but for the whole AWW program corridor. The folios were distributed at one-on-one interviews, cultural/community fairs and festivals, and other public meetings. In November 2006, the project team distributed the folios at various cultural centers, free clinics, and other locations that cater to minority and/or low-income populations in neighborhoods outside the surrounding project area. These translated documents were also made available online as direct links on the Project's website under Multilingual Information.

In 2007, an 11x17 handout was created that briefly described all Moving Forward projects associated with the AWW Program. At the suggestion of community members, the handout included maps and graphics. These fact sheets were translated into Spanish, Traditional Chinese, Vietnamese, and Tagalog.

An Equal Opportunities in Construction Folio also provides information for small businesses, specifically minority-owned and women-owned businesses interested in working on the AWW Program.

Many public documents are also available upon request in alternative formats such as large print, Braille, cassette tape, or on computer disk. Information on how to receive materials in alternative formats is provided in these public documents.

## 4.5 Fairs and Festivals

Community fairs and festivals are effective ways to engage members of the public who may not actively seek out information about a project. As part of the AWW Program's commitment to environmental justice, the program team hosted informational booths at 30 fairs and festivals throughout the Seattle area between March 2007 and May 2008. Many of these events are sponsored by traditionally underrepresented communities.

The program team offered translated folios in Vietnamese, Traditional Chinese, Tagalog, and Spanish at fairs, festivals, and farmers markets. At the Chinatown-International District Festival, three youth interpreters from the Wilderness Inner-city Leadership Development (WILD) program, in association with the International District Housing Alliance, were hired to assist the team at the booth. The interpreters were multi-lingual, and between the three of them, they were fluent in Mandarin, Cantonese, and Vietnamese. The interpreters provided verbal translations for 30 booth visitors.

## 4.6 Information Displays

The project team has increased awareness about the AWV Program by providing general information at displays placed in high-visibility and frequented locations, such as community centers, libraries, etc. These displays included information on this Project. Locations and dates in traditionally underserved communities where information displays have been located include:

- Beacon Hill Library, July 9–23, 2007
- South Park Community Center, August 6–20, 2007
- Southwest Neighborhood Service Center, September 17–October 1, 2007
- Filipino Community Center, October 15–29, 2007
- El Centro de la Raza, October 29–November 12, 2007
- Jefferson Community Center, October 29–November 12, 2007

## 4.7 Project Mailing List

The project team continues to provide project information to the public through newsletters and email. Social services in downtown Seattle and surrounding areas were invited to join the mailing list, as were individuals the AWV Program team met with at interviews, briefings, and public meetings. Only those who wanted to be part of the mailing list have been included.

## 4.8 Website

The AWV Program website ([www.wsdot.wa.gov/projects/viaduct](http://www.wsdot.wa.gov/projects/viaduct)) maximizes public access to timely information about the Program and quick, easy interaction with WSDOT. Information specific to this Project can be found at: <http://www.wsdot.wa.gov/Projects/Viaduct/southend.htm>. The public is able to read information about the Project, including the plans under consideration, and submit their comments online. While the website may not be a communication method for those who do not have access to the Internet, it is an important way for those who do have access to become involved in the Project. Social service providers can access the website and pass along project information to employees and clients. They can also download translated materials for distribution to clients who may not have Internet access. The website is updated on a regular basis to ensure that current and accurate information is available.

## 4.9 Project Information Line

The project information line is a toll-free telephone messaging system that is regularly updated to provide information about upcoming public events.

The telephone number is heavily advertised on all communication materials, including fact sheets, newsletters, brochures, display advertisements, and information displays. The telephone number will also be displayed on-site once construction begins.

Callers can listen to information about upcoming events, including location, time, date, and transit routes close to the event. Callers can connect directly to a communications specialist during regular business hours and a staff member 24 hours a day once construction begins. Callers can also leave messages with questions or comments as well. Comments are entered directly into the public comment database, while questions are forwarded to the appropriate project team member for a response. Responses are made via a follow-up phone call or other method, if requested by the caller. If requested, information is available in other languages, and callers can have a translator provided over the phone to translate questions and answers.

#### **4.10 Outreach to Minority-Owned Businesses**

A significant aspect of the project team's outreach to businesses is outreach to minority-owned businesses. To this end, a community briefing was held on September 10, 2007, at the International District Forum hosted by the Inter\*Im Community Development Association. Although these forums are open to all types of organizations in the International District, the discussion primarily focused on business needs and concerns. Concerns raised during the briefing relevant to the Project include:

- Timing for electric line relocations.
- Closing the viaduct for construction.
- Traffic effects to the whole south downtown area.
- Traffic effects to key arterials such as S. Jackson Street and Fourth and Fifth Avenues S.
- Temporary and permanent loss of parking.
- Coordination with other transportation projects.
- Vulnerability of businesses in the International District.
- Developing alternative routes rather than deterring people from traveling to the area.

The project team will conduct future outreach to further inform minority-owned businesses about this Project and to involve minority-owned business enterprises in construction-related activities.

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## Chapter 5 AFFECTED ENVIRONMENT

### 5.1 Study Area

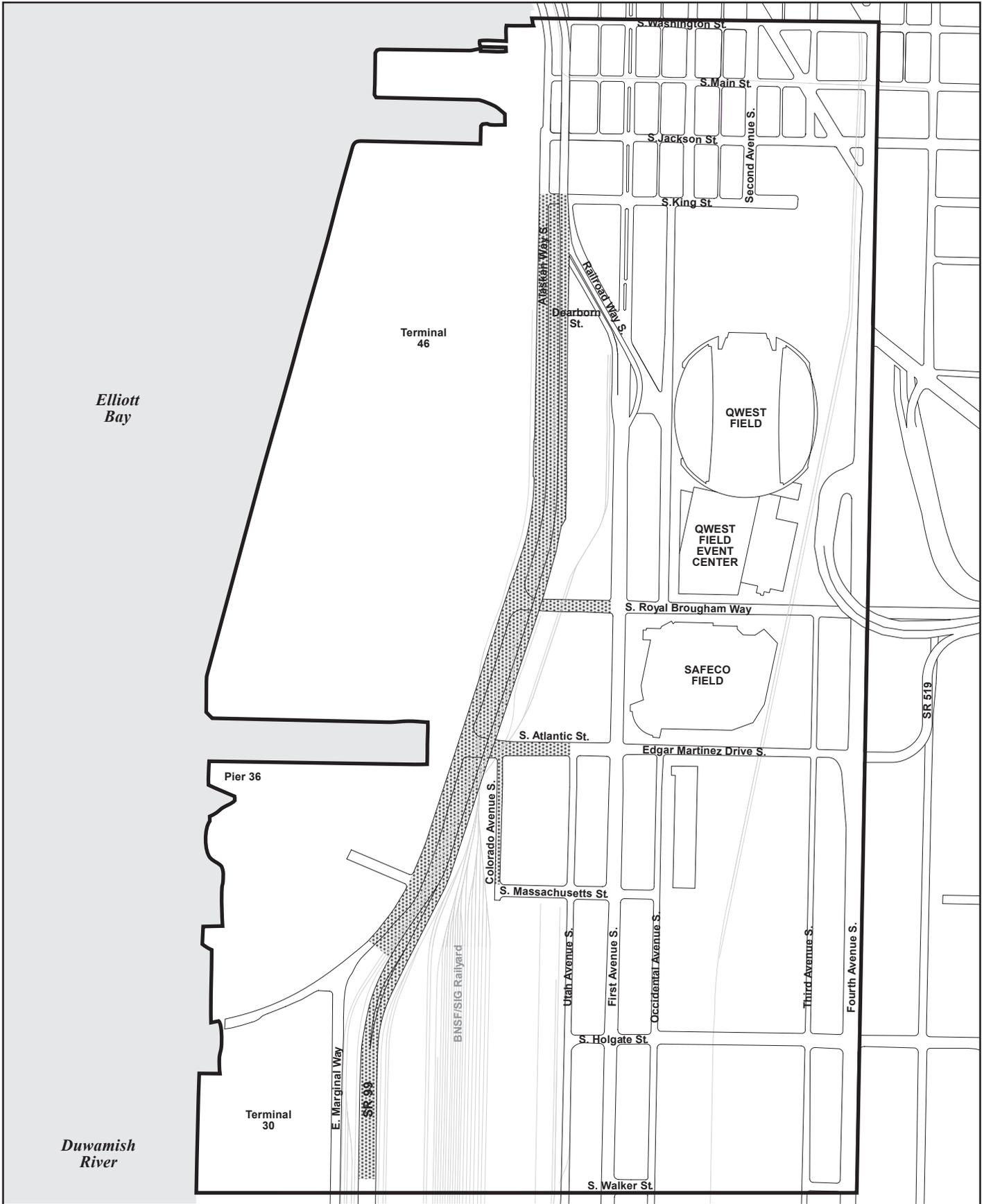
The study area is the core of where potential social effects would be felt. The study area for the environmental justice analysis is south of the downtown core and is shown in Exhibit 5-1. Beginning in the south, it extends from S. Walker Street north to S. Washington Street and from the Duwamish River and Elliott Bay east to Fourth Avenue S. The study area extends three blocks farther to the north than the project area because it contains a number of the social service providers used by the low-income population in the area.

The study area lies within the neighborhood planning areas for both the Greater Duwamish Manufacturing and Industrial Center and the Pioneer Square neighborhood. Land use types in the study area are mostly industrial, but include interspersed commercial, retail, and residential uses. Safeco and Qwest Fields, major league baseball and football stadiums, compose the northeastern portion of the study area.

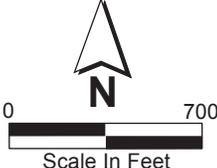
Much of the analysis in this chapter, particularly population and demographic information, is based on statistics published by the U.S. Census Bureau. Data were collected for census tract 93 block group 2 (see Exhibit 5-4). It comes closest to approximating the area encompassed by the study area, though it extends considerably south of S. Walker Street. The geographic area south of S. Walker Street (outside of the study area) is a heavy commercial and industrial area with few residents and is therefore not expected to affect the general demographic characteristics reported for the study area.

Approximately 667 people resided in this block group during the 2000 census, in an area of mixed land uses. The population is slightly more diverse and ethnic than the rest of Seattle. Most residents are adults, and very few are children. Almost half live alone. Household income is substantially below the city's median, and almost half of the population lives at or below the poverty level. Annual surveys also document a substantial homeless population in the study area. Several social service providers operate shelters and support outlets in the study area.

The north end of the study area nearest to Pioneer Square is likely to see the development of many apartments and condominiums priced at or above market rate. The area south of S. Royal Brougham Way is expected to maintain the heavy commercial, industrial, and manufacturing land uses located there.



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- Study Area
- Projects Limits

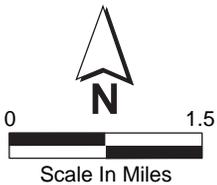
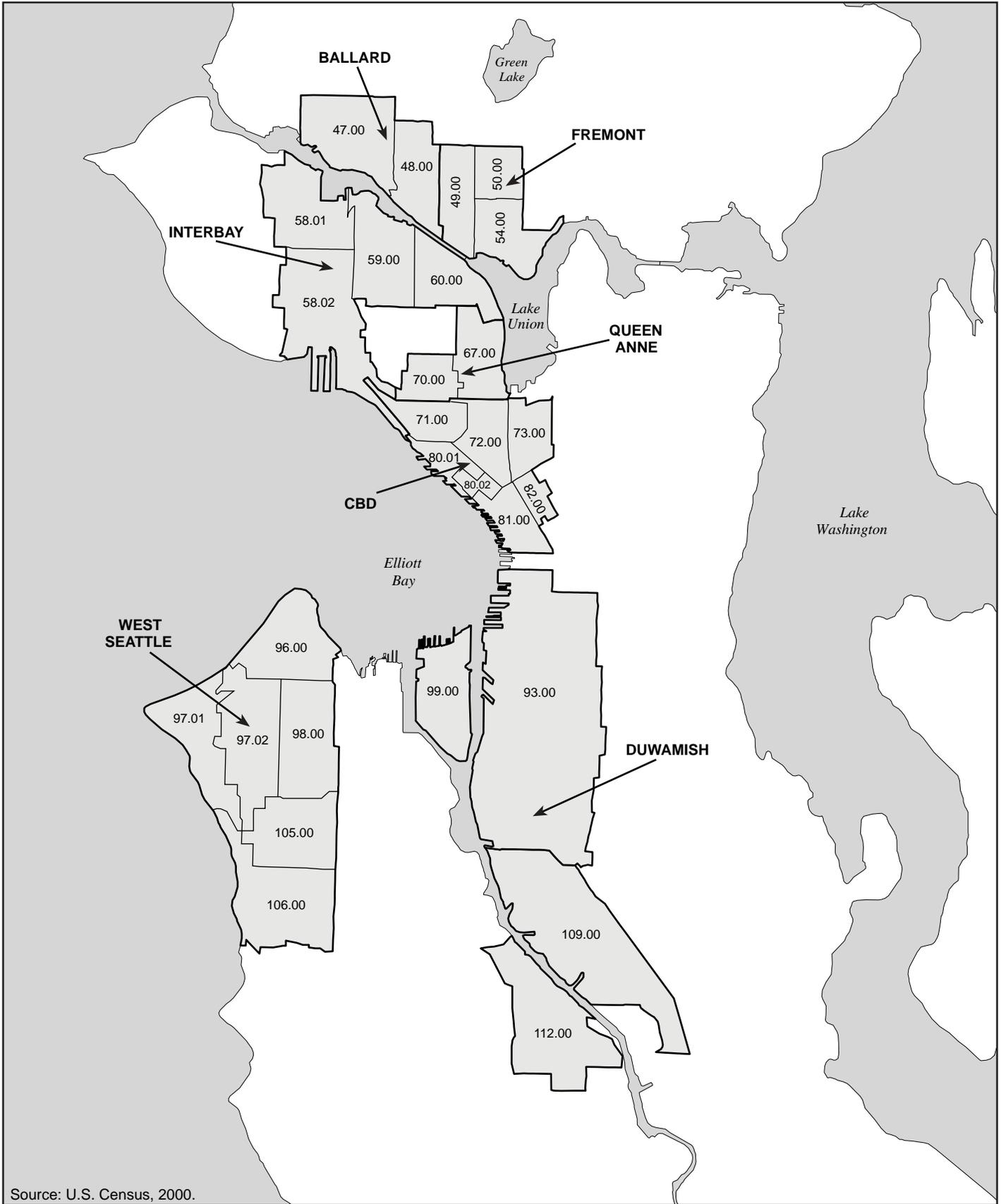
**Exhibit 5-1  
Environmental Justice  
Study Area Map**

SR 99 is one of two major regional transportation corridors that connect downtown Seattle to Everett in Snohomish County to the north and Tacoma in Pierce County to the south. Many of those who use SR 99 live outside the study area and either work in the downtown core, visit for shopping, or visit for entertainment and recreational purposes. The roadway also serves truck traffic between the Duwamish and Interbay industrial areas located to the south and north of downtown Seattle, respectively. People who live and work in the study area also use the roadway for travel outside of the Seattle area, and in particular to and from the Seattle-Tacoma International Airport.

## 5.2 Benefit Area

The Project is part of upgrades to the Alaskan Way Viaduct regional facility. The AWV corridor serves a much larger area than just where the construction activities and operational changes would occur for the Project. During preparation of the 2004 Draft EIS, traffic information was used to evaluate where those using the facility are from. Traffic analysis indicates that many of the vehicle trips originate as far away as Pierce County, Snohomish County, and Eastern King County. However, the majority (approximately two-thirds) of the trips originate from just five residential neighborhoods and two industrial districts in the city of Seattle. The residential districts from south to north are West Seattle, the Seattle Central Business District, Queen Anne, Ballard, and Fremont. The industrial districts are the Greater Duwamish and Ballard/Interbay manufacturing and industrial centers. Together, these neighborhoods and industrial districts are called the benefit area and are used to establish the demographic characteristics of the population that would benefit from the Project.

For the most part, the districts defining the benefit area include those districts located immediately south and north of the downtown area along SR 99/Aurora Avenue (Exhibit 5-2). Trips from these districts travel to and through the downtown core. For residents and businesses of West Seattle, access to downtown Seattle and destinations north is easy via a direct connection between the West Seattle Bridge, E. Marginal Way S. (SR 99), and the Alaskan Way Viaduct. The White Center, Capitol Hill, South Lake Union, Magnolia, and University neighborhoods are other districts located near the downtown area, but access from these districts to SR 99 is not easy or direct. Consequently, the routes taken by these trips tend to follow surface street arterials or they use Interstate 5 (I-5) to access downtown Seattle and destinations further distant from the city.



**CBD** Central Business District  
 Benefit Area

Note: Numbers are census tracts from the 2000 census.

**Exhibit 5-2  
 Map of Benefit Area**

## 5.2.2 Population of the Benefit Area

The population of the benefit area totals approximately 21 percent of the total population of the city of Seattle (U.S. Census Bureau 2000). In total, the benefit area comprises approximately 28 census tracts (see Exhibit 5-2).

Considering that the benefit area comprises such a large portion of the population of Seattle, it is not surprising that the demographic characteristics of the benefit area are similar to those of the city of Seattle (Exhibit 5-3). The benefit area, however, has a larger proportion of the population that is White and non-minority. This is expected since it does not include either the Central District (east of the Seattle Central Business District) or the International District (southeast of the Seattle Central Business District), where there are large concentrations of African Americans and Asians, respectively. The percent of the population that identified themselves as Hispanic or Latino is the same for the benefit area and the city of Seattle. For 1999, approximately 11 and 12 percent of the population of the benefit area and the city of Seattle, respectively, lived below the poverty level (U.S. Census Bureau 2000).

**Exhibit 5-3. Characteristics of the Benefit Area and Study Area, 2000**

Area	Population	Percent Minority	Percent Hispanic or Latino	Percent of Population Below Poverty Line
Benefit Area	120,385	23%	6%	11%
City of Seattle	563,374	32%	6%	12%
Study Area	667	42%	10%	49%

Source: U.S. Census Bureau (2000).

## 5.3 Population and Demographics

The residents, social service providers, and businesses located in the study area are the individuals and organizations that would directly experience the effects of construction activities associated with the replacement of the existing SR 99 Alaskan Way Viaduct.

The most comprehensive recent source of demographic information for the study area was published in 2000 by the U.S. Census Bureau. The following section describes characteristics of the study area and compares them to those of the city as a whole. Characteristics described include total population, minority status (race and ethnicity), language, income, disability, and transit dependency. Summary statistics are presented in tables.

The population trends and demographic characteristics of the study area are both similar to and very different from the overall population of the city of Seattle and the benefit area. The percentage of the study area population that

is minority is higher than that of the city of Seattle and the benefit area. Within the study area, 10 percent of the population considers itself to be Hispanic or Latino. This is higher than both the city of Seattle and the benefit area. The percentage of the population living below the poverty level for the study area was 49 percent, over four times the percentages for the benefit area and the city.

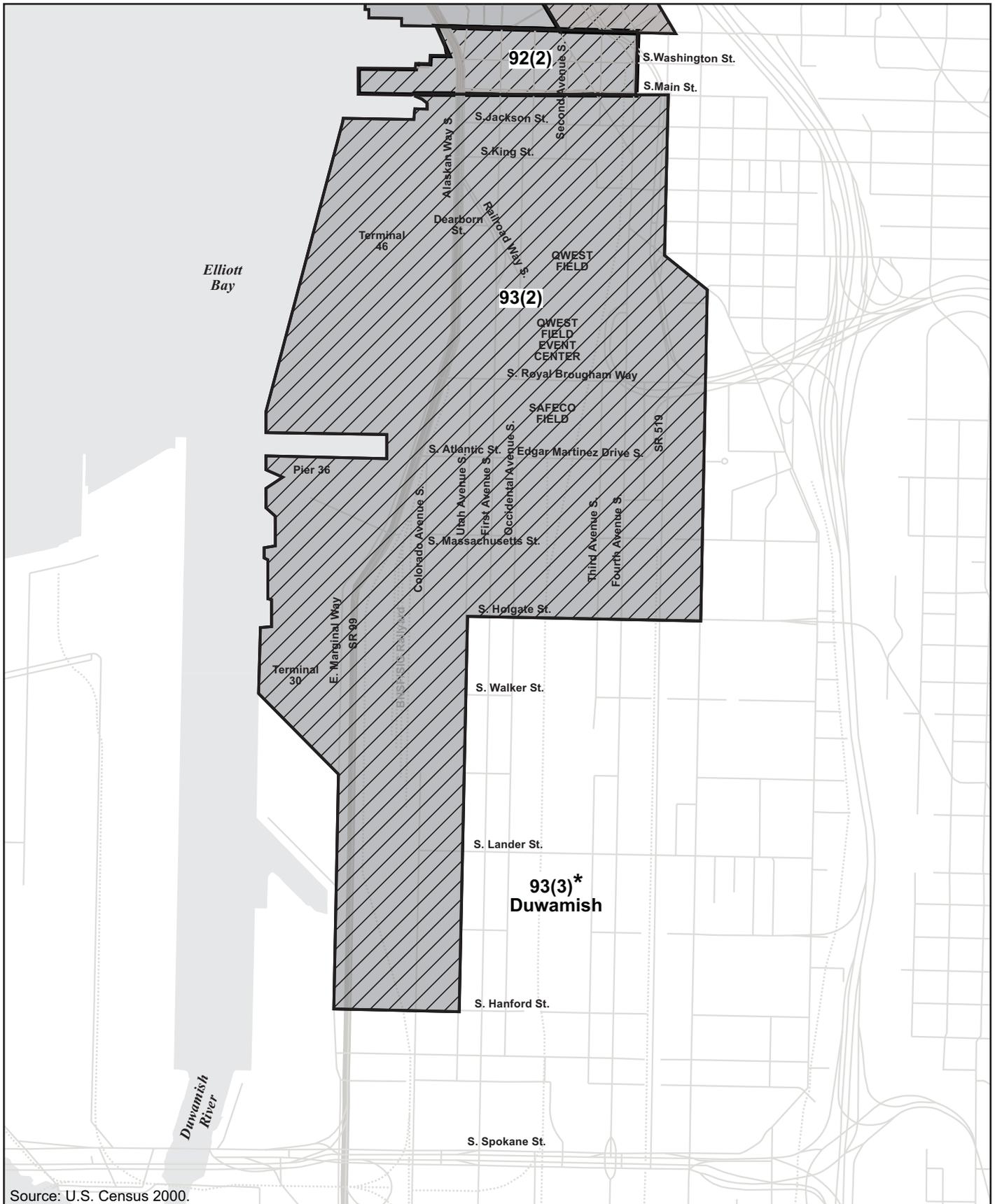
Based on this brief analysis of key demographic statistics, the characteristics of the population of the benefit area are more similar to those of the city of Seattle than those describing the study area. The minority characteristics of the population of the study area are similar to those of the city of Seattle. The low-income statistics for the study area, however, are quite dissimilar from either the benefit area or the city of Seattle.

For comparative purposes, demographic characteristics of the study area are contrasted to the demographic characteristics of the city of Seattle as a substitute for the demographic characteristics of the benefit area. The study area comprises a very small portion of the city's total population. In 2000, the population of the study area was an estimated 667 people (see Exhibit 5-3). This was less than 1 percent of the city's total population. This reflects the industrial and commercial office character of much of the study area.

To identify low-income and minority populations, census tract 93 block group 2 was used to determine the minority status and income characteristics of the project area (Exhibit 5-4).

As specified by FHWA and WSDOT guidance, low-income populations were defined as individuals listed in the 2000 Census as living at or below the federally designated poverty level. Minority populations were defined as individuals listed in the 2000 Census as considering themselves to be Black or African American, American Indian and Alaskan Native, Asian, Pacific Islander, "other race," or Hispanic or Latino (a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race).

Exhibit 5-3 shows low-income and minority percentages for the city of Seattle as compared to the study area. As shown in this table and described below, the study area has percentages far above the city percentage for low-income populations and higher percentages of minority populations. In 2000, 12 percent of the city of Seattle's population was low-income. The study area's low-income population was 49 percent. The study area, along with central downtown and Pioneer Square, has among the highest concentrations of low-income persons in the region. For the minority population

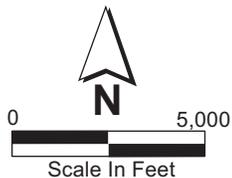


Source: U.S. Census 2000.

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\*Note: Census Tract 93 Block Group 3 was excluded as study area covers less than 1/3 of total block group area.

-  Low-Income percentage higher than City of Seattle average
-  Minority percentage higher than City of Seattle average
- 93(3)** Census Tract (Block Group)



### Exhibit 5-4 Minority and Low-Income Populations

comparison, Exhibit 5-3 shows that 32 percent of the city’s population was made up of minorities in 2000.

### 5.3.1 Minority Characteristics

The demographic characteristics of the study area residents are largely similar to the city’s total population. The study area residents, however, are slightly more diverse (Exhibit 5-5). In 2000, approximately 65 percent of the population residing in the study area was White. Black/African Americans and Asian/Pacific Islanders composed approximately 16 and 4 percent of the population, respectively. The minority population totaled 42 percent. For comparison, the city’s 2000 population was approximately 32 percent minority.

Exhibit 5-5. Minority Characteristics, 2000

Area	Total Population	Total Minority <sup>1</sup>	Race <sup>2</sup>					Ethnicity <sup>3</sup>
			White	Black/ African Am	Am Ind & AK Native	Asian & Pacific Islander	Other	Hispanic or Latino
Study Area	667	283 (42%)	431 (65%)	104 (16%)	43 (6%)	30 (4%)	59 (9%)	67 (10%)
Benefit Area	120,385	27,911 (23%)	98,969 (82%)	4,531 (4%)	1,498 (1%)	7,666 (6%)	7,555 (6%)	6,661 (6%)
City of Seattle	563,374	180,842 (32%)	394,889 (70%)	47,541 (8%)	5,659 (1%)	76,714 (14%)	38,571 (7%)	29,719 (5%)

<sup>1</sup> The definition of minority is all non-White groups plus Hispanic groups.

<sup>2</sup> The definitions for racial groups used by the U.S. Census Bureau changed between 1990 and 2000. In 1990, the groups were (1) White, (2) Black, (3) American Indian, Eskimo, and Aleut, (4) Asian or Pacific Islander, and (5) Other. In 2000, the groups were (1) White, (2) Black/African American, (3) American Indian/Alaska Native, (4) Asian, (5) Native Hawaiian/Pacific Islander, (6) Other, and (7) two or more races. For purposes of comparison in the table, groups have been combined. Percentages may not sum to 100 due to rounding.

<sup>3</sup> The category Hispanic or Latino is not a racial group, but an ethnic identity, and persons may be of any race. Statistics for Hispanic or Latino people are included in the race categories in the previous columns. Source: U.S. Census Bureau (2000).

### 5.3.2 Limited English Proficiency

Another U.S. Census Bureau statistic that helps to measure diversity is the primary language spoken in the home. Several language categories were reported for census tract block groups in 2000. These included persons 5 years or older speaking English only, Spanish, Asian and Pacific Islander, Indo-European, and other languages. In addition, the U.S. Census Bureau assessed whether foreign language households were linguistically isolated

from the community if no one in the household aged 14 years or older spoke English “very well.”

In the study area, 100 percent of the population spoke English (only or very well), whereas this figure was 90.7 percent for the city. Also, although 0.9 percent of the city’s population spoke Spanish in the home, none spoke Spanish in the study area. Rather, residents were more likely to speak other languages. None of the households in the study area, however, were reported to be linguistically isolated.

**Exhibit 5-6. Household Language Characteristics, 2000**

Area		Speak English Only or Very Well	Speak Spanish & Some English	Speak Indo-European & Some English <sup>1</sup>	Speak Asian or Pacific Islander & Some English	Speak Other Languages & Some English
Study Area	Population <sup>1</sup>	653 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	Linguistically Isolated HH <sup>2,3</sup>	NA	0%	0%	0%	0%
City of Seattle	Population <sup>1</sup>	487,784 (90.7%)	9,748 (1.8%)	4,916 (0.9%)	31,453 (5.9%)	3,537 (0.7%)
	Linguistically Isolated HH <sup>2,3</sup>	NA	0.9%	0.7%	3.2%	0.5%

Notes:

1. Population includes only persons 5 years or older in a household.
2. HH = households.
3. A linguistically isolated household is one in which no member 14 years old or older speaks only English or speaks a non-English language and speaks English “very well.” These statistics are based on a sample survey, not the 100 percent census; therefore, the number of households is predicted and not the actual number of households. Percentages may not sum to 100 due to excluded data.

Source: U.S. Census Bureau (1990, 2000).

Though not available for block groups, the U.S. Census Bureau also reported specific languages, not language groups, persons 5 years or older spoke at home for the city of Seattle. These data indicated that approximately 20 percent of the city’s population spoke a foreign language at home. The most frequent foreign languages were reported to be Spanish, Chinese, Tagalog, and Vietnamese. Based on these statistics, handouts used to communicate information about the Project to the public were translated into these four languages.

The census data, however, does not report linguistic isolation for residents of group quarters, such as homeless shelters. And there is a substantial proportion of the population in the study area who reside in group quarters. Recent information collected during the 2006 One Night Count indicated that

as a general guideline, almost half of the individuals who stay in shelters countywide are families, and most of these individuals are immigrants with limited English proficiency (Committee to End Homelessness in King County 2006). Unfortunately, this survey did not collect information specific to the study area or information regarding which foreign languages are most frequently used by these individuals. More importantly, though, compared to census data, this information provides very different evidence of whether limited English proficiency issues are likely among study area residents.

The continued use of the four foreign languages in public outreach activities is consistent with more recent anecdotal evidence related to limited English proficiency in the study area. Chinese, Spanish, and Vietnamese are three of the five foreign languages currently used by the Seattle Housing Authority on their webpage for housing applications (<http://www.seattlehousing.org/housing/downloads.html>). Public outreach to area social service agencies (Bread of Life, Compass Center, Urban Reststop, and others) repeatedly identified the need for project information to be translated into Spanish (EnviroIssues 2007). Additionally, social service agency representatives have told project team members that project notices for distribution in the community should be kept basic and should consider using pictures to help communicate messages. These recommendations were provided because many residents of the study area are immigrants from Latin American countries, and/or may have only an elementary school education. Social service providers also mentioned that some people in the study area may suffer from mental illness and anxiety as well (EnviroIssues 2007).

### 5.3.3 Disabled Persons

Disabled persons may be more susceptible than the majority of the population to changes in accessibility for supporting services or changes to their surroundings that create unfamiliar situations. A larger percentage of the study area population has some type of disability than for the city of Seattle as a whole (U.S. Census Bureau 2000). We gathered data on persons with disabilities for this report since many low-income individuals have disabilities.

The 2000 U.S. Census Bureau published statistics on the number of persons with disabilities. The census short form asked respondents if they had any of the following long-term conditions: (1) blindness, deafness, or a severe vision or hearing impairment (sensory disability) or (2) a condition that substantially limits one or more basic physical activities such as walking, climbing stairs, reaching, lifting, or carrying (physical disability). In addition, respondents were asked if they had a physical, mental, or emotional condition that made it difficult to perform certain activities, including (a) learning, remembering, or

concentrating (mental disability); (b) dressing, bathing, or getting around inside the home (self-care disability); (c) going outside the home alone to shop or visit a doctor’s office (go-outside-the-home disability); and (d) working at a job or business (employment disability).

Respondents could report more than one type of disability, and the disabilities could cause limitations to one or more activities. Not all limitations, however, can be assumed to affect the mobility of persons. Moreover, children 5 to 15 years of age generally have family members or guardians who assist them. As such, it is not appropriate to report all persons with all disabilities as representative of persons with mobility limitations in the study area.

The best statistic to describe disabled persons with mobility limitations is the number of persons 16 years and older who have a disability that affects their ability to go outside of the home alone. Exhibit 5-7 presents these statistics for the study area and the city of Seattle. In 2000, approximately 11 percent of the study area population had mobility limitations. This proportion was considerably higher than for the city, which had an estimated 6 percent of the population with mobility limitations.

**Exhibit 5-7. Disabled Persons with Mobility Limitations, 2000**

Area	Population	Population 16 Years or Older with Disability	Percent of Total Population
Study Area	667	71	11%
City of Seattle	563,374	32,051	6%

Source: U.S. Census Bureau (2000).

### 5.3.4 Transit Dependency

The central portions of Seattle are generally well served by transit. Even so, according to the census, most residents in the study area have a vehicle available at their dwelling, as shown in Exhibit 5-8. However, it should be noted that many homeless people sleep in group housing and shelters in the study area, such as St. Martin de Porres Shelter, which has beds for over 200 men. The majority of the homeless population is without a vehicle and depends on public transit and walking for mobility.

**Exhibit 5-8. Transit Dependence, 2000**

Location	Occupied Dwellings	Percent of Dwellings With No Vehicle Available
City of Seattle	258,499	16%
Study Area	139	6%

Source: U.S. Census Bureau (2000).

### 5.3.5 Income Characteristics

Income statistics for the study area show another aspect of the diversity of residents in the study area. Generally, the residents are substantially less well off than residents of the city and the benefit area (Exhibit 5-9). Median income in the study area was more than 50 percent greater than in the city in 1999, yet the per capita income was \$20,508 for the study area compared to \$30,306 for all of Seattle and \$34,333 for the benefit area. These divergent characteristics indicate that many residents in the study area are below the poverty line, but a few households have high income. This is largely due to the increase in affluent people moving into newer market-rate and luxury apartments and condominiums in the area.

Exhibit 5-9. Income Characteristics, 2000

Area	Households	Median Household Income	Per Capita Income	Households With Public Assistance	Population At or Below the Poverty Level
Study Area	139	\$73,125	\$20,508	0 (0%)	305 (49%)
Benefit Area	64,31	\$64,39	\$34,344	1,291 (2%)	12,150 (20%)
City of Seattle	258,499	\$45,736	\$30,306	7,638 (3%)	64,068 (12%)

Note: Income statistics for the 2000 census are for the year 1999.

Source: U.S. Census Bureau (2000).

### 5.3.6 Updated Demographic Characteristics

The above discussion of demographic characteristics was based on U.S. Census Bureau data collected in 2000. The 2000 census data is the most comprehensive recent source of demographic information for the study area. However, U.S. Census Bureau data collected in 2000 may not reflect the demographics of the population currently residing in the project area. New data for the study area will not be available from the U.S. Census Bureau until 2010. Also, FHWA requests that demographic analysis be based on more than one source of information. Typically, the demographic characteristics of public schools located in the study area are used. In this case, however, there are no public schools in the study area. Therefore, other sources were used to infer likely changes in demographic characteristics of the study area. Demographic data at the city level are available for 2005 through the U.S. Census Bureau's American Community Survey and the OFM.

These 2005 data, when compared to the city-level census data from 2000, indicate general demographic trends since 2000. During this 5-year period,

the population for the city of Seattle increased to 573,000 persons, a 2 percent increase (OFM 2005). The city of Seattle's non-White population increased from 30 percent in 2000 to 34 percent in 2005 (U.S. Census Bureau 2000, 2005a). Based on this citywide analysis, the demographics of the study area may be slightly more diverse than they were in 2000. A similar analysis showed that the proportion of Hispanics in Seattle increased from 5 percent in 2000 to slightly greater than 6 percent in 2005, indicating that Hispanics may now represent up to 12 percent of the population of the study area.

In comparison, the percentage of persons living at or below the poverty level in Seattle has remained about the same between 2000 and 2005. In 2000, 12 percent of the population was living at or below the poverty level, and in 2005 an estimated 12.3 percent were living at or below the poverty level (U.S. Census Bureau 2000, 2005a). This is likely an accurate comparison because populations in institutions were not included in either the 2000 census or the 2005 American Community Survey. Based on this lack of change, it is assumed that the proportion of the study area population living at or below the poverty level has not changed and remains approximately 49 percent.

### 5.3.7 Long-Term Population and Demographic Changes Expected

Longer term, however, the demographics of residents of the study area are expected to substantially change due to forecasted urban development trends. The City of Seattle is currently conducting a planning effort called the Livable South Downtown project, which includes the study area.

As residential development is generally not permitted in the Duwamish Manufacturing and Industrial Center, no substantial changes would be expected in that portion of the study area generally south of S. Royal Brougham Way. Some of the older industrial buildings, however, may be converted to artist's residential lofts and studios consistent with City policy to encourage this type of housing, while preserving industrial and heavy commercial properties in the Duwamish area.

A technical report associated with this study effort (BHC Consultants and Property Counselors 2007) indicates that, although limited property is available, there is demand for additional residential development in the Pioneer Square neighborhood. This report suggests that neighborhood stakeholder sentiment is that the neighborhood has its fair share of low-income housing and that future residential development should include more market-rate housing. Proposed changes in zoning and development regulations may also permit higher zoned heights than under current zoning; this could facilitate increased development of market-rate residential development in Pioneer Square.

A key future development site is the Qwest Field north parking lot that King County sold to a private developer in June 2007. The property is proposed for redevelopment with mixed uses and up to perhaps 400 residential units with perhaps 100 low-income units (Puget Sound Business Journal 2007). This proposed development project alone would almost double the existing population in the study area.

If City development policies change and demand continues to press for new residential housing near the downtown core, there could be a substantial increase in the current population over the next 10 to 15 years. The existing study area demographic characteristics also support the notion that overall, these new residents would likely be similarly diverse, consistent with citywide increased diversity. However, these new residents would also be expected to have substantially higher incomes than most of the current residents.

### 5.3.8 Emergency, Subsidized, and Transitional Housing

Another environmental justice consideration is the housing used particularly by minority and low-income populations. The study area has a number of subsidized, transitional, and emergency housing units. The subsidized units category includes all low-income public housing developments (i.e., Section 8 project-based housing and Section 42 tax credit housing), senior housing, and affordable housing operated by partner nonprofits such as the Archdiocesan Housing Authority. It does not include households that use federal Section 8 housing vouchers to subsidize the purchase of housing of their choice. Only 12 subsidized units are located in the study area; 3 at the Boston Hotel and 44 at the OK Hotel (City of Seattle 2003, 2007; Washington State Housing Finance Commission 2007). Most of the city's downtown subsidized housing is located in the Belltown neighborhood.

The study area has a substantial portion of the city's transitional and emergency housing. This includes short-term and long-term housing with supportive social services, emergency temporary housing, and homeless shelters. Exhibit 5-10 lists transitional and emergency housing within the study area. Seattle's Union Gospel Mission with a capacity of 209 residents comprises more than 40 percent of the city's total transitional housing located downtown (from the SODO area north to the Belltown neighborhood). The Bread of Life Mission and St. Martin de Porres Shelter, with a combined capacity of 262 residents, comprise more than 30 percent of the city's total emergency housing located downtown. Moreover, several large men's shelters are located immediately north of the study area near the intersection of Yesler Way and Third Avenue.

## Exhibit 5-10. Special Needs and Emergency Housing in the Study Area

Special Needs Housing
Transitional Housing and Residential Treatment Services
Compass Center (23 cap.)
Seattle's Union Gospel Mission (209 cap. + 50 additional in winter cold weather)
Emergency Housing and Homeless Facilities
Bread of Life Mission (50 cap. + 24 additional in winter cold weather)
Compass Center First Church Men's Emergency Shelter (79 cap.)
St. Martin de Porres Shelter AHA (212 cap. + 34 additional in winter cold weather)

Notes: Cap. = capacity; AHA = Archdiocesan Housing Authority.

Source: Crisis Clinic (2002, 2003, 2006).

### 5.3.9 The Unsheltered Homeless Population

In addition to persons who live in market-rate, subsidized, transitional, or emergency housing, some individuals who reside in downtown Seattle use the shelter provided by building overhangs, porticos, or elevated walkways and roadways for protection from the weather for sleeping. Several elevated portions of the Alaskan Way Viaduct are known to provide shelter to Seattle's homeless population.

The Seattle/King County Coalition for the Homeless reports that approximately 8,000 people lack permanent housing in King County (Seattle/King County Coalition on Homelessness 2008). Many of these people obtain shelter in the county's homeless shelters, some of which are mentioned in Section 4.1. In 2007, an estimated 2,513 such beds were available in all of King County, with 2,117 in Seattle (Committee to End Homelessness in King County 2007). Others "couch surf" and temporarily live with a series of friends and acquaintances. However, in 2007 more than 2,159 individuals were found to be without shelter in King County during the annual One Night Count (Seattle/King County Coalition on Homelessness 2007).

The 2006 One Night Count reported demographic data for King County's homeless population residing in emergency and transitional housing (Seattle/King County Coalition on Homelessness 2006). The survey indicated that an estimated 48 percent included families with children and 36 percent were single men. In sharp contrast to all of King County, a total of 63 percent of this population was minority. Of those identified as immigrants or refugees, nearly 90 percent were families with children; 75 percent of these families had limited English proficiency.

In part because nearly 84 percent of the county's emergency and homeless housing facilities and many social services are located in downtown Seattle, a

substantial proportion of the county's homeless people are living on the streets in downtown Seattle. The 2007 One Night Count of unsheltered individuals determined an estimated 1,589 individuals, or 74 percent, were located in the city of Seattle (Seattle/King County Coalition on Homelessness 2007). Moreover, an estimated 28 percent were sleeping in their cars or trucks. An additional 16 percent were found during the survey to be located in or under structures or roadways (Seattle/King County Coalition on Homelessness 2007). Although there is no published data, social service providers stated that a substantial number of people may spend the night on streets near or under portions of the viaduct in the project area. Moreover, homeless persons often do not sleep at night due to personal danger and instead find shelter and sleep during the day (interview with social service provider; see Exhibit 4-1).

In the project area, many of the parking spaces beneath and adjacent to the viaduct are long-term and unmonitored parking. Social service providers have mentioned that homeless people with vehicles park their cars in these spaces. From S. Atlantic Street to S. Dearborn Street, approximately 290 long-term parking spaces beneath or adjacent to the existing viaduct would be removed for improvements. Although it is not known to what extent people use this portion of the viaduct for car camping, it could have some effect on the homeless population.

Overall, an estimated 1,267 parking spaces would be permanently displaced, 418 of which are long-term on-street parking spaces. There are approximately 6,450 existing off-street parking spaces in the study area. Since relatively few residents and retail businesses are located in the area, the utilization rate of the parking spaces remains low. According to a parking inventory study, the average weekday utilization rate for off-street parking spaces in the area is approximately 37 percent (PSRC 2006), so approximately 4,100 parking spaces would be available within 0.25 mile of the parking that the Project would remove on an average weekday. (Appendix F, Transportation Discipline Report provides additional information.)

On one afternoon, AWV team members observed at least five vehicles that appear to be lived in within the project area (specifically between S. Jackson Street and S. Royal Brougham Way). In addition, people sleeping (at least two) and personal belongings were also seen under the viaduct in the project area. It's important to note that these observations were not a formal count, and they happened in the afternoon and not at night, when more campers could have been present. Throughout the city of Seattle, people are known to use their vehicles for camping (Seattle/King County Coalition on Homelessness 2007). In fact, a 2005 *Seattle Times* article noted a significant

number of people living out of vehicles or using them to sleep in and using certain areas to park their vehicles (Seattle Times 2005).

The 2007 Annual One Night Count recorded 449 cars, trucks, or other vehicles within the city of Seattle that people were possibly camping in (Seattle/King County Coalition on Homelessness 2007). Furthermore, 127 persons were documented seeking shelter underneath roadways throughout Seattle. Although the count did not identify locations, it demonstrates the use of roadways and parked cars as places homeless people seek shelter within the city.

Seeking shelter underneath the viaduct or camping overnight in parking lots or on other City properties is not recognized as a legal residence and therefore cannot be addressed under the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. The Project does not have to mitigate effects that may potentially cause displacement of such people. Regardless of the legality of the situation, the Project's potential effects on the homeless population should still be considered. The project team has considered ways to coordinate with social service providers to notify and ensure the safety of homeless individuals who may be using areas within the project area for shelter.

### 5.3.10 Native American Tribes

Minority populations in the Pacific Northwest include Native American tribes. The Project does not cross or directly affect contemporary American Indian reservation lands. Elliott Bay and the Duwamish River have been a usual and accustomed area for tribes such as the Muckleshoot and Suquamish. The tribes with active interest in the area include the Muckleshoot Indian Tribe, the Suquamish Tribe, the Duwamish Tribe, the Tulalip Tribes, Snohomish, and the Snoqualmie Indian Tribe as well as the Confederated Bands and Tribes of the Yakama Nation. WSDOT is consulting with Indian tribes through the Section 106 process. To date, tribal interest has been focused on potential effects to cultural resources during construction. However, other interests and concerns may emerge during the planning and construction of the Project. WSDOT will continue open and meaningful consultation with the tribes to address any emergent issues or findings.

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## Chapter 6 OPERATIONAL EFFECTS, MITIGATION, AND BENEFITS

### 6.1 Operational Effects

Major concerns for the minority and low-income population for this Project include access to service providers, such as shelters and meal providers, and changes in traffic flow and pedestrian routes that could affect transit-dependent social service clients. Access to residential properties and traffic patterns in the study area would be similar to current conditions.

The new interchange at S. Atlantic Street and closure of S. Royal Brougham Way would increase traffic volumes on S. Atlantic Street. The revised flow of traffic through this interchange and the new access to Terminal 46 would change access to the St. Martin de Porres Shelter. New circulation patterns for traffic would also alter access to the parking lot south of the Bemis Building at the southeast corner of Colorado Avenue S. and S. Atlantic Street. Many of the overnight visitors at the shelter are transported to and from the facility by an agency van from downtown Seattle. The van would need to drive a slightly longer, less direct route compared to using Alaskan Way S. Safe pedestrian access would be maintained during construction, and the pedestrian access would be improved in the built condition with a signalized crossing.

An estimated 30 to 40 percent of the nighttime visitors, however, walk to and from the shelter (based on an interview with St. Martin de Porres). Access to the facility by these clients would change compared to current conditions. The pedestrian facilities would be improved in several locations in the project area. The proposed design provides pedestrian walkways and crosswalks to continue to provide pedestrians a safe travel route south along the west side of Alaskan Way S. and east along S. Atlantic Street, but would differ somewhat from the current pedestrian facilities. Bike lanes would be widened on Alaskan Way S., E. Marginal Way S., and S. Atlantic Street. Bike lanes would be added on the northbound and southbound Alaskan Way S. frontage roads. Refer to Appendix F, Transportation Discipline Report, for a more detailed discussion of bicycle and pedestrian facility improvements for the Project.

Pedestrian, vehicular, and transit access to services in Pioneer Square and downtown Seattle may be changed slightly. The new travel patterns would not cause substantial adverse effects on the few residents living in the study area, and would provide increased access to SR 99 due to the two new ramps.

Once completed, the Project should improve pedestrian and bike access along the SR 99 corridor. A crosswalk at S. Atlantic Street would allow pedestrians safer access to St. Martin de Porres Shelter and the U.S. Coast Guard facilities.

Existing noise levels along much of the corridor exceed the FHWA noise abatement criterion for traffic noise (67 dBA). The operation of the improvements would produce similar noise levels in the project area and continue the current effect. Operational changes in noise levels in other locations of the study area would not affect minority and low-income populations or supporting organizations.

The amount of parking in the area would also be reduced substantially after project completion. This includes both long- and short-term parking. From S. Atlantic Street to S. Dearborn Street, approximately 290 long-term parking spaces beneath or adjacent to the existing viaduct would be removed for improvements. Overall, approximately 1,267 parking spaces would be permanently displaced, approximately 418 of which are long-term on-street parking spaces. According to data from a PSRC parking inventory study completed in 2006 as well as Project staff field observations, the average weekday utilization rate for parking spaces in the area is approximately 37 percent (PSRC 2006), and approximately 4,100 parking spaces would be available within 0.25 mile of the parking that the Project would remove on an average weekday.

As noted in Chapter 5, in interviews with local service providers it was mentioned that some homeless people park their vehicles under and adjacent to the viaduct in unmonitored long-term parking areas. Although it is not known to what extent people use this portion of the viaduct for car camping, loss of these long-term parking spaces could have some effect on the homeless population. Other long-term unmonitored parking exists in other nearby areas that would not be affected during the construction period and could provide an alternative location for those living in their vehicles. Long-term parking (approximately 80 spaces) immediately east of St. Martin de Porres Shelter along E. Marginal Way S. would be removed. Loss of long-term parking and sheltered space beneath the viaduct (although not legal to use for camping) could cause an undetermined number of homeless people to leave the project area.

The Project would provide some important benefits to low-income and minority populations in the project area. Pedestrian access and safety would be improved with new sidewalks and crosswalks. Also, the new northbound and southbound ramps connecting SR 99 with S. King Street would support improved transit service to the south downtown area. Both of these improvements would benefit low-income and minority populations.

## 6.2 Minimization and Mitigation

The project effects mentioned above, including changes to both pedestrian and vehicular travel and changes in access to service providers, may have potential effects on minority and low-income populations. Most of these effects are likely to be short-term as people and service providers adjust to changes in transportation infrastructure. It is important to keep in mind the sensitive aspects of minority and low-income populations, including physical and mental disabilities, economic disadvantages, and language and cultural barriers that may make transitions and changes more difficult to adapt to. Continued community outreach and communication will be a crucial part of minimizing adverse effects. The following list identifies infrastructure considerations as well as community outreach and communication activities that should occur prior to the opening of the new facilities to educate and prepare the public for changes in their community. These measures will help avoid, minimize, and mitigate adverse effects of the Project.

- Work with service providers to facilitate changes in access to their facilities for their clients, deliveries, and emergency vehicles. This includes providing a debriefing for service providers to disseminate information about transit and route changes and options for minority and low-income populations.
- Continue communications with social service providers, and homeless people, through interviews and briefings to learn more about people who may live out of vehicles and what other parking alternatives exist for that population.
- Use newsletters, websites, posters, newspaper inserts, television and radio public announcements, special neighborhood public meetings, and other similar methods of communication to announce to the general public the upcoming opening and use of the new roadway facilities. Publish these messages in non-English languages to accommodate the area's diverse population.
- Coordinate the opening of the facilities with modes of public transportation—bus and light rail. Travel to and from the airport would also be affected to some degree. Both public and private transportation providers would need to know how to change operations and communicate these changes to their users.
- The project team should continue to coordinate with transit agencies to conduct special outreach activities to communicate new transit service and operations to members of the public who have mobility limitations and the transit-dependent. Coordination efforts should be extended to social and employment services that work with these

special populations, as well as low-income and homeless populations (including those living on the street and out of vehicles).

- Public transit agencies could conduct special outreach activities to communicate new transit operations to members of the public who have mobility limitations and those who may be transit-dependent.
- Install a substantial network of temporary signs, posters, or reader boards to guide vehicular or transit traffic in the first several weeks or months after the opening of the new roadway facilities. Consider using a special opening-event logo or theme so signs are easily recognizable.

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## Chapter 7 CONSTRUCTION EFFECTS AND MITIGATION

### 7.1 Construction Effects

Construction effects upon minority and low-income populations include increased congestion, travel delays, increased response time for emergency services, increased noise, and decreased long-term parking. Availability of long-term parking for car camping and displacement of shelter under aerial structures are a concern for the homeless population. Since these activities are not considered to be legal, they are not protected by the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.

Temporary congestion during construction (most severe during Traffic Stages 2 and 3, lasting 14 months) could have a substantial effect on the minority and low-income populations in the project area and the organizations that strive to serve them. These populations and organizations are heavily reliant on transit, whose service could be hampered by overall congestion. Many service providers require clients to arrive in time to get their name on the waiting list for shelter that night, or to arrive by a certain time for other services. If individuals accessing services are unable to reach these providers by certain times, they may not have access to needed services or a safe and secure place to sleep. Traffic congestion could also delay access by emergency services and make deliveries to service providers more difficult. Providing safe pedestrian routes to and from service providers and other central locations is a critical design element to consider.

Construction activities and the associated noise, light, and glare effects in the construction corridor could affect homeless persons living on downtown streets. Some of these people congregate or spend the night in informal places of shelter, including underneath existing elevated structures of SR 99 or in vehicles parked under or adjacent to the highway. For some, these locations may be areas they are accustomed to for seeking shelter on a regular basis. They may attempt to continue using these areas, even though the areas have become part of a construction zone. Depending on the location and severity of the construction effects, these people may decide to move elsewhere along the project corridor or could leave the downtown area for adjacent neighborhoods.

During interviews, some social service providers also stated that areas under certain portions of the viaduct may be used for criminal activities. If these areas are fenced or off-limits to the general public, these activities may shift to other parts of the neighborhood. Neighborhoods adjacent to the project area, with high percentages of minority and low-income populations (Duwamish,

Pioneer Square, and International District) could experience negative effects if these activities shift into their neighborhoods.

Traffic detours, barricades, and other temporary construction measures could make it more difficult for homeless people to reach or be on time for accustomed sources of food, shelter, or health care. The homeless people who sleep under the south portion of the viaduct and those that use the long-term parking for car camping would be unable to do so during construction.

Homeless people may try to climb or otherwise gain access through fences surrounding the construction zone to return to their habitual nighttime shelter locations, at potential risks to themselves.

Section 4.1 describes the one-on-one interviews conducted with groups in the project area, and Section 4.2 contains notes from community briefings. The following summarizes the concerns relating to construction that were noted from these interviews and briefings:

- Transit service disruptions or reroutes (minority and low-income populations depend on public transportation as a primary means of transportation).
- Utility disruptions.
- Increased stress, anxiety, and accidents for homeless people.
- Construction site hazards.
- Service outages for power and other utilities.
- Increased traffic congestion and decreased access, which could affect services, deliveries, staff, volunteers, and emergency service response times.
- Changes in pedestrian access to services and usual pedestrian routes.
- Construction and detours to accustomed routes, which may disorient and pose potential hazards for the blind or partially sighted.
- Displacement of homeless people that live under the viaduct and in parked cars.
- Increased demand for social services.
- Increased pressure on shelter capacity.
- Elimination of long-term parking used by homeless with cars.
- Noise and vibration at St. Martin de Porres Shelter (most construction should occur during the day). During summer months, the shelter leaves its windows open for ventilation, as it does not have air conditioning.

The project area and the International District to the east of the project area have a substantial number of minority-owned businesses. During project meetings, several of these businesses have expressed concern that during

construction, actual or perceived congestion could drive away customers and hurt their business. Four minority-owned businesses are located on streets where traffic volumes and congestion would likely increase when SR 99 traffic is detoured. This would occur during Traffic Stages 2 and 3 for a total of 14 months, with the most severe effects during an 8-month period when both north- and southbound SR 99 traffic is detoured. The affected minority-owned businesses are located on First Avenue S., S. Holgate Street, and Fourth Avenue S. Five additional minority-owned businesses are located farther from the Project on First Avenue S., Fourth Avenue S., and S. Hanford Street, but are much less likely to be affected.

## 7.2 Minimization and Mitigation

Although construction would affect minority and low-income populations, it appears that these effects can be avoided, minimized, and mitigated. Discussions with service providers have identified potential solutions to many known and potential construction effects. The key to mitigating potential effects is ongoing community outreach and communication efforts before, during, and after construction. Monitoring mitigation during the construction period will be important to ensure that the suggested measures are successful and to understand how they might be modified to be more effective.

The following potential mitigation measures are specific to St. Martin de Porres Shelter:

- Identify a safe pedestrian route(s) between Pioneer Square/downtown and St. Martin de Porres Shelter to allow movement of people to and from the shelter throughout construction. This includes providing a pedestrian crossing at Alaskan Way S. and S. Atlantic Street. Information about this route should be distributed to social service providers, placed in proper notification areas, and marked with directional signs.
- Monitor noise levels of construction, specifically during the nighttime, at the shelter during summer months when windows need to be open for ventilation. If monitoring shows noise levels to exceed threshold levels, mitigation measures can be used to modify the activities or otherwise reduce the noise to meet with permitting conditions. (For additional discussion on monitoring and mitigation, please refer to the Noise and Vibration Technical Memorandum).

The following potential mitigation measures are general recommendations:

- Ensure continuous access to buildings, properties, and loading areas used by social service providers during construction to facilitate:

- Emergency access at all times.
- Client access at all applicable hours.
- Delivery access.
- Employee access.
- Monitor potential noise effects during construction, especially during the nighttime. If monitoring shows noise levels to exceed threshold levels, mitigation measures can be used to modify the activities or otherwise reduce the noise to meet with permitting conditions. (For additional discussion on monitoring and mitigation, please refer to the Noise and Vibration Technical Memorandum).
- Work in collaboration with public transportation (King County Metro Transit) to plan consistent arrival, departure, and travel times and facilitate traffic flow.
- Help provide and facilitate route planning support during construction for service providers and the public.
  - Early notification of route changes.
  - Posted in multiple languages (Spanish, Vietnamese, Tagalog, and Traditional Chinese) in many locations, including bus stops and at social service agencies.
- Conduct social service providers' briefings and planning sessions to keep service providers up to date on the Project and to monitor mitigation strategies for minority and low-income populations.
- Cooperate with social service providers on any emergent issues that affect minority and low-income populations.
- Notify the public early about construction activities (bus service, road closures, sidewalk closures, etc).
  - Translate materials into different languages.
  - Send notices directly to service provider staff.
- Ensure continuous utility service during construction.
  - Provide ample notice for periodic outages.
- Secure construction sites to prevent entry and injuries, especially by homeless persons.
  - Light construction areas during the night.
  - Conduct security sweeps to look for unauthorized people seeking shelter within construction sites.
- Train construction workers on how to appropriately interact with homeless persons they may encounter at construction sites.

- Provide a construction information line for noise and other construction problems and concerns.
- Facilitate alternative transit routes during construction.
- Consider extending free bus service farther north and south and later in the evening, as recommended by service providers.
- Help arrange pedestrian detours that meet the safety needs of those who are blind, partially sighted, or have other disabilities. This would include notifying service providers to help them navigate through changes to transit routes and schedules, as they are also dependent on this means of transportation.
- Ensure the general public is aware that local businesses are accessible and open for business during construction.
- Maintain regular communication with minority-owned businesses that may be affected by construction-related traffic congestion.
- Conduct outreach communication with representatives of area homeless shelters, special needs housing, transitional housing, and related social service organizations prior to the start of construction to develop specific mitigation measures for the needs of these low-income populations, including those living on the streets. For example, thorough field investigations should be undertaken periodically prior to and during construction to ensure homeless persons are not taking shelter within the construction zone, including under elevated portions of SR 99. On-site workers should check all machinery, dumpsters, excavated areas, etc. before beginning the work day or after breaks.
- Consider distributing flyers to service providers and local businesses and placing flyers on windshields of cars parked in long-term parking concerning when vehicles need to be moved. List other long-term parking alternatives in the area, if any exist.
- Consider alternative locations for long-term parking spaces used by transient populations.
- Many providers suggested offering jobs or apprenticeship programs to low-income persons staying at shelters or living in the downtown core.

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## Chapter 8 INDIRECT AND CUMULATIVE EFFECTS

### 8.1 Indirect Effects

As a direct effect of the Project, construction zones would include structures and areas that homeless people are accustomed to using for shelter. Some homeless people may turn to existing shelters for places to stay. This could indirectly affect the availability of homeless shelter beds in the entire downtown area, which are already low on capacity. The number of emergency shelter beds is far fewer than the estimated number of homeless persons residing downtown (Seattle/King County Coalition on Homelessness 2007). No other indirect effects are expected.

### 8.2 Cumulative Effects

Cumulative effects result from the total effect of the Project when added to other past, present, and reasonably foreseeable future projects or actions. A number of large projects as well as many smaller development projects are being completed or are proposed in the vicinity of the Project that, when combined with the S. Holgate Street to S. King Street Viaduct Replacement Project, could have some cumulative effect on minority and low-income populations. The SR 519 Intermodal Access Project Phase 2 is the one other major construction project with a proposed construction schedule that would overlap with the Project's construction schedule in the study area. There may be minor cumulative effects, such as to parking, in the project area.

Multiple transportation projects under construction at overlapping times may increase traffic and congestion and create further changes in public transit operation schedules. Some minority and low-income populations, along with the organizations that serve them, are highly dependent on transit. Pedestrian routes may be further complicated by multiple projects in the vicinity of the Project. The combined effect of multiple projects could also feed the public perception that the project area and International District are not easily accessible and reduce customers for minority-owned businesses. The parking vacancy rate for business use in the area is high and would not likely be a cumulative effect. (For more information on parking, see Appendix F, Transportation Discipline Report.)

The mitigation measures described in Chapters 6 and 7 would also address these cumulative effects.

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## Chapter 9 ENVIRONMENTAL JUSTICE DETERMINATION

Minority and low-income populations could be disproportionately affected during the construction of the Project. However, with advance planning, close communication with service providers, and adaptation during construction, it is expected that potential effects identified to date can be avoided, minimized, or mitigated. Of particular concern is ensuring that transit service and access for emergency services remain available throughout all phases of the Project. While the general public would also be affected during construction, low-income and some minority populations, and the service providers who support them, are far more dependent on transit service and emergency services.

It is important to keep in mind the special considerations of minority and low-income populations, including the disabilities, economic disadvantages, and language and cultural barriers that may hinder adaptation to changes. Most of these effects are likely to be short-term as people and service providers adjust to changes in transportation infrastructure during construction or after the completion of the Project.

Proposed construction between S. Walker Street and S. King Street would require approximately 3 years, 8 months to complete (with an additional 8 months of early utility work) and would have substantial effects on much of the surrounding area. The most widespread effect would be traffic congestion and reduced mobility during Traffic Stages 2 and 3, for a period of about 14 months. This could cause minority and low-income populations to be adversely affected because they are heavily reliant on public transit and have limited transportation choices available. The organizations serving these populations are also reliant on transit and need to preserve access for the delivery of supplies, staff, and emergency services. Pedestrian travel in the project corridor during construction would also be altered, making some services somewhat less accessible.

Operation of the Project should improve public transit service and pedestrian safety along the corridor, which would benefit the minority and low-income population. However, the existing viaduct structure in the project area is used for shelter by homeless people. Long-term parking beneath and adjacent to the viaduct is also used by homeless people living out of their vehicles. Although it is hard to gauge the extent of the use of this portion of the viaduct for car camping and shelter, loss of this area could have some effect on the homeless population. Other long-term parking exists in nearby areas that would not be affected by the Project. During construction, it is likely that

homeless individuals would relocate to these other areas in the city for long-term parking and camping. Homeless individuals without vehicles would likely seek shelter elsewhere. This could indirectly increase demand for shelter beds as well as increasing the presence of homeless people in adjacent neighborhoods.

Additional socio-cultural factors that are unknown at this time may contribute to disproportionate effects on minority and low-income populations. It is important to monitor social effects during construction and continue coordination with service providers throughout planning and construction. With advance planning, close communication with service providers, and adaptation during construction, it is expected that potential effects identified to date could be avoided, minimized, and mitigated such that the effects would not fall disproportionately on minority and low-income populations.

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**ATTACHMENT A**

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**Community Interview Questions**

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# Community Interview Questions

## Getting to Know the Agency and Clients

- What kind of programs/services does your agency provide?
- How many staff members work at the agency? How many clients/guests do you have?
- Have you noticed an increase, decrease, or about the same number of clients/guests over the past few years? Do you expect to see an increase in the future?
- Does the group you serve transition in and out of your services? If so, how often?
- How do your clients and staff members commute to the agency? If they drive, where do they park? Is it necessary for them to drive to your building?
- Does your agency work out of other buildings? If so, where? Do other agencies or programs work inside your building?
- Does your agency receive regular incoming or outgoing deliveries? If so, how frequently and what time of day?
- What are your days and hours of operation?

## Planning for Future Involvement and Communication

- How aware is the group about the Project? What level of understanding do you think they should have now about the Project?
- What interests do you think the group(s) you serve will have in this Project? Given that the Governor has put the decision to Seattle voters, would your clients be interested in voting on this issue? Are most of them registered Seattle voters? If we brought registration forms would they fill them out or have the means to fill them out, address, etc.?
- What can we do to relate the importance of this Project to their needs and interests? What suggestions do you have to meaningfully engage your group and further their understanding of the Project?
- What outreach strategies would you recommend to most effectively communicate and engage the target population(s)?
- What communication styles would you recommend as most useful for this target population(s)? Will PowerPoints work? How long should the presentation be?

- Are there any key leaders in this community with whom you suggest we speak?
- What groups (community or otherwise) are already meeting, where we could make a presentation?
- Are there any festivals or events sponsored by this target population(s) where we could set up a booth?
- Which publications would you recommend we use to communicate with the target population(s)?
- Do you know of any community groups in the downtown area with whom we could meet?
- What other extras (such as free child care during public meetings, food) would you recommend that could help improve attendance and participation?
- Would you be interested in being an EJ ambassador and distributing information to your group/clients? What do you think would be the best communication tools/materials to talk to your group/clients?
- Are you more likely to read something about the Project through e-mail or mail?

#### **Planning for Construction**

- What questions or concerns about construction do you have at this time?
- What are the best ways to notify the community you serve about construction?
- Are there any potential issues or concerns that we should be aware of concerning construction, such as future plans to relocate or expand your agency?
- We're interested in forming a focus group with social service providers and homeless people to introduce and get feedback on our ideas to make construction a smooth transition for homeless people. What would be the best way to go about it? How could we recruit participants?