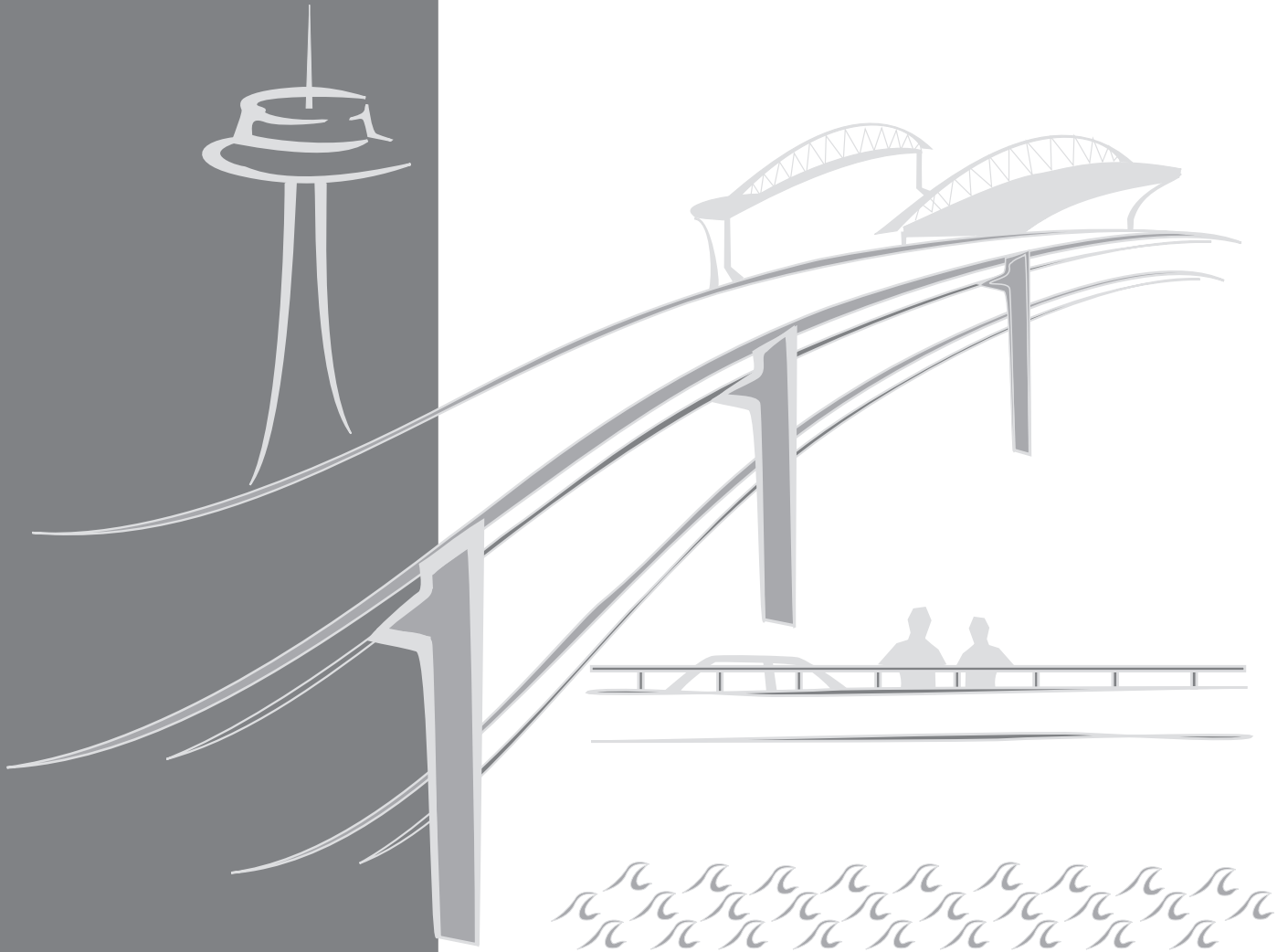


SR 99: ALASKAN WAY VIADUCT &
SEAWALL REPLACEMENT PROJECT

Draft Environmental Impact Statement Appendix J Environmental Justice Technical Memorandum



MARCH 2004

Submitted by:
PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.

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SR 99: ALASKAN WAY VIADUCT & SEAWALL REPLACEMENT PROJECT

Draft EIS Environmental Justice Technical Memorandum

AGREEMENT NO. Y-7888

FHWA-WA-EIS-04-01-D

Submitted to:

Washington State Department of Transportation

Alaskan Way Viaduct and Seawall Replacement Project Office
999 Third Avenue, Suite 2424
Seattle, WA 98104

The SR 99: Alaskan Way Viaduct & Seawall Replacement Project is a joint effort between the Washington State Department of Transportation (WSDOT), the City of Seattle, and the Federal Highway Administration (FHWA). To conduct this project, WSDOT contracted with:

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ACRONYMS

EIS	Environmental Impact Statement
FHWA	Federal Highway Administration
SR	State Route
US DOT	United States Department of Transportation
WSDOT	Washington State Department of Transportation

Chapter 1 SUMMARY

Executive Order 12898 on environmental justice requires all federal agencies to make achieving environmental justice part of their missions by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations. In April 1997, the U.S. Department of Transportation (DOT) issued the DOT Order on Environmental Justice to Address Environmental Justice in Minority Populations and Low-Income Populations (DOT Order 5610.2). The Order generally describes the process for incorporating environmental justice principles into all DOT existing programs, policies, and activities. In December 1998, the Federal Highway Administration (FHWA) issued FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (DOT Order 6640.23). That Order requires the FHWA to implement the principles of the DOT Order 5610.2 and Executive Order 12898 by incorporating environmental justice principles in all FHWA programs, policies and activities.

This report describes the characteristics of these populations in the project area, ongoing efforts to include them in the planning process, and initial conclusions of the project's potential impacts. This report does not duplicate other analyses on specific types of project effects, but instead evaluates how the project could affect low-income and minority populations.

The Alaskan Way Viaduct and Seawall Replacement Project is a major undertaking that will take many years to complete. This memorandum should be considered an interim report and not a final or definitive statement. If this project is going to succeed in recognizing and protecting disadvantaged communities and environmental justice populations, there must be consistent, dedicated efforts to bring them into the development process and recognize their needs. This work will not be complete until construction ends.

The population characteristics of the project study area¹ are:

¹ The project study area is defined as where the direct effects of project construction and operation will occur. This area encompasses all or most of 13 census tract block groups (see Section 4.2.1 of Appendix I, Social Resources Technical Memorandum) (U.S. Census Bureau 1990, 2000).

- The population is White (73 percent), Asian (7 percent), African American (10 percent), and American Indian/Alaskan Native (2 percent) as other major ethnicities represented. Eight (8) percent of the study area population is Hispanic/Latino. Overall this is similar to the entire city of Seattle, which is 70 percent White and 6 percent Hispanic.
- Twenty-five percent of the population is below the poverty line and 4 percent receive public assistance. By comparison, this is more than twice the percentage of the entire city of Seattle.
- Eighty-four percent of the population speaks English. Asian and Pacific Islander (5 percent), Spanish (3 percent), and other languages (6 percent) make up the remainder of languages spoken. Five percent of the population is linguistically isolated, meaning that all household members 14 years old and over have at least some difficulty with English.
- Eighty-six percent of the population is between the ages of 18 to 64 years old.
- Seventy-four percent of the population is made up of one-person households (compared to 41 percent for all of Seattle). According to social service providers, many of these are low-income. Family households compose 16 percent of the study area, and 11 percent of the population is over 64 years old, many of whom are also low-income.²
- Nine percent of the population is disabled,³ which includes sensory disabilities, physical disabilities, mental disabilities, self-care disabilities, go-outside disabilities, and employment disabilities. The citywide percentage is 6 percent.
- Forty-nine percent of the population has no vehicle available to the occupants of a dwelling. The citywide percentage is 16 percent. According to social service providers, nearly all low-income persons in the project area do not have a vehicle and rely on public transit.

² The Age Discrimination Act of 1975 prohibits discrimination on the basis of age in federally assisted programs and activities (Department of Transportation 2004).

³ Disabled persons are included under environmental justice as part of compliance with the Americans with Disabilities Act (U.S. Department of Justice 2004).

A substantial effort has been made to include environmental justice populations in the project development and evaluation process. Based on these community characteristics, specific efforts have been made to reach out to the following groups, as part of the overall public outreach:

- Non-white populations, including Asian, African American, Latino, and American Indian/Alaskan Native populations.
- Non-English speaking populations, including Indo-European, Asian and Pacific Islander, and Spanish.
- Persons receiving some sort of public assistance or those with incomes below the poverty line.
- Persons who are disabled.
- Elderly persons.
- Persons who have no vehicle access and are therefore reliant on transit. Discussions with community service organizations reveal this includes many low-income residents of the project area.

Outreach to these groups is ongoing and should continue through all phases of this project (development, design, and construction) to ensure their needs are identified and addressed to the extent possible.

Current project designs are conceptual, and while sufficient for environmental review, they are far from final. There remain many opportunities for refining the project to avoid or minimize its adverse effects. Additional information from public outreach efforts, economic (businesses) analysis, subsistence fishing studies, and homeless population surveys will help to reach a conclusion on environmental justice impacts. At this point in the development process there is insufficient information to determine if the project has high and disproportionate impacts as defined by the Executive Order.

Based on available information, it is expected that operation of the Rebuild, Aerial, Tunnel, or Bypass Tunnel Alternatives will result in conditions similar to or slightly better than current conditions. The Surface Alternative could result in increased transit travel times for all downtown bus routes, however, the City of Seattle will take measures to ensure that transit service in Downtown Seattle does not degrade.

Construction of the Alaskan Way Viaduct and Seawall Replacement Project will require many years to complete and will have substantial impacts to most of the project area. The most widespread impact will be traffic congestion and reduced mobility during construction. Environmental justice populations could be disproportionately affected because they and the organizations

serving them are heavily reliant on bus transit and have limited transportation alternatives available. The organizations serving these populations are also reliant on transit, as well as overall accessibility for the delivery of supplies, staff, and emergency services. With advance planning and adaptation during construction, all potential impacts identified to date could be avoided or minimized. The information available at this time indicates that any high and disproportionate adverse construction impacts to environmental justice populations can be avoided or minimized provided there is an ongoing commitment to outreach and identification of their needs. The results of the environmental justice outreach will be used to determine both adversity and appropriate mitigation.

Chapter 2 METHODOLOGY

The following steps were taken to analyze impacts of the project on environmental justice populations.

- The study area was defined and census block groups within the area identified.
- The study area population was compared to the population that will benefit from the project and the population of the city of Seattle. This comparison is for illustrative purposes only and is not used to determine whether or not project impacts are disproportionate.
- Preliminary identification of environmental justice populations was made using data from the U.S. Census Bureau and local social service providers. In addition to low-income and minority populations, demographic data and discussion with service providers shows a large population that has some form of disability and is heavily reliant on transit.
- The public involvement plan was revised to ensure inclusiveness of environmental justice populations. Service provider interviews were used to further identify low-income or minority populations in the project area as well as impacts the project would have on their clients.
- Impacts of the project were identified and an assessment of whether they fall disproportionately on environmental justice populations was made. The assessment is qualitative, using professional judgment and drawing on the understanding of the project area gained from service provider interviews and direct observation. The results of other environmental analyses are included by reference and summarized only as needed to support the findings of this report.
- Preliminary mitigation measures were identified.

Results of ongoing public outreach efforts will provide further information on potential project impacts and help determine effective mitigation measures. This report describes the project's first steps to include potentially disenfranchised low-income, minority, and disabled communities in the planning and decision making process. To be consistent with the underlying principles and tenets of NEPA, Executive Order 12898, and Title VI of the Civil Rights Act, outreach to and involvement of these communities 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 DOT and FHWA responded by developing environmental justice policy 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 communities 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 local guidance provided by FHWA (FHWA 2003) and procedures developed by Washington State Department of Transportation (WSDOT) (WSDOT 2003). Additional federal, Washington State, and City of Seattle regulations relevant to environmental justice and guiding this study are:

- US 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).
- National Environmental Policy Act (NEPA).
- 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 will be ongoing and inclusive throughout the project. The text below describes the efforts made to date to ensure the entire community is involved in the decision-making process.

4.1 Interviews

With over 72 low-income housing and social service agencies located within one block of the existing viaduct, impacts on these groups during and after construction are likely to occur. One-on-one interviews were held to ensure these groups are engaged in the decision-making process and to discuss their potential concerns and impacts on their property and/or operations. During the interviews, the project was presented and specific alternatives described. 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's alternatives might present. Most of the interviews were conducted with the Executive Director and/or Program Manager of the organization. One exception was the Heritage House, where the Executive Director and 15 residents participated in the interview. The list of questions used to guide each interview is attached in Attachment A. Translation services were offered for these interviews, and a Spanish interpreter was used at the CASA Latina Day Workers' Center interview. Interviews are ongoing and should include most of the social service providers in the project area. Potential mitigation or other actions to address concerns raised during these interviews have been developed, but are not final commitments. Measures and actions to avoid or reduce project impacts will be developed through continued coordination with these organizations as project planning proceeds. To date, the following groups have been interviewed and their concerns are as follows:

Organization	Potential Concerns	Resolution or Potential Mitigation
St. Martin de Porres Shelter, 10/30/02, 10/03/03	<ul style="list-style-type: none"> • Access to shelter during construction for vehicles and men using shelter services. • Traffic levels on Alaskan and Marginal Ways after construction and impacts on access to shelter. • Relocation of shelter if property required for expanded right-of-way. 	<ul style="list-style-type: none"> • Ensure consistent access during construction. • Require that safe pedestrian routes between the shelter and Pioneer Square area be maintained during construction. • Consider a traffic signal at Massachusetts to assist vehicles leaving the site. This would also benefit the Coast Guard maintenance yard.
St. Martin de Porres Shelter,		<ul style="list-style-type: none"> • Property is not required for right-of-way. If property were required, provide

Organization	Potential Concerns	Resolution or Potential Mitigation
10/30/02, 10/03/03 (continued)		assistance for relocation of shelter in a location desirable to St. Martin de Porres.
CASA Latina Day Workers' Center, 11/13/02	<ul style="list-style-type: none"> Relocation of workers' center located at 2330 Western Avenue, which may be a construction staging area, both during and after construction. Proximity of workers' center to SR 99 ramps, which are used by potential employers. 	<ul style="list-style-type: none"> Commit to finding a suitable new location for the workers' center during construction (and possibly operation) that is easily accessible to potential employers. Same as above.
Rose of Lima House, 11/21/02	<ul style="list-style-type: none"> Access to transit if routes are relocated from First and Second Avenues during construction. Indirect impacts from construction, i.e., increased traffic, noise. 	<ul style="list-style-type: none"> Rose of Lima House will be added to the project mailing list. If the project team identifies additional impacts, a follow-up meeting will be held.
The Catholic Seamen's Club, 6/5/03	<ul style="list-style-type: none"> Access to and through the waterfront area in order to provide services to the workers and sailors at the Port. Noise impacts on retail tenants, which account for 50% of their income. 	<ul style="list-style-type: none"> Ensure adequate access, possibly including replacement parking, for club vehicles. Evaluate construction noise mitigation measures to protect tenants (operational noise levels will be similar to existing levels).
El Rey Residential Treatment Facility, 7/25/03	<ul style="list-style-type: none"> Access around downtown during construction without the midtown/Bell Street ramps. Temporary loss of utilities during construction for food storage and clinic uses. 	<ul style="list-style-type: none"> Ensure adequate access during construction and provide route-planning support. Ensure continuous utility service during construction.
Dorothy Day House, 7/30/03	<ul style="list-style-type: none"> Access to transit if routes are relocated from First and Second Avenues during construction. Noise impacts during construction on house residents. 	<ul style="list-style-type: none"> Provide alternative transit access during construction. Evaluate potential noise impacts during construction and avoid if possible.

Organization	Potential Concerns	Resolution or Potential Mitigation
Lutheran Compass Center, 8/5/03	<ul style="list-style-type: none"> • Access to the buildings on Western Avenue and S. Washington Street for visitors, residents, and staff. • Access to transit if routes are relocated from First and Second Avenues during construction. 	<ul style="list-style-type: none"> • Lutheran Compass Center will be added to the project mailing list. When additional information on access to the buildings is available, a follow-up meeting will be held.
Bread of Life, 8/19/03	<ul style="list-style-type: none"> • Impacts on facility during construction due to proximity of building to the viaduct, including access to the building. 	<ul style="list-style-type: none"> • Bread of Life Mission will be added to the project mailing list. Once more information is known about construction impacts that may affect the mission, a meeting with the Executive Director will be held.
Post Alley Apartments, 8/21/03	<ul style="list-style-type: none"> • Impacts during construction on access to facility (subsidized housing at 60% of median income being phased out by 2005). 	<ul style="list-style-type: none"> • While Post Alley Apartments will no longer be subsidized housing by 2005, a follow-up meeting will be held to discuss construction impacts, once more information is known.
Heritage House, 9/15/03	<ul style="list-style-type: none"> • Access for visitors, deliveries, and facility vehicles during construction. • Noise impacts during construction on house residents. 	<ul style="list-style-type: none"> • Ensure continuous access during construction. • Evaluate potential noise impacts during construction and avoid if possible.
Pike Market Senior Center/ Downtown Food Bank, 9/17/03	<ul style="list-style-type: none"> • Construction effects on east side of Alaskan Way. • Access in and out of facility on Western Avenue. • Modifications to bus schedules and timeliness. 	<ul style="list-style-type: none"> • Maintain access during construction. • Maintain bus schedules and facilitate traffic flow.
First Avenue Service Center, 12/5/03	<ul style="list-style-type: none"> • Increased congestion for deliveries, staff, and volunteers. 	<ul style="list-style-type: none"> • Maintain access during construction. • Maintain bus schedules and facilitate traffic flow.
First Avenue Service Center, 12/19/2003	<ul style="list-style-type: none"> • Accidents to homeless people entering construction sites. • Increased number of clients. 	<ul style="list-style-type: none"> • Provide funding for increased social services such as additional outreach workers and shelters/beds.

Organization	Potential Concerns	Resolution or Potential Mitigation
First Avenue Service Center, 12/19/2003 (continued)	<ul style="list-style-type: none"> • Displacement of parked cars used by homeless people. • Increased congestion for services, deliveries, staff, and volunteers. 	<ul style="list-style-type: none"> • Secure construction sites to prevent entry. • Monitor availability of long-term parking. • Maintain access during construction. • Maintain bus schedules and facilitate traffic flow.
King County Labor Agency AFL/CIO, 12/17/03	<ul style="list-style-type: none"> • Displacement of low-income housing and social service organizations. • Increased number of clients. • Transit service impacts. • Increased congestion for services, deliveries, staff, and volunteers. 	<ul style="list-style-type: none"> • Extend free bus service further north and south and later in the evening. • Provide funding for increased services, especially the food bank. • Maintain access during construction. • Maintain bus schedules and facilitate traffic flow.
Millionaire Club Charity, 8/14/03	<ul style="list-style-type: none"> • Transit service impacts. • Increased congestion and decreased access for deliveries and volunteers. 	<ul style="list-style-type: none"> • Maintain access during construction. • Maintain bus schedules and facilitate traffic flow.
Boomtown Café, 1/14/04	<ul style="list-style-type: none"> • Displacement of people who live under the viaduct. • Increased stress for homeless people. • Increased congestion for services, deliveries, staff, and volunteers. • Business and real estate market impacts could prevent café from relocating as anticipated. • Elimination of metered parking along waterfront. 	<ul style="list-style-type: none"> • Provide funding for increased social services, including shelter space. • Maintain access during construction. • Maintain bus schedules. • Give construction related jobs to homeless and hire Boomtown Café to provide catering services. • Establish an emergency catering service to provide meals for people in need. • Viaduct photography exhibit and fundraiser (homeless photographers).
Women's Referral Center/Noel House, 1/13/04	<ul style="list-style-type: none"> • Impacts to transit service. • Increased congestion for services, deliveries, staff, and volunteers. • Safety around current structures. • Access to emergency services. 	<ul style="list-style-type: none"> • Maintain bus schedules and facilitate traffic flow. • Maintaining access during construction. • Open communication.

Organization	Potential Concerns	Resolution or Potential Mitigation
Pioneer Square Clinic, 1/16/04	<ul style="list-style-type: none"> • Increased congestion for services, deliveries, and staff. • Traffic safety during construction. • Delays in response times for emergency vehicles. • Displacement of people who live under the viaduct. • Access to ferries. 	<ul style="list-style-type: none"> • Maintain bus schedules and facilitate traffic flow. • Maintain access during construction. • Provide more shelter space for homeless.
Lazarus Day Center, 11/12/03	<ul style="list-style-type: none"> • Client access to center. • Increased congestion for services, deliveries, and staff. • Impacts to transit service. 	<ul style="list-style-type: none"> • Maintain access during construction. • Early notification of construction related changes to bus service, road closures, etc.
Frye Apartments, 11/21/03	<ul style="list-style-type: none"> • Displacement of people who live under the viaduct. • Impacts to transit service. • Delays in response times for emergency vehicles. • Increased congestion for services, deliveries, and staff. 	<ul style="list-style-type: none"> • Provide more housing for low-income people. • Maintain bus schedules and facilitate traffic flow. • Maintain access during construction.
Plymouth Housing Group, 11/7/03	<ul style="list-style-type: none"> • Impacts to transit service. • Displacement of people who live under the viaduct. 	<ul style="list-style-type: none"> • Maintain bus schedules. • Provide more housing for low-income people.

The measures summarized above are preliminary and need further development through the planning process. Involvement of these organizations will continue through project planning and design under direction by FHWA and the co-lead agencies.

4.2 Project Fact Sheets

According to the 2000 U.S. Census, there are many non-English languages that are spoken by Seattle residents. In order to ensure that residents that do not understand English, both in the project area and throughout the city, are kept informed about the project, a fact sheet on the Environmental Impact Statement (EIS) alternatives, proposed preferred plan, and general project information was translated into several non-English languages. These languages included Spanish, Chinese, Tagalog, and Vietnamese. Translated in August 2002, this fact sheet was posted on the project website and placed in the following locations:

Tagalog

- Filipino Community Center, 5740 Martin Luther King Jr. Way
- Filipino Youth Activities, 810 18th Ave., RM 108
- Filipino American Student Association, University of Washington

Vietnamese

- Rainier Vista Family Center
- Employment Opportunities Center, 4726 Rainier Ave. S.
- Vietnamese Buddhist Association, 1651 S. King St.
- Vietnamese Catholic Community Archdiocese of Seattle, 1230 East Fir St.
- Vietnamese Friendship Association—6721 51st Ave. S.

Spanish

- El Centro de la Raza, 2524 16th Ave. S.
- CASA Latina, corner of Western and Battery

Chinese

- Chinese Information and Service Center, 409 Maynard Ave. S., #203
- Indochinese Cultural and Service Center, P.O. Box 8382
- Indochina Chinese Refugee Association, 410 7th Ave. S.

General

- International District Multi-Service Center, 675 S. Lane St.
- National Asian Pacific Center on Aging, Melbourne Tower, 1511 3rd Ave., #914
- Refugee Community Development Office, 3600 Graham, N41-2
- Refugee Federation Service Center, 2200 Rainier Ave. S.
- Refugee Women's Alliance, 3004 S. Alaska
- Asian Counseling and Referral Service, 720 8th Ave. S.

Fact sheets and project information will continue to be translated and made available at key points through the development process. Distribution of these materials will be expanded to include other locations in the project area frequented by non-English speaking persons. Information for persons unable to read is provided by public meetings and phone.

4.3 Public Meetings

Public meetings have been held at project milestones to establish a dialogue with the community, solicit public input, and answer questions. These meetings have been held in an open house format, some with presentations, so that the public could talk with members of the project team in a one-on-one

setting. Comment cards were available and the project team received summaries of public input and had access to verbatim comments through the public comment database.

Public meetings were held in a variety of locations throughout the southern, central, and northern portions of the project corridor to ensure access for all members of the public. This included downtown locations to ensure property owners, tenants, and neighbors in the downtown area were able to attend and that meetings were accessible by transit. The dates and locations of the public meetings were as follows:

- June 28, 2001, Mountaineers Club, Uptown/Downtown
- November 13, 2001, Seattle Pacific University, North Queen Anne
- November 14, 2001, The Arctic Building, Dome Room, Downtown
- November 15, 2001, Lafayette Elementary School, West Seattle
- February 25, 2002, The Arctic Building, Dome Room, Downtown
- February 26, 2002, Sylvester Middle School, Burien
- February 27, 2002, Ballard High School, Ballard
- February 28, 2002, Lafayette Elementary School, West Seattle
- March 5, 2002, Meridian Park School, Shoreline
- June 17, 2002, Seattle Center, Rainier Room, Uptown
- July 24, 2002, Port of Seattle, Pier 69, Downtown
- July 25, 2002, Gatewood Elementary School, West Seattle
- July 30, 2002, B.F. Day Elementary School, Fremont
- September 30, 2003, B.F. Day Elementary School, Fremont
- October 1, 2003 Plymouth Congregational Church, Downtown
- October 2, 2003, Lafayette Elementary School, West Seattle

4.4 Display Advertisements

In order to increase awareness of public meetings about the project in the various neighborhoods, display advertisements were placed in local and regional print publications. For each of the series of public meetings identified above, display advertisements were placed in the following publications:

- Seattle Times
- Seattle Post Intelligencer
- The Seattle Weekly
- The Stranger
- NW Asian Weekly
- The Filipino American Herald
- The Hispanic News
- The Facts (African-American paper)

- The Seattle Medium (African-American paper)
- Federal Way Mirror
- Shoreline Enterprise
- Daily Journal of Commerce
- The Highline Times/Des Moines Times
- The Ballard News Tribune
- The Beacon Hill News
- The Capitol Hill Times
- West Seattle Herald
- White Center News
- Magnolia/Queen Anne News

4.5 Community Briefings

Project team visits to existing organizations (at their regular meetings) to provide an update on the project and solicit public questions and comments are being held throughout the life of the project. Since June 2001, over 146 community briefings have been held. The following is a list of dates of all community briefings held within the environmental justice communities. Please note, this is in addition to the one-on-one interviews that have been conducted throughout the project area:

- International District Community Forum, April 22, 2002
- Delridge Neighborhoods District Council, May 15, 2002

Disabled Populations

Planning on outreach to this population is underway

Transit-Reliant Populations

Planning on outreach to this population is underway

Elderly Populations

Planning on outreach to this population is underway

4.6 Information Displays

The project team has increased awareness about the project by providing general information at information displays placed in highly visible and frequented locations, such as community centers, libraries, and shopping malls. Locations in traditionally underserved communities where information displays have been located include:

- Delridge Community Center, 4501 Delridge Way SW, December 2001
- Southwest Community Center, 2801 SW Thistle Street, January 2002
- High Point Community Center, 6920 34th Ave. SW, February 2002

- Jefferson Park Community Center, Beacon Avenue
- Greater Duwamish Neighborhood Service Center, 3801 Beacon Avenue S., September 2002
- South Park Community Center, 8319 8th Avenue S., October 2002

More locations will be added as additional locations are identified. If appropriate, displays will be translated into additional languages.

4.7 Project Mailing List

The project maintains two mailing lists to which project updates are sent; one is electronic and the other by postal mail. Social service agencies within one block of the project corridor were included in the original list, which is being expanded to include agencies within five blocks of the project corridor. Local and regional arts organizations, community centers, and community groups are included in the list.

4.8 Website

The project website (www.wsdot.wa.gov/projects/viaduct) maximizes public access to timely information about the project and quick, easy interaction with project agencies. 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 primary 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. The website is updated on a regular basis to ensure current and accurate information is available.

4.9 Hotline

The project hotline is a 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. Callers can listen to information about upcoming events, including location, time, date, and transit routes close to the event. Callers can also leave messages with questions or comments. 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.

4.10 Posters

Posters advertising public meetings are placed throughout the corridor to ensure those not reachable through existing community groups or the project's mailing list are invited to attend. Posters are placed in libraries, community centers, and businesses in all of the neighborhoods next to the existing viaduct or seawall and neighborhoods whose residents use SR 99 and Alaskan Way for vehicle trips.

4.11 Newsletters

Newsletters provide project information to the public at key decision points and notification of public events. Each newsletter includes options for communicating with the project team and providing input on project choices by mail, e-mail, and telephone. These newsletters are distributed at community briefings, placed at community centers with the information displays, and mailed to the project mailing list.

4.12 E-mail Notification

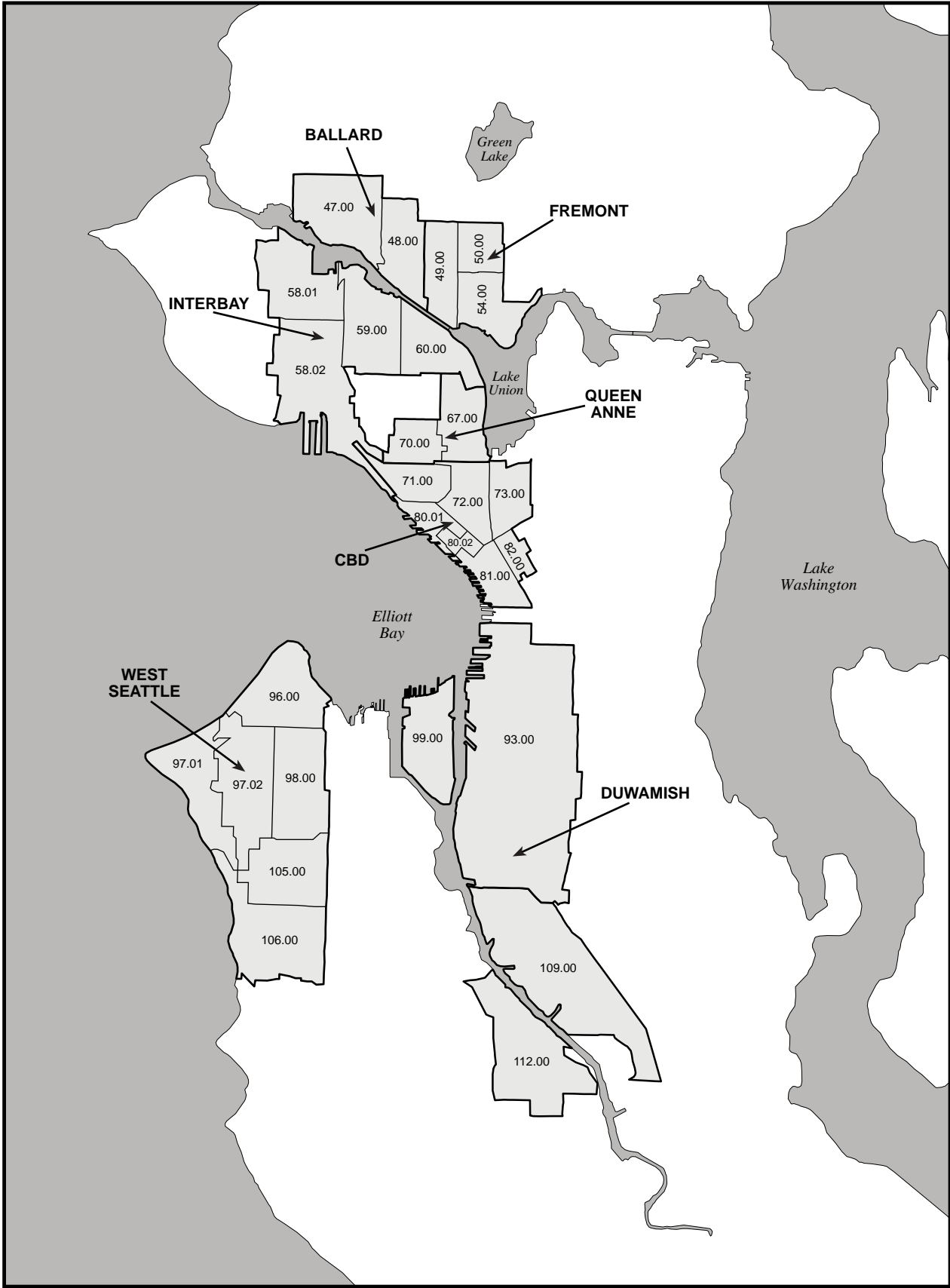
Members of the public who identify a preference for receiving information via e-mail are sent regular updates about the project. These updates notify the public of new information on the website, upcoming events, or major project milestones. At this time, e-mail notices are only available in English.

Chapter 5 AFFECTED ENVIRONMENT

The area where project activities will occur, including proposed displacement of residences and businesses, road construction, and property acquisition, is called the affected area. As a regional facility, the project corridor serves a much larger area than just where the construction activities and operational changes will occur. 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. These trips are made by people who work and shop in the downtown area as well as trips to bypass the downtown core. In addition, businesses use the roadway to transport goods. Statistically, 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 include West Seattle, the Seattle Central Business District, Queen Anne, Ballard, and Fremont. The industrial districts include the Duwamish and Interbay. Together, neighborhoods and industrial districts are called the Benefit Area and are used to establish the demographic characteristics of the reference population.

For the most part, these districts defining the Benefit Area include those districts located immediately south and north of the downtown area along Aurora Avenue N. (SR 99). 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 in close proximity to the downtown area, but access from these districts to SR 99 is not easy nor direct. Consequently, the routes taken by these trips tend to follow surface street arterials or they use I-5 to access downtown Seattle and destinations further distant from the city.

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 27 census tracts (Exhibit 5-1). Considering that the population of the Benefit Area comprises such a large proportion of the city of Seattle, it is not surprising that the demographic characteristics of the Benefit Area are similar to those of the city of Seattle (Exhibit 5-2). The Benefit Area, however, has a smaller proportion of the



Source: U.S. Census, 2000.



CBD Central Business District
 Benefit Area

**Exhibit 5-1
 Map of Benefit Area**

population that is non-white. 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 5-2. Characteristics of the Benefit Area and Impact Area, 2000

Area	Population	Percent Non-White	Percent Hispanic or Latino	Percent of Population Below Poverty
Impact Area	15,839	26%	8%	25%
Benefit Area	120,385	18%	6%	11%
City of Seattle	563,374	30%	6%	12%

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

The Impact Area, or study area, is the geographic area that encompasses only the project corridor. The residents and businesses located in this area are the ones that would directly experience the effects of construction activities associated with the rebuilding or replacement of the existing SR 99 Alaskan Way Viaduct and Seawall.

The demographic characteristics of the study area, however, differ from those of the city of Seattle and the regional Benefit Area. The percent of the population that is non-white is similar to the City of Seattle and the percent of the population that considers itself to be Hispanic or Latino is higher than both the City of Seattle and the Benefit Area. The percent of the population living below the poverty level for the Impact Area was 25 percent, or more than double the percentages for the Benefit Area and the city of Seattle.

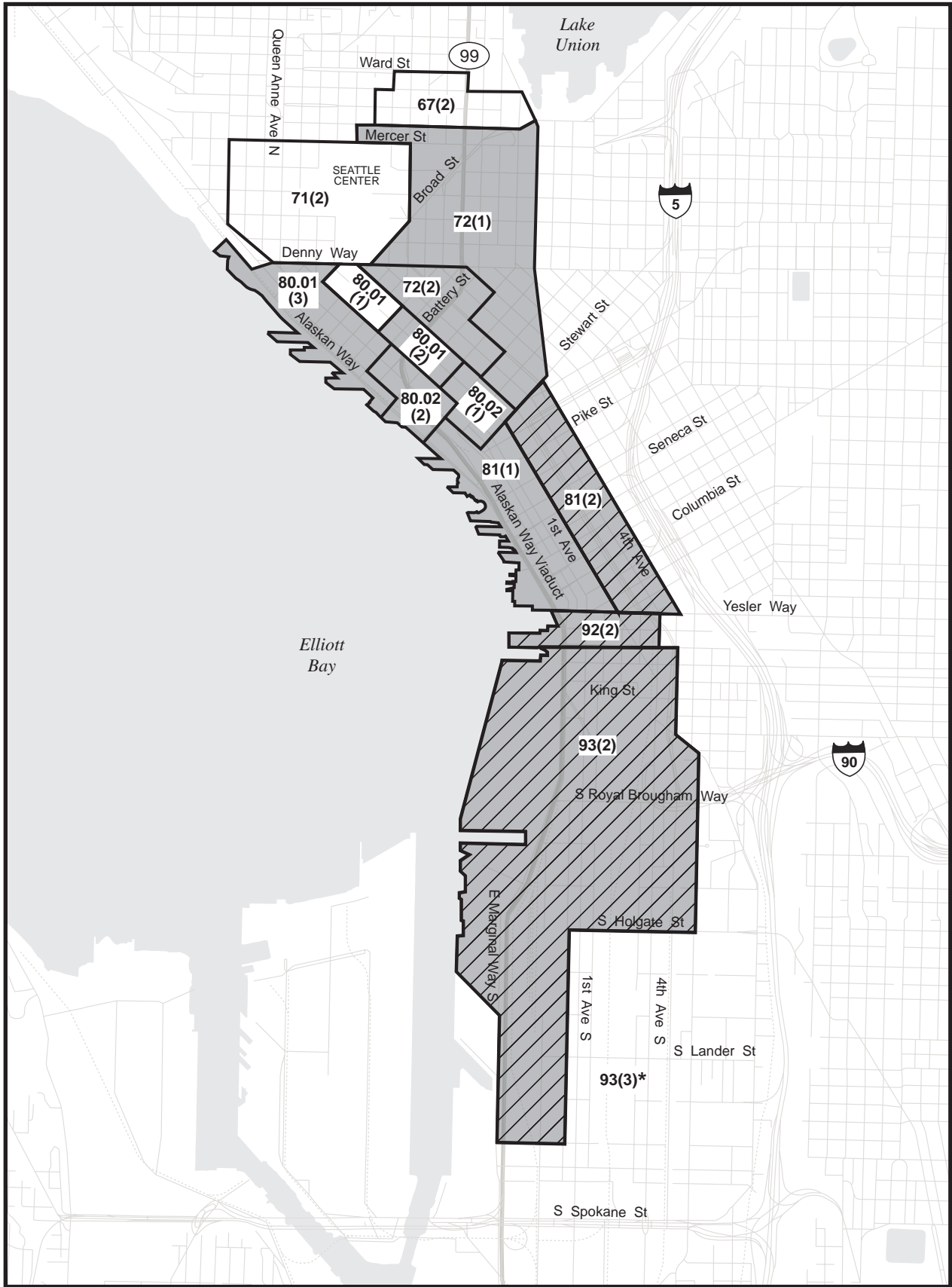
Based on this brief analysis of key demographic statistics, the characteristics of the population of the Benefit Area are more similar to those of the City of Seattle than those describing the Impact Area. The ethnic characteristics of the population of the Impact Area are similar to those of the City of Seattle. The low-income statistics for the Impact Area, however, indicate there are unique characteristics of the Impact Area that are quite dissimilar from either the Benefit Area or the City of Seattle.

Low-income and minority persons are protected under Executive Order 12898. As such, it is important that analysis highlight the adverse effects on these populations, rather than the benefits realized by the majority of the population. For these reasons, the Impact Area must be the study area and focus of the analysis of potential social effects of the proposed project alternatives. For comparative purposes, demographic characteristics of the Impact Area are contrasted to the demographic characteristics of the city of Seattle as a substitute for the demographic characteristics of the population that would benefit from proposed improvements associated with the SR 99 Alaskan Way Viaduct and Seawall Replacement Project. To determine the affected environment for environmental justice communities (low-income and minority populations), census tracts and block groups within the project vicinity were overlain over the affected area to determine the race, ethnicity, and income characteristics of the project area. The affected area was composed of census tract 67 (block group 2), census tract 71 (block group 2), census tract 72 (block group 1), census tract 80.01 (block groups 1, 2, and 3), census tract 80.02 (block groups 1 and 2), census tract 81 (block groups 1 and 2), census tract 92 (block group 2), and census tract 93 (block group 2) (Exhibit 5-3).

As specified by FHWA and WSDOT guidance, low-income communities 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 non-white (Black or African American, American Indian and Alaskan Native, Asian, Pacific Islander, or 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 5-4 shows low-income and minority percentages for the city of Seattle as compared to the block groups in the affected area. As shown in this table and described below, many census block groups have percentages above the city percentage for low-income populations and several have higher percentages of minority populations.

In 2000, 12 percent of the city of Seattle's population was low-income (see Exhibit 5-4). This figure was exceeded in 10 of the 13 block groups in the affected area. See Exhibit 5-3 for the locations of the block groups. The highest concentrations of low-income persons are in the central downtown area and around Pioneer Square.



554-1585-025/06(0620) 10/03
 Source: U.S. Census 2000.

*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 5-3
Minority and Low
Income Populations

Exhibit 5-4. Project Area Demographics

Location	% Low-Income	% Non-White
City of Seattle	12%	30%
Benefit Area	11%	18%
Affected Area		
CT 67, BG 2	1%	15%
CT 71, BG 2	8%	17%
CT 72, BG 1	15%	25%
CT 72, BG 2	18%	20%
CT 80.01, BG 1	8%	17%
CT 80.01, BG 2	25%	27%
CT 80.01, BG 3	23%	28%
CT 80.02, BG 1	28%	27%
CT 80.02, BG 2	16%	26%
CT 81, BG 1	25%	25%
CT 81, BG 2	63%	43%
CT 92, BG 2	48%	39%
CT 93, BG 2	49%	35%
Affected Area Average:	25%	26%

Bold indicates higher percentage than Benefit Area.

CT: Census Tract

BG: Block Group

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

For the minority population comparison, Exhibit 5-4 shows that 30 percent of the city's population was made up of minorities in 2000. Considering persons identifying themselves as White only, this figure was exceeded in 3 of the 13 census block groups. Exhibit 5-5 lists percentages of minority populations by race/ethnicity. The affected area has several areas where the percentage of Hispanic, Black, and/or American Indian persons is substantially higher than for the entire city. These are mostly in the downtown and Pioneer Square areas.

Exhibit 5-5. Race/Ethnicity

Location	White Alone	Hispanic or Latino	Black/ African American	American Indian/ Alaskan Native	Asian	Native Hawaiian/ Pacific Islander	Some Other Race Alone	Two or More Races
City of Seattle	70%	5%	8%	1%	13%	0%	2%	4%
Affected Area								
CT 67, BG 2	85%	4%	3%	1%	7%	0%	0%	3%
CT 71, BG 2	83%	7%	4%	4%	5%	0%	0%	0%
CT 72, BG 1	75%	8%	8%	4%	6%	0%	3%	3%
CT 72, BG 2	80%	5%	5%	1%	8%	0%	2%	4%
CT 80.01, BG 1	83%	3%	3%	1%	11%	0%	0%	2%
CT 80.01, BG 2	73%	4%	12%	1%	9%	0%	2%	4%
CT 80.01, BG 3	69%	8%	9%	2%	7%	0%	0%	4%
CT 80.02, BG 1	70%	6%	10%	3%	6%	0%	0%	4%
CT 80.02, BG 2	72%	3%	10%	1%	9%	0%	1%	4%
CT 81, BG 1	73%	6%	8%	1%	8%	0%	0%	3%
CT 81, BG 2	53%	9%	24%	7%	3%	0%	0%	4%
CT 92, BG 2	56%	11%	18%	3%	6%	0%	0%	6%
CT 93, BG 2	58%	10%	15%	6%	4%	0%	5%	2%

Bold indicates higher minority percentage than city of Seattle percentage.

CT = Census Tract

BG = Block Group

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

Information on English proficiency is useful in determining whether or not translation services are needed to communicate project information to populations in the affected area. Information on linguistic isolation is available in the U.S. Census by census tract and is presented in Exhibit 5-6. Two of the census tracts in the affected area (both near Pioneer Square and the International District) are above the threshold level for requiring language translation (per Department of Justice guidance). The threshold level for requiring language translation is 5 percent or 1,000 or more persons, whichever is less, in the affected population. From discussions with service providers in the project vicinity, most linguistically isolated households are of Asian background. Project information has been translated into Spanish, Chinese, Tagalog, and Vietnamese and outreach efforts in these areas are ongoing.

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 substantial portion of the affected area population has some type of disability (Exhibit 5-7).

Exhibit 5-6. Household Linguistic Isolation

Location	Spanish	Other Indo-European Language	Asian and Pacific Island Language	Other Languages
City of Seattle	4%	6%	9%	7%
Affected Area				
CT 67	2%	9%	2%	9%
CT 71	5%	5%	1%	6%
CT 72	4%	6%	7%	7%
CT 80.01	3%	7%	5%	5%
CT 80.02	2%	4%	6%	6%
CT 81	5%	7%	4%	10%
CT 92	26%	7%	6%	11%
CT 93	0%	0%	4%	4%

Bold indicates higher percentage than city of Seattle percentage.

CT = Census Tract

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

Exhibit 5-7. Disabled Population

Location	Total Population	Percent Disabled ^{a,b}
City of Seattle	563,374	6%
Affected Area		
CT 67, BG 2	609	2%
CT 71, BG 2	919	3%
CT 72, BG 1	495	5%
CT 72, BG 2	2,589	10%
CT 80.01, BG 1 and 2	2,265	7%
CT 80.01, BG 3	1,145	5%
CT 80.02, BG 1 and 2	2,762	11%
CT 81, BG 1	2,431	8%
CT 81, BG 2	1,046	11%
CT 92, BG 2	911	17%
CT 93, BG 2	667	11%
Affected Area Average:	15,839	9%

^a Disabilities include: a) sensory disabilities (blindness, deafness), b) physical disabilities, c) mental disabilities, d) self-care disabilities, e) go-outside disabilities, and f) employment disabilities.

Bold indicates higher percentage than city of Seattle percentage.

CT = Census Tract

BG = Block Group

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

The central portions of Seattle are generally well served by transit. Many residents in the affected area do not have a vehicle available at their dwelling and therefore are reliant on transit to travel more than a short distance. Availability of a vehicle at the dwelling is shown in Exhibit 5-8.

Exhibit 5-8. Transit Dependence¹

Location	Occupied Dwellings	Percent of Dwellings With No Vehicle Available
City of Seattle	258,499	16%
Affected Area		
CT 67, BG 2	408	8%
CT 71, BG 2	672	31%
CT 72, BG 1	331	46%
CT 72, BG 2	1,819	64%
CT 80.01, BG 1 and 2	1,602	40%
CT 80.01, BG 3	757	35%
CT 80.02, BG 1 and 2	1,907	55%
CT 81, BG 1	1,444	44%
CT 81, BG 2	518	90%
CT 92, BG 2	431	72%
CT 93, BG 2	139	6%
Affected Area Average:		49%

Bold indicates higher percentage than City of Seattle percentage.

CT = Census Tract

BG = Block Group

¹ Transit Dependence is a US Census Bureau term.

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

It should be noted that cross-tabulations of census data are limited. It would be useful, for example, to list how many persons reliant on transit are also low-income. Unfortunately, such listings are not available and such conclusions can only be cautiously made by inference.

Minority populations in the Pacific Northwest include Indian tribes. This project does not cross or directly affect Indian lands. The tribes with active interest in the area include the Muckleshoot, Suquamish, Duwamish, Tulalip, Snohomish, Snolqualmie, and Yakima Nation Tribes. To date, tribal interest has been focused on potential impacts to cultural resources during construction. The project's lead agencies are consulting with Indian tribes through the Section 106 process.

Some areas under and directly adjacent to the viaduct are occasionally used by homeless persons. Homeless persons are almost certainly low-income and therefore also of concern, although overnight camping is considered trespass and is illegal. As an illegal activity it is not directly protected, but nevertheless, the potential effects should be considered. Most of the area under the existing structure is used for parking or roadways and does not provide locations for overnight use. Because these areas are somewhat sheltered, small groups occasionally use them. The hillside underneath the viaduct between the Pike Place Hillclimb and Battery Street Tunnel offers slightly more opportunity for overnight use, although no obvious or substantial campsites have been observed. As reported by local community service providers, many of the homeless suffer from substance abuse or mental health problems. These people can have difficulty adapting to changed conditions and can be more easily confused. Additional description of social services provided for homeless persons in the project corridor are included in Appendix I, Social Resources Technical Memorandum.

The waterfront is also used for fishing. Informal participant observation and interviews during December 2003 at Pier 65 found several persons of Asian or Pacific Island heritage fishing for squid. All fishing was for personal consumption or distribution to their families, and none of those interviewed lived in the project area.

Information on fishing along the project will continue to be gathered to gain a more complete understanding of this activity throughout the year.

Chapter 6 OPERATIONAL IMPACTS AND BENEFITS

6.1 No Build Alternative

6.1.1 Scenario 1 – Continued Operation of the Viaduct and Seawall With Continued Maintenance

Under this scenario, conditions experienced by environmental justice populations would be relatively unchanged compared to existing conditions. This includes relatively noisy conditions along much of the corridor. In particular, shelter beds in the Pioneer Square area currently experience noise levels exceeding FHWA impact criteria for developed lands and for residences or parks (72 and 67 dBA, respectively) (see Appendix F, Noise and Vibration Discipline Report).

6.1.2 Scenario 2 – Sudden Unplanned Loss of the Viaduct and/or Seawall Without Major Collapse or Injury

Under this scenario, there would be a sudden, unplanned loss of the viaduct and partial or full closure of Alaskan Way due to damage to the seawall. The resulting traffic disruption, congestion, and loss of accessibility would have substantial and severe impacts to most of the environmental justice populations in the project area. As local residents with more limited resources, they would have little or no way to avoid the area affected by the sudden failure.

6.1.3 Scenario 3 – Catastrophic Failure and Collapse of the Viaduct and/or Seawall

Catastrophic failure of the viaduct and seawall would have similar impacts to the sudden loss of the facilities discussed above, but substantially greater in magnitude and duration. If homeless or other persons were under the structure at the time of an earthquake, they would likely be severely injured or killed. Some service providers could suffer a permanent loss of their facilities or access.

6.2 Build Alternatives

Section 4.1 described the one-on-one interviews conducted with groups in the project area. The following summarizes the potential long-term impacts that could occur to organizations with all of the build alternatives:

- Relocation of housing, social services, and other facilities
- Increased traffic congestion could affect services, deliveries, staff, and volunteers
- Decreased access to facilities, SR 99, and service/work destinations.
- Impacts to transit services, including access to ferries.
- Displacement of homeless people that live under the viaduct and in parked cars.
- Increased accidents.
- Increase in demand for social services.
- Business and real estate market impacts.
- Elimination of metered parking along waterfront.
- Impacts to emergency services.

Transportation was one of the subjects brought up in interviews. The following excerpts from the Transportation Discipline Report (Appendix C) summarize effects of the project alternatives relevant to environmental justice:

Traffic Distribution:

- The Surface Alternative is forecast to cause increased traffic on arterials (16 percent) and I-5 (6 percent) through downtown Seattle. Other alternatives are forecast to decrease traffic on arterials and I-5 through downtown, except the Bypass Tunnel Alternative, which would increase traffic by one percent on I-5 through downtown.

Arterial Intersections Performance:

- The Surface Alternative will result in an increase in the number of congested intersections in the downtown area. Conversely, the Tunnel and Tunnel Bypass Alternatives are anticipated to offer some improvement overall to traffic operations in the downtown area due to the redistribution of traffic accessing SR 99 to several east–west streets, rather than to a single street (Columbia).
- The Tunnel and Tunnel Bypass Alternatives relocate access to SR 99 in the Belltown area from Elliott/Western to Alaskan Way, resulting in lower levels of congestion on Elliott and Western Avenues, but higher levels of congestion on Alaskan Way north of Pike Street. The Surface Alternative is also expected to experience lower levels of congestion at several intersections in the Elliott/Western area because some traffic may instead choose to stay on Alaskan Way.

Transit Connections, Travel Times, and Coverage Area:

- Transit travel times under the Rebuild, Aerial, Tunnel, and Bypass Tunnel Alternatives would be similar to the No Build Alternative, should direct routing into downtown continue to be utilized to and

- from the south (via the Columbia and Seneca Street ramps, or the S. King Street ramps).
- Transit routing to and from the south could instead be accommodated by the new Atlantic Street ramps, SR 519, and Fourth Avenue under any of the alternatives. This route would increase travel times compared to the No Build Alternative, but would allow service to more locations downtown and in the stadium area. Also, this routing would be subject to traffic congestion in the stadium area during events.
 - Some increase in travel times could be expected under the Surface Alternative for all downtown bus routes, unless measures to give transit priority are implemented. This is due to higher traffic volumes and increased congestion on downtown streets. The City of Seattle's policy is to give transit priority in the downtown area and measures to maintain transit speed and reliability would likely be implemented if downtown streets became more congested. Increased utilization of transit facilities that provide travel time advantages, such as the E3 busway, could help avoid increased congestion on some surface streets, while implementation of transit priority systems could help reduce the effect of traffic congestion on bus routes on the arterial grid.
 - The Seattle Monorail Project will provide grade-separated transit service along the corridor, which will not be affected by traffic conditions under any of the alternatives. Sound Transit will provide transit service on dedicated right-of-way through downtown and south Seattle.

Existing noise levels along much of the corridor exceed the FHWA noise abatement criteria for traffic noise (67 dBA). This includes 120 shelter beds located near First and Main Streets near Pioneer Square. All alternatives produce similar noise levels in this area and continue the current impact. Changes in noise levels in other areas would not affect environmental justice populations or supporting organizations (see Appendix F, Noise and Vibration Discipline Report).

All alternatives result in some business displacements, however at this time it is not known if any of these businesses are minority-owned or employ individuals from environmental justice populations. There are no residential displacements for any alternative (see Appendix K, Relocations Technical Memorandum).

6.2.2 Rebuild Alternative

Conditions experienced by environmental justice populations under the Rebuild Alternative would be relatively unchanged from existing conditions. Traffic patterns and accessibility through the project area would be similar to existing conditions. Noise impacts from the elevated structure would be similar to existing conditions.

6.2.3 Aerial Alternative

Conditions experienced by environmental justice populations under the Aerial Alternative would be relatively unchanged from existing conditions. Traffic patterns and accessibility through the project area would be similar to existing conditions. Noise impacts from the elevated structure would be similar to existing conditions, and other changes in urban character would not have a substantial effect on surrounding communities (see Appendix I, Social Resources Technical Memorandum).

6.2.4 Tunnel Alternative

Conditions experienced by environmental justice populations under the Tunnel Alternative would be altered in some regards compared to existing conditions. Noise levels near Pioneer Square would be slightly reduced but would still exceed FHWA criteria. Noise impacts along the central waterfront would be reduced and the urban character of that area would be more open and park-like. Like other residents of Seattle, environmental justice populations would benefit from an increase in open space (see Appendix H, Parks and Recreation Technical Memorandum). Although traffic patterns would be changed in many areas, overall accessibility would be maintained or improved.

6.2.5 Bypass Tunnel Alternative

Similar to the Tunnel Alternative, conditions experienced by environmental justice populations under the Bypass Tunnel Alternative would be altered in some regards compared to existing conditions. Noise levels near Pioneer Square would be slightly reduced but would still exceed FHWA criteria. Portions of the central waterfront would have noise levels slightly lower than existing conditions, but not as low as with the Tunnel Alternative. Traffic patterns would be altered with increases in traffic volumes along the central waterfront, but overall accessibility would be maintained.

6.2.6 Surface Alternative

The Surface Alternative could increase congestion through the project area during most of the day. Noise levels near Pioneer Square would be similar to existing conditions and exceed FHWA criteria. Traffic patterns would be altered with substantial increases in traffic volumes along the central waterfront. Traffic volumes would also increase in much of the downtown area as motorists seek other routes. With measures to ensure transit travel is not greatly impeded, overall accessibility and mobility for disadvantaged communities along the corridor would be maintained. Increased traffic volumes and related congestion could increase response times for emergency services.

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Chapter 7 CONSTRUCTION IMPACTS

Construction of any of the project alternatives will require many years and has the potential to be very disruptive. Construction impacts especially important to environmental justice populations include increased congestion, reduced mobility, reduced transit service, increased response time for emergency services, and increased noise. Specific impacts in these areas are described in detail in the Transportation Discipline Report (Appendix C), Noise and Vibration Discipline Report (Appendix F), Public Services and Utilities Technical Memorandum (Appendix O), and Social Resources Technical Memorandum (Appendix I).

Temporary congestion during construction (although potentially lasting years) would have a substantial effect on the environmental justice populations in the project area and the organizations that strive to serve them. These populations and organizations are heavily reliant on transit, whose service will be hampered by overall congestion. Congestion would also make deliveries to service providers more difficult.

All alternatives would use city-owned property west of Battery Street Tunnel for construction staging. This property is currently used by CASA Latina for their day workers' center. Day workers gather at the site and wait for potential employers to drive up and hire them. The current location works well for both workers and employers because it is relatively close to the downtown free-ride area and easy for employers to reach via SR 99. Loss of this site could substantially hinder Casa Latina's program unless a suitable alternative is found and implemented in advance of construction.

Section 4.1 described the one-on-one interviews conducted with groups in the project area. The following summarizes the perceived construction impacts that could occur to organizations with the build alternatives:

- Relocation of organizations and facilities for construction staging.
- Transit service impacts.
- Utility disruptions.
- Increased stress and accidents for homeless people.
- Construction site hazards.
- Increased traffic congestion and decreased access could affect services, deliveries, staff, volunteers, and emergency service response times.
- Displacement of homeless people that live under the viaduct and in parked cars.
- Increase in demand for social services.
- Elimination of metered parking along waterfront.

Construction activities may bring additional impacts to portions of the homeless community. Traffic detours, barricades, and other temporary construction measures can present substantial hurdles for these people and potentially prevent them from reaching accustomed sources of food, shelter, or health care. The homeless that sleep under the viaduct would be unable to do so during construction.

Construction activities may also bring additional impacts to people with disabilities. Traffic and sidewalk detours, barricades, and other temporary construction measures can present substantial hurdles for these people.

Access to Pier 65 would likely be more difficult during construction. This would affect people who fish at the pier and use the fish and/or squid to feed their families.

7.1.1 Minimization and Mitigation

Although construction impacts to environmental justice populations may be substantial, it appears they can be avoided, minimized, and mitigated. Discussions with service providers have enabled identification of potential solutions to the construction impacts identified at this time. Some solutions are specific, for example, relocating the CASA Latina Day Workers' Center to a new location so it will remain accessible to both clients and potential employers. Other solutions are more general and common to most service providers. These include maintaining access to transit, provisions for emergency services, and access for deliveries and employees.

At this point in the project planning and development process, it is too early to do more than generally describe construction impacts and how they can be avoided or mitigated. If the outreach efforts already begun are continued through the entire process of planning, evaluation, design, and construction, all impacts should be identifiable in advance. While it would be naïve to state that once identified all impacts can be resolved, they can certainly be at least minimized and substantially avoided. Where impacts cannot be avoided, mitigation should be developed based on the specific needs of the affected population or community.

Chapter 8 SECONDARY AND CUMULATIVE IMPACTS

At this time, no secondary or cumulative impacts to environmental justice populations have been identified. However, construction schedules for both the Seattle Monorail Project and Sound Transit light rail project show overlap with the first years of construction of the viaduct. This could cause increased disruption to traffic and increased congestion, especially in the downtown area.

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Chapter 9 ENVIRONMENTAL JUSTICE DETERMINATION

At this stage in the environmental documentation process, it is not possible to make an environmental justice determination. Additional information from public outreach efforts, economic (businesses) analysis, and subsistence fishing studies will help to reach a conclusion on environmental justice impacts. Initial indications are that potential high and disproportionate impacts to environmental justice populations in the project area can be avoided or reduced through careful planning and design. Based on the information available to date, it is expected that operation of the Rebuild, Aerial, Tunnel, or Bypass Tunnel Alternatives would result in conditions similar to or slightly better than current conditions. As presently designed and analyzed, the Surface Alternative could result in increased transit travel times for all downtown bus routes, however, the City of Seattle will take measures to ensure that transit service in downtown Seattle does not degrade.

Construction of the Alaskan Way Viaduct and Seawall Replacement Project will require many years to complete and will have substantial impacts to most of the project area. The most widespread impact will be traffic congestion and reduced mobility during construction. Environmental justice populations could be adversely affected because they and the organizations serving them are heavily reliant on bus transit and have limited alternatives available. The organizations serving these populations are also reliant on transit as well as overall accessibility for the delivery of supplies, staff, and emergency services. With advance planning and adaptation during construction, all potential impacts identified to date could be avoided, minimized, and mitigated.

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Chapter 10 REFERENCES

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ATTACHMENT A

Community Interview Questions

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COMMUNITY INTERVIEW QUESTIONS

1. What service does your organization provide?
2. Who is your audience?
3. How do you provide the service?
4. Are there periods of time that are crucial for the service you provide (i.e., times during the day or year)?
5. Do you feel you have a fairly good understanding of the proposed project? Do you have questions about the proposed construction and operation of the alternatives?
6. What are your concerns regarding the potential impacts of the project on your service(s) and/or people that you serve?
7. Do you have any concerns regarding the potential impacts of the project on your staff and/or volunteers?
8. Do you have any suggestions for ways the project can help mitigate the impacts that people you are serving may encounter?
9. As we reach out to all groups and individuals that may be affected by the project, what is the most effective way to reach the people you serve?
10. Does your organization sponsor any special events or fundraisers that may be impacted by the project?
11. What languages do the people you serve speak?
12. What is the most effective way to continue to involve and inform your organization in the project as it moves forward?
13. Are there other organizations that you suggest we speak with or include in our project's public involvement activities?

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