

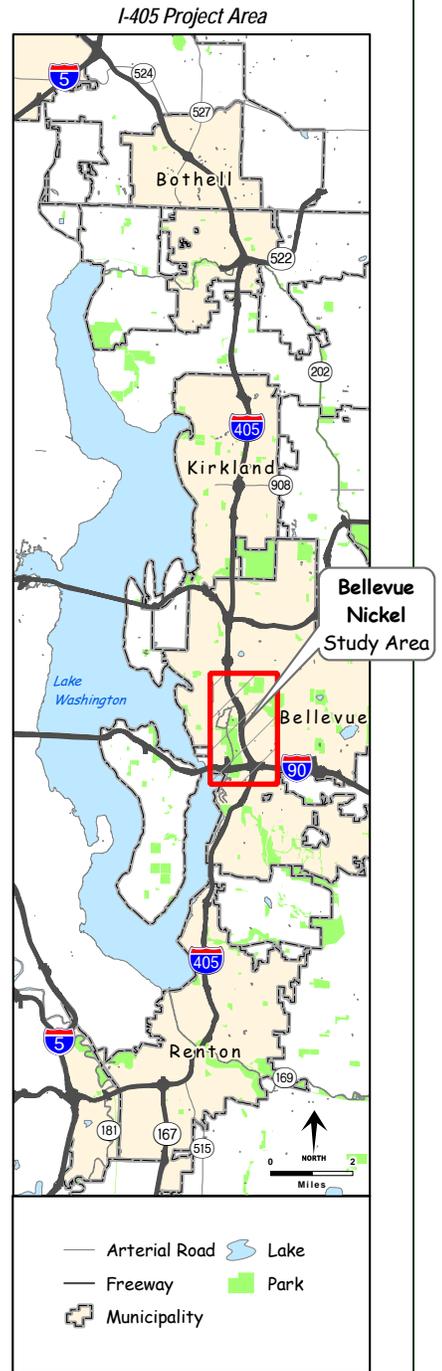
I-405 Bellevue Nickel Improvement Project I-90 to Southeast 8th Street



Corridor Program
Congestion Relief & Bus Rapid Transit Projects

SOCIAL ELEMENTS DISCIPLINE REPORT

January 2006



This document should be cited as:

Washington State Department of Transportation. 2005. I-405 Bellevue Nickel Improvement Project. Social Elements Discipline Report. November. Bellevue, WA. Prepared for the Washington State Department of Transportation, Urban Corridors Office, and the Federal Highway Administration, Olympia, WA.



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Appendices

Appendix A. Avoidance and Minimization Measures

Appendix B. Demographic Data

Glossary

best management practices	BMPs are generally accepted techniques that, when used alone or in combination, prevent or reduce adverse effects of a project. Examples include erosion control measures and construction management to minimize traffic disruption.
census block group	A subset of a census tract. A block group is the smallest geographic unit for which the US Census Bureau collects data.
context sensitive solutions	An approach to roadway design that involves all stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic, and environmental resources while maintaining safety and mobility.

Acronyms and Abbreviations

BMP	Best Management Practices
BNSF	Burlington Northern Santa Fe Railroad
CSS	Context Sensitive Solutions
EA	environmental assessment
EIS	environmental impact statement
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
HOV	high-occupancy vehicle
I-405	Interstate 405
I-90	Interstate 90
NB	northbound
NEPA	National Environmental Policy Act
OFM	Washington State Office of Financial Management
PSRC	Puget Sound Regional Council
ROD	record of decision
SB	southbound
SE	southeast
WSDOT	Washington State Department of Transportation

Introduction

In 1998, the Washington State Department of Transportation (WSDOT) joined with the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), Central Puget Sound Regional Transit Authority (Sound Transit), King County, and local governments in an effort to reduce traffic congestion and improve mobility in the Interstate 405 (I-405) corridor. In fall 2002, the combined efforts of these entities culminated in the *I-405 Corridor Program Final Environmental Impact Statement (EIS)* and *FHWA Record of Decision (ROD)*.

The ROD selected a project alternative that would widen I-405 by as many as two lanes in each direction throughout its 30-mile length. The ultimate configuration of the selected alternative includes buffers separating general-purpose lanes from parallel high-occupancy vehicle (HOV) lanes (potentially used by future high-capacity transit). The design also allows for expanded “managed lane” operations along I-405 that could include use of HOV lanes by other user groups, such as trucks.

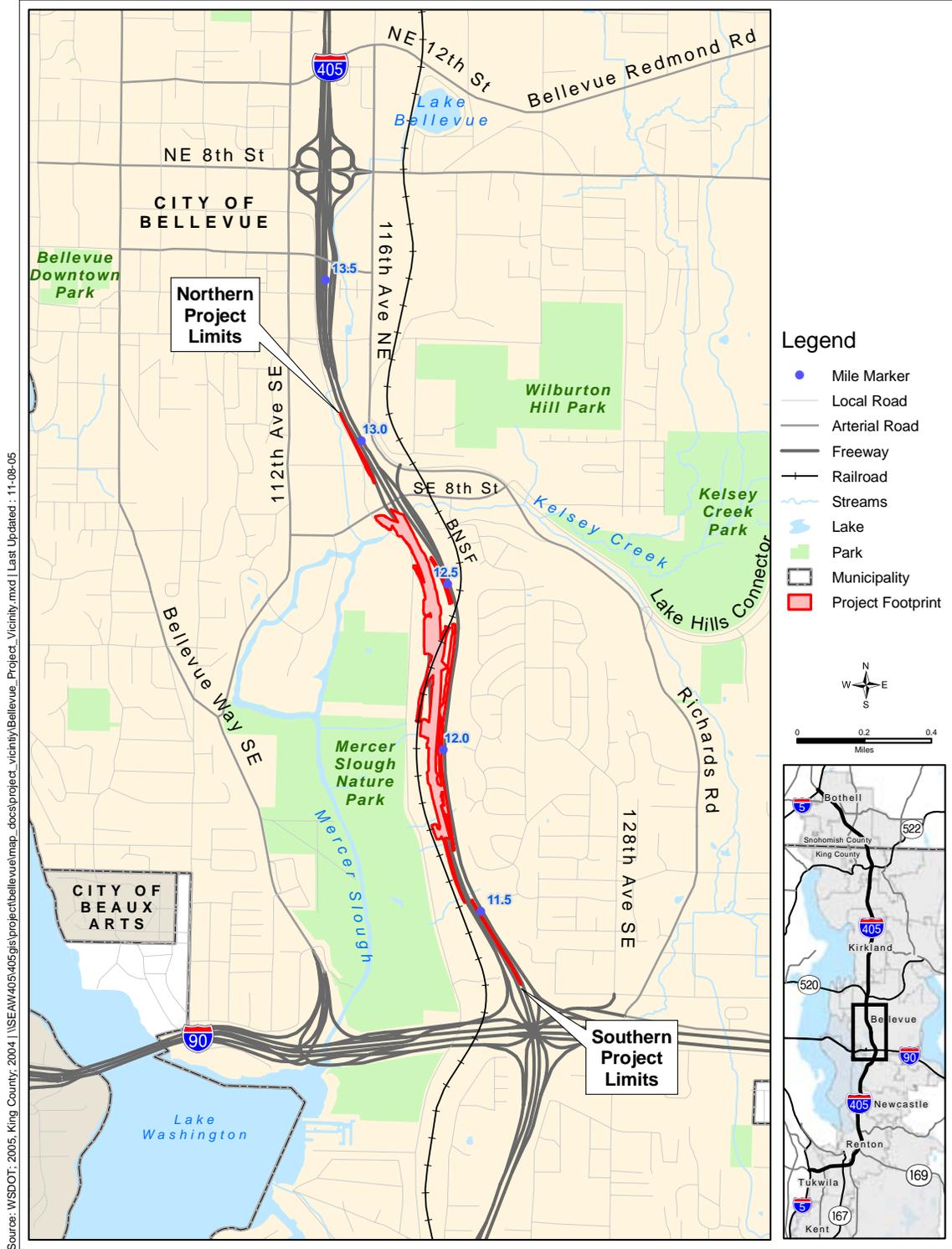
In 2003, the Washington State legislature approved a statewide transportation-funding plan called the “nickel package.” The nickel package provided funding for congestion relief projects in three critical traffic hotspots along the I-405 Corridor: Renton, Bellevue, and Kirkland. The Bellevue Nickel Improvement Project is one of several projects now moving forward as part of a phased implementation of the I-405 Corridor Program. Exhibit 1 shows the location of the Bellevue Nickel Improvement Project.

In 2003, the Washington State legislature approved a statewide transportation-funding plan called the “nickel package.” The nickel package provides funding for congestion relief projects in three critical traffic hotspots along the I-405 Corridor, including Bellevue.



Traffic moving along I-405

Exhibit 1. Project Vicinity Map



In keeping with the direction established in the Final EIS and ROD, we are preparing a National Environmental Policy Act (NEPA) Environmental Assessment (EA) that focuses on project-level effects of constructing and operating the Bellevue Nickel Improvement Project.

We will base the EA on the analysis in the *I-405 Corridor Program Final EIS*, and will describe any new or additional project changes, information, effects, or mitigation measures not identified and analyzed in the corridor-level Final EIS (FEIS). The project-level EA for the Bellevue Nickel Improvement Project will not reexamine the corridor-level alternatives, impacts, and mitigation measures presented in the corridor-level FEIS, or the decisions described in the ROD.

The Environmental Assessment will describe new project changes, information, effects, or mitigation measures, but the assessment will not revisit the alternatives, impacts, and mitigation measures evaluated in the corridor-level EIS or the decisions documented in the *Record of Decision*.

What alternatives do we analyze in this discipline report?

This discipline report is one of 19 environmental elements WSDOT will study to analyze the effects of the Bellevue Nickel Improvement Project. All of the discipline reports will analyze one build alternative and one “no build” or “no action” alternative. This approach is consistent with FHWA’s guidelines for preparing a NEPA EA.

What is the No Build Alternative?

NEPA requires us to include and evaluate the No Build Alternative in this discipline report. We use this approach to establish an existing and future baseline for comparing the effects associated with the Build Alternative. We assume the No Build Alternative will maintain the status quo: only routine activities such as road maintenance, repair, and safety improvements would occur within the corridor between now and 2030. The No Build Alternative does not include improvements that would increase roadway capacity or reduce congestion on I-405. We describe these improvements further in the Bellevue Nickel Improvement Project Traffic and Transportation Discipline Report.

We assume the No Build Alternative will maintain the status quo: only routine activities such as road maintenance, repair, and safety improvements would occur within the corridor between now and 2030.

What are the principal features of the Build Alternative?

The project will add one new general-purpose lane in each direction along a 2-mile section of I-405 between I-90 and SE 8th Street. We will generally use the inside or “median” side

of I-405 for construction. After we re-stripe the highway, the new lanes will occupy the outside of the existing roadway. The Bellevue Nickel Improvement Project also includes new stormwater management facilities and better drainage structures and systems.

Other project activities include developing off-site wetland mitigation as well as on-site stream mitigation areas to compensate for the loss of these resources within the project area. We expect project construction to begin in spring 2007 and the improved roadway to be open to traffic by fall 2009.

Improvements to Southbound I-405

We will add one lane in the southbound direction of I-405 from approximately SE 8th Street to I-90.

In the southbound (SB) direction, we plan to add one new travel lane from approximately Southeast (SE) 8th Street to I-90 (Exhibits 2, 3, and 4). In addition, the existing outside HOV lane at I-90 will be extended north so that it begins at the on-ramp from SE 8th Street. In order to add these lanes and maintain traffic flow during construction, we will shift approximately 3,000 feet of the SB roadway as much as 200 feet east into the existing median. The relocated SB roadway will connect to the existing SB travel lanes just north of the I-90 interchange, and south of the existing bridge over SE 8th Street.

We will build a new tunnel underneath the Burlington Northern Santa Fe (BNSF) railroad, just east of the existing Wilburton Tunnel, to accommodate the relocated and widened SB roadway. The existing tunnel does not have the capacity to accommodate additional lanes of SB traffic.

The existing SB travel lanes and the Wilburton Tunnel will remain open to traffic during construction of the new tunnel and the relocated/widened SB lanes. We will also build the new tunnel wide enough to accommodate additional lanes. The existing tunnel will remain after we complete the improvements.

Exhibit 2. Proposed Bellevue Nickel Project Improvements (Sheet 1 of 3)

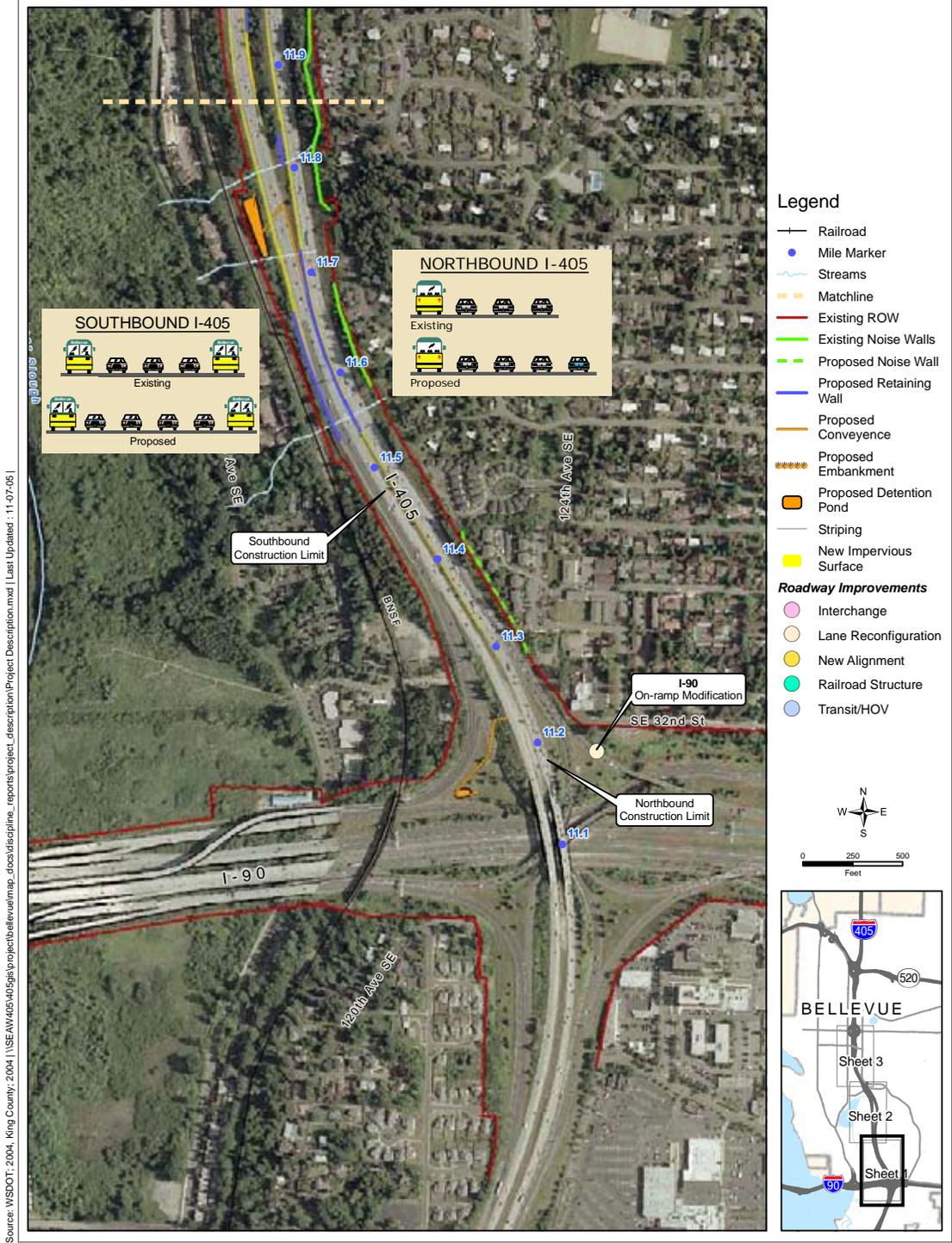


Exhibit 3. Proposed Bellevue Nickel Project Improvements (Sheet 2 of 3)

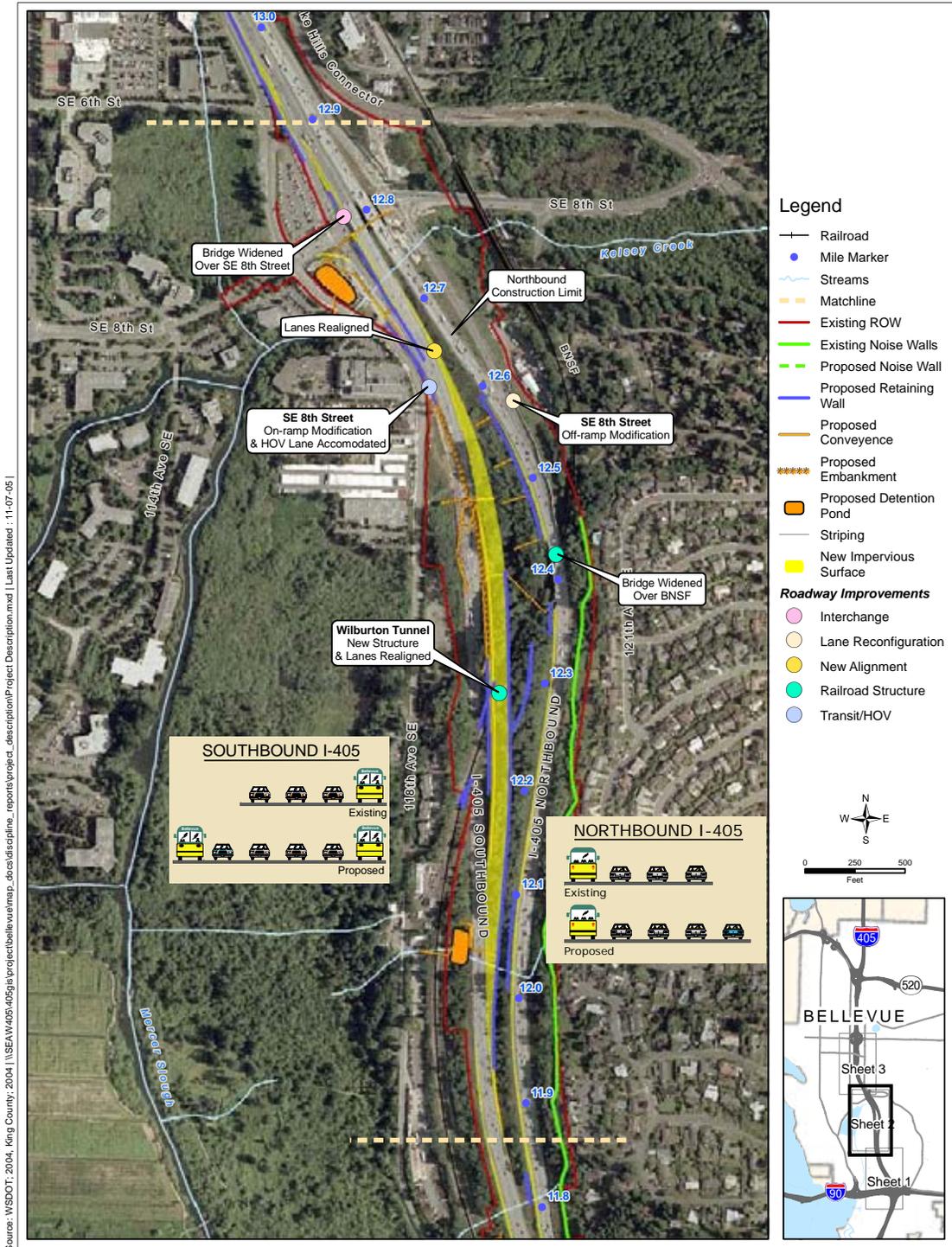
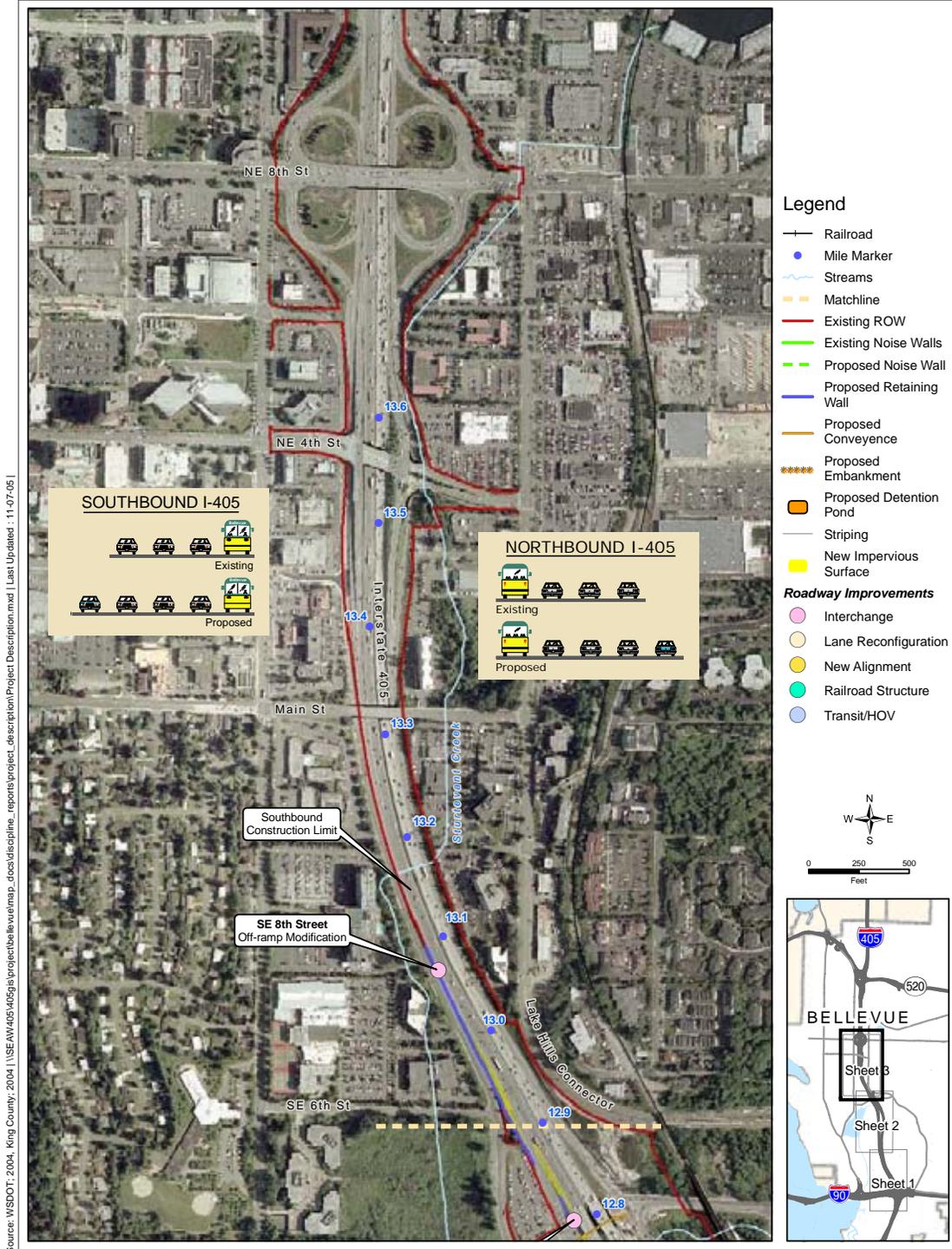


Exhibit 4. Proposed Bellevue Nickel Project Improvements (Sheet 3 of 3)



Source: WSDOT, 2004. King County, 2004. \\SE\AW\405\project\bellevue\map_docs\discipline_reports\project_description\Project Description.mxd | Last Updated: 11-07-05

We will also include the following improvements in the Build Alternative:

- Modify the existing off-ramp at SE 8th Street to make room for an additional southbound lane on I-405. The off-ramp will then become a single-lane, optional off-ramp (i.e., the off-ramp will no longer be an “exit only” off-ramp).
- Build a retaining wall between the SB travel lanes and the off-ramp at SE 8th Street.
- Widen the existing bridge over SE 8th Street to the west to accommodate the new SB lane.
- Modify the existing on-ramp at SE 8th Street to tie into the relocated SB general-purpose travel lanes.
- Reconfigure the on-ramp at SE 8th Street to accommodate the extended outside HOV lane.
- Temporarily shift the existing BNSF railroad track from its current alignment to allow for continuous railroad operation during construction of the new tunnel.
- Construct retaining walls along the eastern edge of the relocated SB travel lanes.

Improvements to Northbound I-405

In the northbound (NB) direction, we plan to add one new travel lane from approximately I-90 to SE 8th Street (Exhibits 2, 3, and 4). We will add one new lane to the NB ramp from I-90. We will shift the NB lanes to allow all of the proposed widening to occur on the inside, or median side of the existing roadway.

Additional improvements include:

- Re-stripe the westbound/eastbound I-90 on-ramp to NB I-405 resulting in one lane becoming two lanes in the NB direction.
- Widen, shift, and re-stripe NB I-405 travel lanes north of I-90 to allow the westbound I-90 to NB I-405 on-ramp and the eastbound I-90 to NB I-405 on-ramp to enter I-405 without having to merge into a single lane.
- Construct several retaining walls needed for road widening in locations that allow for existing and future widening of I-405.

We will add one lane in the northbound direction of I-405 from approximately I-90 to SE 8th Street. All widening of the northbound mainline will occur on the inside (median side) of the existing roadway.

- Construct noise barrier approximately 725 feet long and 16 feet high (see Exhibit 2).
- Widen the existing bridge over the BNSF Railroad to the west to accommodate the new NB lane.
- Modify the NB off-ramp to SE 8th Street to make it a single-lane “exit-only” off-ramp.
- Transition the NB travel lanes back into the existing lane configuration before crossing over SE 8th Street.

Improvements to the Stormwater Management System

Managing stormwater for the I-405 Bellevue Nickel Improvement Project involves the collection and treatment of rainfall runoff from the new project pavement consistent with the guidelines in the WSDOT Highway Runoff Manual.

Currently, we treat less than 5 percent of the existing runoff from paved surfaces in the project area before discharging it. We will improve this condition by treating 17 percent more area than the new paved surface area we create. By treating a greater area, we improve flow control and remove pollutants from a portion of the existing roadway as well as from newly constructed areas.

Reconfiguration and new construction associated with the SB lanes will mean that we need to replace much of the existing drainage system. We will continue to use open roadside ditches along the shoulders of the roadway shoulders where possible. We will use standard WSDOT catch basins and manhole structures to move the roadway runoff to a system of stormwater drain pipes. These features will transport runoff to treatment and flow-control facilities within the existing ROW.

We will construct three new stormwater ponds (detention ponds combined with stormwater treatment wetlands) as part of the project and enlarge the existing pond at SE 8th Street. Two of the new ponds will be located south of the Wilburton Tunnel between the SB lanes and the BNSF railroad ROW. We will construct the third new pond in the northwest quadrant of the I-90/I-405 interchange. The project will discharge treated stormwater following existing flow patterns to Mercer Slough or to the wetlands that surround it.

Avoidance and Minimization Measures

WSDOT will use Best Management Practices (BMPs), WSDOT Standard Specifications, and design elements to avoid or minimize potential effects to the environment for the Bellevue

Best Management Practices (BMPs)

BMPs are generally accepted techniques that, when used alone or in combination, prevent or reduce adverse effects of a project. Examples include erosion control measures and construction management to minimize traffic disruption. Please see [Appendix A](#) for a complete list of BMPs.

WSDOT Standard Specifications

Guidelines and procedures established by WSDOT for roadway design and construction in a variety of design, engineering, and environmental manuals.

Nickel Improvement Project. Collectively, these measures to avoid or minimize potential effects to the environment are known as “avoidance measures.” We describe these measures in more detail in an Appendix A. If the project has additional effects not addressed in the avoidance measures, we will address these measures through mitigation.

Wetland and Stream Mitigation Sites

We will compensate for adverse effects to wetlands and their buffers by creating just over an acre of wetland within the boundaries of Kelsey Creek Park (Exhibit 5). The site is located north of the intersection of Richards Road and the Lake Hills Connector.

Our general concept will be to create an area that will transition from forested land beside the Lake Hills Connector to wetlands within Kelsey Creek Park. We will reshape the surface area to create favorable conditions for the necessary wetland aquatic characteristics, and we will replant and enhance habitat in the area by constructing habitats and replanting adjacent roadside areas with forest-type vegetation.

Similarly, we will compensate for unavoidable effects to “Median Stream,” the unnamed stream within the I-405 median. We have developed a conceptual stream mitigation plan that includes on-site habitat restoration and creation. The conceptual stream mitigation plan includes the following specific elements (See Exhibit 6):

- Connect the new Median Stream culvert under I-90 to the existing channel and wetland located west of SB I-405.
- Create approximately 500 linear feet of stream channel along the western slope of SB I-405.
- Buffer the created stream channel with approximately 16,000 square feet of native streamside vegetation.
- Enhance approximately 300 linear feet of riparian habitat west of SB I-405 by removing selected non-native invasive plant species and replacing with native streamside vegetation.

We provide more detailed information about mitigation efforts planned in conjunction with the Bellevue Nickel Improvement in the Surface Water, Water Quality, and Floodplains and Wetlands Discipline Reports.

Exhibit 5. Proposed Wetland Mitigation Area

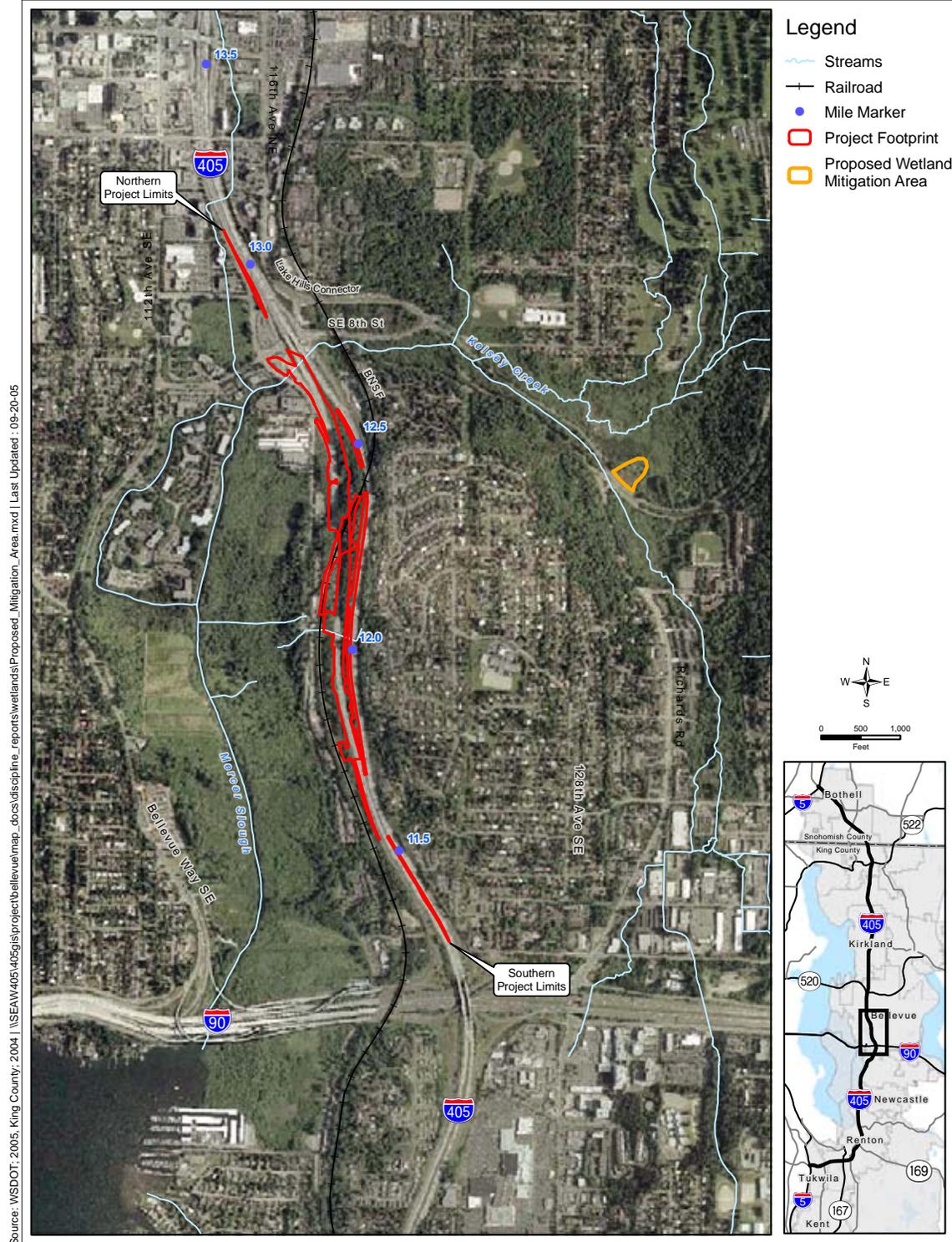
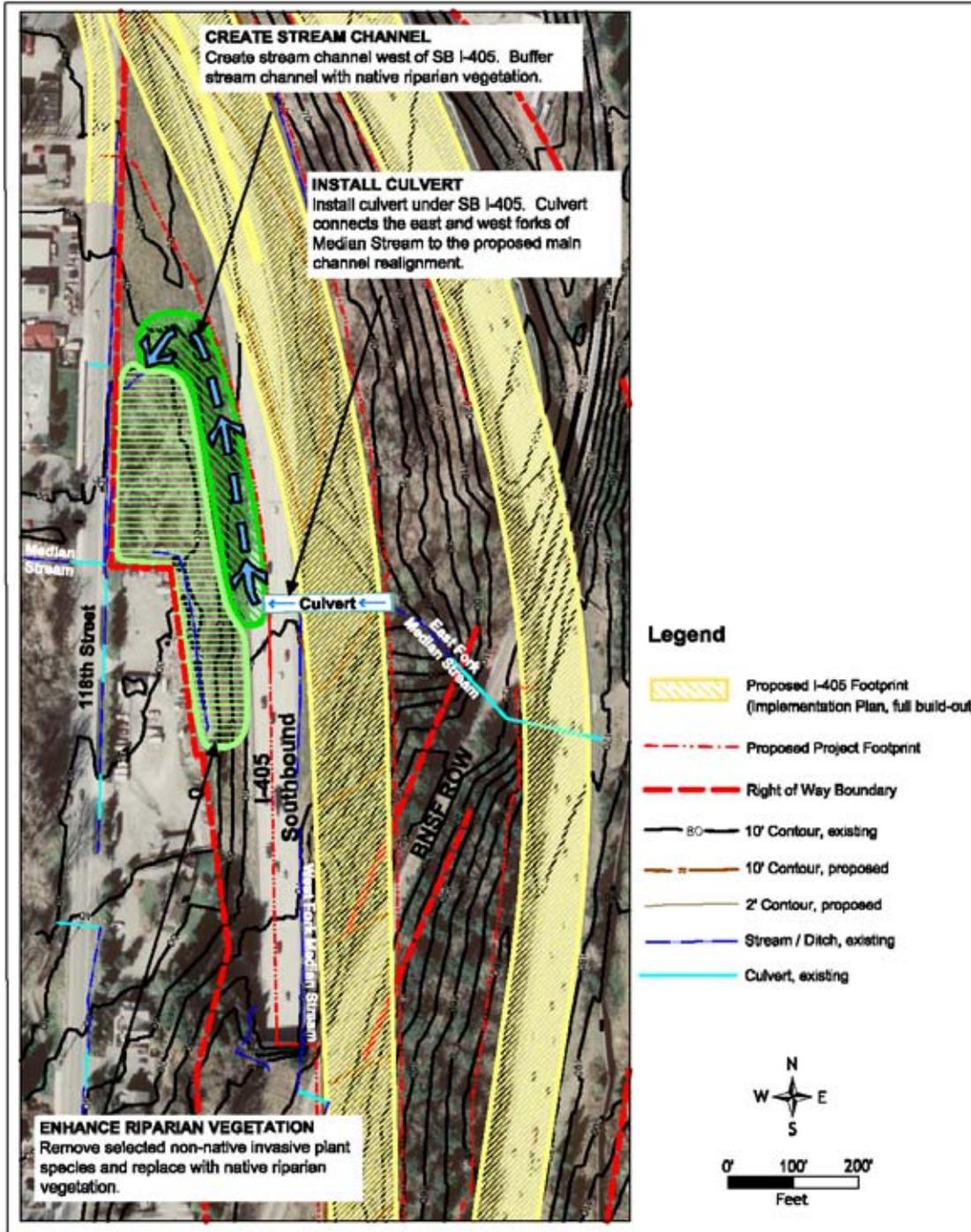


Exhibit 6. Conceptual Stream Mitigation Plan



Why do we consider Social Elements as we plan this project?

A number of federal regulations, statutes, policies, technical advisories, and Executive Orders dating back to the 1960s require the federal government (and state and local governments using federal highway funds) to consider the effects of transportation projects on neighborhoods, communities, and the individuals who live in them. The most important of these are described below:

Title VI of the Civil Rights Act of 1964 was signed into law to ensure that no person shall, on the grounds of race, color, national origin, age, sex, or disability be subjected to discrimination under any program or activity receiving federal financial assistance.

The *National Environmental Policy Act of 1969* calls for a systematic and interdisciplinary approach to evaluating the environmental effects (including social effects) of transportation projects and identifying reasonable alternatives that will avoid or reduce harmful effects.

The *Federal Aid Highway Act of 1970* requires FHWA to consider the possible effects of proposed highway projects on a variety of environmental factors including community cohesion, public facilities and services, and local and regional growth.

Section 23 USC 128 (“Highways”) establishes a minimum requirement for investigating social, economic, and environmental effects of highway projects and the consistency of highway plans with local comprehensive planning.

The *Uniform Relocation Assistance and Real Property Acquisition Act of 1970, as amended*, requires FHWA to ensure that owners of real property acquired for, and persons displaced by, federal aid projects are treated fairly, consistently, and equitably, so that they will not be disproportionately affected.

Executive Order 12898 (Environmental Justice) requires the federal government to avoid actions that cause disproportionately high and adverse effects on minority and low-income populations with respect to human health and the environment.

Executive Order 13166 (Limited English Proficiency) requires the federal government to implement its programs in a manner that does not disadvantage those who are not fluent in the English language.

We prepared this report consistent with the regulations, statutes, policies, technical advisories, and Executive Orders described above by following the guidance in the WSDOT *Environmental Procedures Manual (M31-11)*. The *Environmental Procedures Manual* includes specific steps that need to be followed when analyzing a project's potential effects on neighborhoods, communities, public services, and facilities.



I-405 plays a critical role in the regional movement of people and freight.

What are the key points of this report?

The project, as currently proposed, would not result in any notable adverse effects on neighborhoods, parks, recreation, and pedestrian and bicycle facilities. However, construction activities could result in localized adverse effects if not properly mitigated. These effects could include increased noise, dust, and exhaust emissions from construction equipment operating during daytime, and possibly nighttime, hours. In addition, any possible periodic lane closures on I-405 and SE 8th Street could increase traffic delays and persuade drivers to seek alternate routes thereby increasing local congestion on city streets. Because the project includes BMPs to avoid and minimize these effects, no notable adverse effects are anticipated. Please see Appendix A for a description of BMPs that are incorporated into this project.

Since WSDOT will implement a variety of measures to reduce any effects, we do not anticipate any notable adverse effects on social elements within the study area.

Existing Conditions

What social elements did we consider?

We considered the effects of the Bellevue Nickel Improvement Project on neighborhoods, parks, recreation, and pedestrian and bicycle facilities. We also researched the demographics of the study area and evaluated the potential of the project to affect community and regional growth.

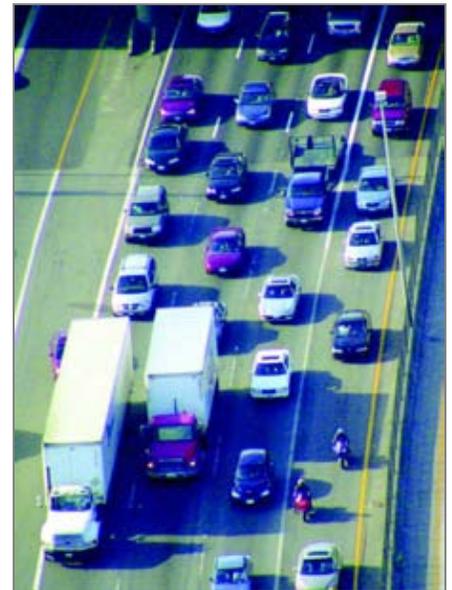
We evaluated other social elements including public facilities and services (for example, schools, police and fire protection, and government services) in a separate discipline report entitled *Public Services and Utilities*.

During our investigation, we identified a number of distinct neighborhoods within the study area, researched their population characteristics, and identified the social connections within and between these neighborhoods and the broader community.

How did we collect information on social elements for this report?

We collected data from a variety of federal, state, and local sources to gain a better understanding of the social characteristics of the community and future growth trends of the area.

We gathered demographic information from the U.S. Bureau of the Census and the Puget Sound Regional Council (PSRC) and obtained information about specific neighborhoods, recreational



Congestion building along the I-405 corridor

facilities, and pedestrian and bicycle routes from the City of Bellevue's web site. We also used a variety of maps, aerial photographs, and reports prepared previously for the I-405 corridor project.

We contacted neighborhood representatives, social services providers, and City of Bellevue staff. We used a questionnaire during interviews with social services providers to obtain information that would help us to better understand community issues, concerns, and needs in the study area. We also conducted site visits to verify our findings and confirm our understanding of the project area.

What is the study area for this analysis?

We established a study area extending one-half mile in all directions from the construction limits of the Bellevue Nickel Improvement Project to encompass the area where potential effects on neighborhoods, parks, recreation, and pedestrian and bicycle facilities might occur (Exhibit 7). Where neighborhoods or census tract boundaries extended beyond the half-mile limit, we included those areas in the analysis.

However, we limited information on recreational resources to those located within the half-mile study area.

Who lives in Bellevue and how is the city projected to grow?

According to U.S. Census data, the City of Bellevue grew by approximately 11 percent from a population of 98,622 to 109,569 between 1990 and 2000. Bellevue's population is roughly 6 percent of the total population of King County. King County as a whole grew by approximately 15.2 percent between 1990 and 2000.

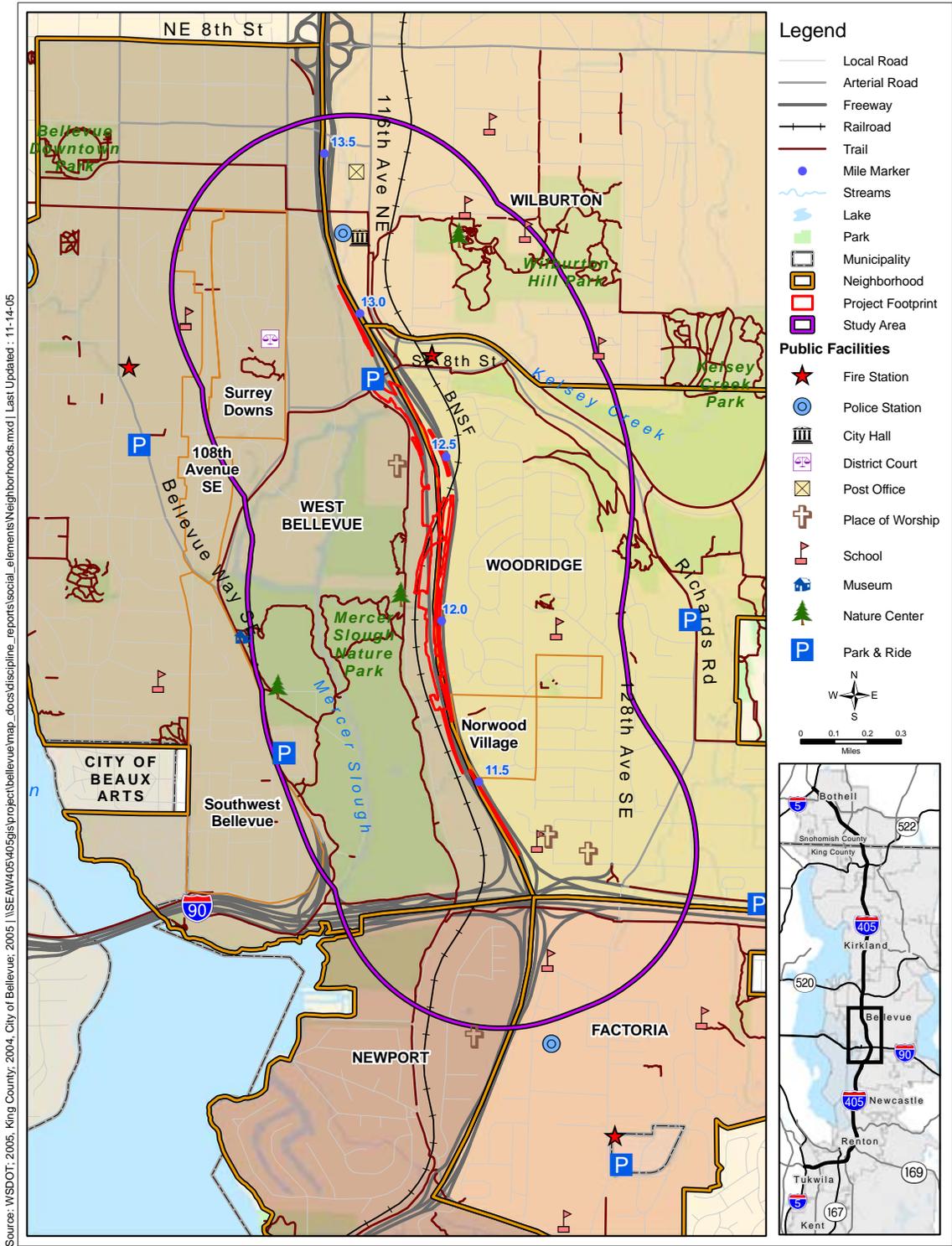
According to the Washington State Office of Financial Management (OFM) 2004 population estimate, 116,500 people currently live in the City of Bellevue. This represents an increase of 6,931 persons between 2000 and 2004, or a roughly 6 percent population increase during that 4-year period.

OFM expects residential growth to continue in Bellevue over the next 20 years. New apartments, condominiums, and housing developments are under construction or are proposed within city limits. According to Bellevue's Comprehensive Plan, the city's

Census Tract

Census tracts are small statistical subdivisions of a county or similar entity. Census tracts usually have between 1,500 and 8,000 people.

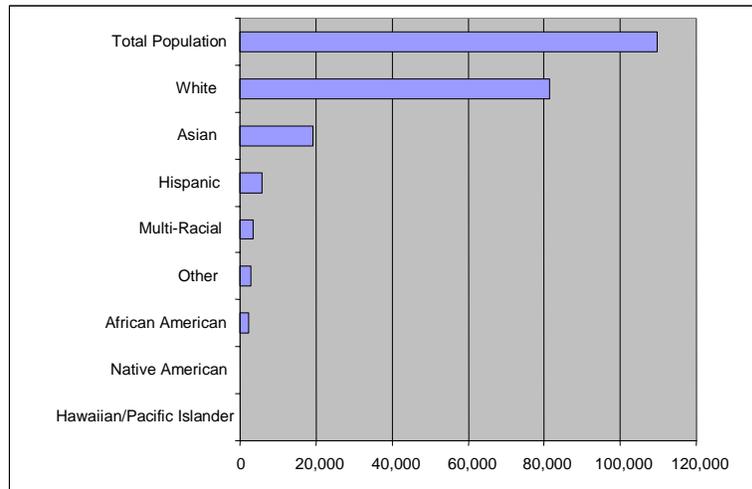
Exhibit 7. Neighborhoods and Recreational Facilities



population is expected to increase to over 137,000 by 2022, or roughly 17 percent between 2004 and 2022. The median annual household income for Bellevue residents is approximately \$62,000. This is considerably higher than the statewide average of approximately \$46,000. Only 5.7 percent of the residents within the City of Bellevue had incomes below the poverty level compared to the statewide average of 10.6 percent.

According to US Census data, approximately 74 percent of the population in the City of Bellevue is white, about 17 percent is Asian, and approximately 5 percent is Hispanic (of any race). African Americans make up 2 percent of the City's population (see Exhibit 8).

Exhibit 8. Ethnic Characteristics of the City of Bellevue



The average number of persons per household in Bellevue is 2.37. This figure is slightly less than the statewide average of 2.53 persons per household.

Almost 22 percent of households contain individuals 65 years old or older, and roughly 29 percent contain children under the age of 18. The median age of residents in Bellevue is 38.2 years.

Most residents in Bellevue live in owner-occupied housing units (61.5 percent) while approximately 38.5 percent of the city's housing units are renter-occupied.

How do the demographic characteristics of the study area compare to the City of Bellevue?

The U.S. Census has broken down the 8 census tracts overlapping the study area into 16 block groups (sub-units of a census tract). We examined the demographic data for these block groups and compared it to the data for the city of Bellevue (described above).

We found the percentage of minority populations living within the study area was only slightly lower than for the city as a whole, at 24 percent and 26 percent, respectively. Residents within the study area are on average slightly older (39.5 years old) and households have far fewer children under the age of 18 (18.6 percent) compared to the city as a whole (29 percent). Approximately 14 percent of the residents living within the study area are 65 years old or older compared with 22 percent citywide.

In terms of home ownership, we found that approximately 52 percent of the housing units in the study area are owner-occupied compared to 58 percent for the city as a whole. The percentage of households with incomes below the poverty line (7.2 percent) was slightly higher than the city as a whole, but less than the statewide average.

In Appendix B, we have included a map of the study area and several easy-to-understand charts and graphs to help explain the demographic data that we collected.

What neighborhoods exist in the study area and what are they like?

We identified eight distinct neighborhoods within the study area (Exhibit 7). Each one is described below:

Surrey Downs

Surrey Downs is a single-family neighborhood located about one-quarter mile west of the I-405 corridor. The neighborhood is defined by Main Street on the north, 112th Avenue SE on the east, and approximately Bellevue Park Lane on the south. The western border of this neighborhood abuts the 108th Avenue SE neighborhood. The Bellevue District Court is located in a former elementary school building on 112th Avenue SE. The

homes in Surry Downs were constructed in the 1960s and most (79 percent) are owner-occupied.

The 108th Avenue SE Neighborhood

This neighborhood is located primarily on either side of 108th Avenue SE between Main Street on the north and Bellevue Way on the south. Surry Downs borders the neighborhood on the east and Bellevue High School abuts the neighborhood on the west. This neighborhood includes a mix of single-family residential and multi-family residential housing. The ratio of owner-occupied to renter-occupied housing in this neighborhood is evenly split at about 50 percent in each category.



Typical Multifamily Development

Southwest Bellevue

Southwest Bellevue is located west of the I-405 corridor and is generally defined by 108th Avenue SE on the west, I-90 on the south, and Bellevue Way SE on the east. The area is close to both Mercer Slough and Lake Washington, both of which play a key role in defining the character of the neighborhood. The neighborhood contains a mix of old and new single-family residential and multi-family residential housing. Additional multi-family residential housing can be found along 118th Avenue SE, immediately adjacent to I-405. Most of the homes in this neighborhood (82 percent) are owner-occupied.

Community resources near the Southwest Bellevue neighborhood include the Mercer Slough Blueberry Farm, the historic F.W. Winters House, and the Mercer Slough Environmental Education Center. The South Bellevue park-and-ride lot is also located near this neighborhood.

Newport

The Newport neighborhood is located at the southernmost end of the study area, southwest of the I-405/I-90 interchange. The neighborhood is bounded by I-90 on the north, Lake Washington on the west, and I-405 on the east. A portion of the neighborhood includes a series of canals bordered by single-family homes. The SE 40th Street Public Boat Ramp is located in this neighborhood as well as a portion of the Mercer Slough Nature Park. Generally, housing in the Newport neighborhood primarily consists of owner-occupied housing units (84 percent of housing units). Renter-occupied units comprise approximately 14 percent of the housing units..

Factoria

The Factoria neighborhood is located in south Bellevue. Factoria is known for the commercial and office development near the interchange of I-405 and I-90, but it also contains a mix of single- and multi-family residential units. The neighborhood is generally bordered by I-405 on the west, Newport Hills on the east and south, and I-90 on the north. Roughly 50 percent of the housing in Factoria is renter-occupied. Sunset Elementary School, Tyee Middle School, and Newport High School are located within this neighborhood. Other community facilities include the Factoria Police substation, Fire Station No. 4 and the Factoria Park and Ride.

Woodridge

The Woodridge neighborhood is located on a hill east of the I-405 corridor. The neighborhood is bounded by SE 8th Street on the north, the Lake Hills Connector/Richards Road on the east, and I-90 on the south.

The neighborhood contains single-family residential development with some multi-family residential development located near the I-90/I-405 interchange. Residences on the west side of the neighborhood have expansive views toward Lake Washington, downtown Bellevue, downtown Seattle, and the Olympic Mountains. Roughly 70 percent of the housing units in this neighborhood are owner-occupied.

Woodridge Elementary School is located at the center of the Woodridge neighborhood. Other community resources include two houses of worship in the southern portion of the neighborhood near I-90.



Woodridge Elementary School

Norwood Village

Norwood Village is a small, unique neighborhood located adjacent to I-405 in the southwestern portion of the Woodridge neighborhood. The neighborhood was developed in 1951 by University of Washington faculty and the renowned local architecture firms Bassetti and Morse, and Chairelli and Kirk.

Norwood Village was built using five basic house designs, and each home was placed along “curvilinear streets” that follow the contour of the land. The neighborhood is a good example of a style of post-World War II housing that may be eligible for listing in the National Register of Historic Places because of its distinctive design characteristics and its association with

important local architects. Please see the Cultural Resources Discipline Report for more information on the historic status of Norwood Village.

Wilburton

The Wilburton neighborhood is located immediately north of the Woodridge neighborhood and is generally bounded by I-405 on the west, SE 8th on the south, NE 8th Street on the north, and Kelsey Creek Park on the east.

The neighborhood contains single-family residential development with office and commercial uses along major arterials and adjacent to I-405.

Roughly half of the housing units in the Wilburton neighborhood are rental units. The highest rates of home ownership are located between Wilburton Hill Park and Kelsey Creek Park. Higher rates of renter-occupied housing units are located in the western portions of the neighborhood closer to I-405, which is where most of the multi-family residential development in the neighborhood is concentrated.

The International School, a public secondary school, is also located within this neighborhood. Other community resources include Wilburton Hill Park and the Bellevue Botanical Gardens.

What parks and other recreational facilities are within the study area?

We identified a variety of parks, open spaces, and recreational facilities within the study area, as shown in Exhibit 7. We have included a brief overview of these facilities below.

Mercer Slough Nature Park and Trails

Mercer Slough Nature Park, a 320-acre park, offers a variety of recreational opportunities to residents of Bellevue and the surrounding region. The park provides multiple community benefits, including wildlife habitat, hiking trails, cultural preservation, agriculture heritage, and environmental education. We describe the park briefly below; please refer to the Section 4(f) Evaluation for additional description of this park.

The historic FW Winters House and Visitors Center is located on the west side of the park (along Bellevue Way SE). It includes interpretive exhibits, rental facilities, restrooms, parking, and is the home of the Eastside Heritage Center.



Trail in Mercer Slough Nature Park

The Mercer Slough Blueberry Farm, also located on the west side of the park, comprises 22 acres of blueberry fields, a farmer's dwelling, and farm market complex.

The park also includes the Mercer Slough Environmental Education Center located on 118th Avenue SE. The Environmental Education Center is a partnership between the City of Bellevue and the Pacific Science Center. It attracts approximately 8,000 visitors each year, many of whom take classes to learn about the importance of freshwater wetland ecosystems.

A variety of trails exist within the Mercer Slough Nature Park, including six miles of elevated boardwalks, soft surface trails, and asphalt paths. We have described a number of these trails below:

Periphery Trail

This asphalt path circles the perimeter of the park and is a component of the Lake Washington Bike Loop and Mountains to Sound Greenway. The path connects to Newcastle Beach Park, Seattle, Factoria, and Renton.

Heritage Trail

This trail begins at the FW Winters House and continues as an elevated floating boardwalk that traverses the wetland system. It includes several interpretive exhibits and seating/viewing areas.

Bellefields Trailhead

This trail, located on the east side of the park, loops through upland forest, scrub-shrub wetland areas, and open meadow habitats to the edge of the Mercer Slough channel.

Canoe Trail

This water trail meanders through Mercer Slough Nature Park and is popular with local kayakers and canoeists.

Wilburton Hill Park and Bellevue Botanical Gardens

The 105-acre Wilburton Hill Park and Bellevue Botanical Garden is one of the largest upland parks in Bellevue. The park includes ball fields, a play area, and numerous hiking trails. The park is also home to the Bellevue Botanical Gardens, containing 36 acres of flower gardens and landscaping. The park includes the 3.4-mile-long Wilburton Hill Park Trail. The trail traverses the park through natural areas and ball fields. The trail is also a



Mercer Slough Blueberry Farm

major link in the Lake-to-Lake-Trail system that connects Lake Washington and Lake Sammamish.

Kelsey Creek Park

The 150-acre Kelsey Creek Park is located southeast of the Wilburton neighborhood. The park includes dense forest, wetlands, nature and jogging trails, and covered picnic shelters. The park is best known as the location of Kelsey Creek Farm, which offers recreational programs for children, including pony-care classes and farm experience tours.

Woodridge Water Tower Park

Located on 125th Avenue SE, across the street from the Woodridge Elementary School, this 1.3-acre neighborhood park contains recreational areas, trails, and landscaping.

Norwood Village Neighborhood Park

This 1.62-acre neighborhood park in the Woodridge area includes two tennis courts, a play and picnic area, and a multi-purpose sport court.



Woodridge Water Tower

What pedestrian and bicycle facilities exist in the study area?

In addition to the trails described in the previous section, we identified sidewalks and walking paths within the study area. We also identified designated bicycle routes.

Sidewalks and pedestrian paths are located along 118th Avenue SE and on the north side of SE 8th Street. Designated bicycle routes in and around the study area are located on:

- 118th Avenue SE
- 112th Avenue SE
- 123rd Avenue SE
- Lake Hills Connector
- SE 20th Place/128th Avenue SE
- Lake Washington Blvd
- Factoria Blvd SE

Do local comprehensive plans and policies call for more pedestrian and bicycle facilities?

We reviewed the City of Bellevue's Pedestrian and Bicycle Plan (1999) and identified two pedestrian/bicycle projects planned to be completed within the study area within the next 15 to 30 years. Project B-329 will create a bike route by widening both sides of SE 8th Street between 114th Avenue SE and the Lake Hills Connector. This project will improve access to park and ride facilities; nearby parks and trails, including the Lake to Lake trail and the Lake Washington Loop. Project B-121 would create a bike path within or parallel to the BNSF railroad right of way that crosses through the study area. The trail would serve both recreational and commuter bicyclists.



Bike Route on 118th Avenue SE

Public Involvement Activities

How has the community been involved in the project?

WSDOT held two meetings to gather information on the issues that we should include in the environmental document for the Bellevue Nickel Improvement Project. A scoping meeting for the tribes and federal, state, and local agencies was held from 9:00 a.m. to 12:30 p.m. on January 25, 2005, in Newcastle. A separate scoping meeting for the general public was held in Bellevue from 5:00 to 7:00 p.m. on the same day.

WSDOT published the legal notice advertising the public scoping meeting on January 9, 2005. Public comments on the proposed project were received through February 10, 2005. In addition to the legal notice, WSDOT mailed a newsletter to residences and businesses within the project vicinity, informing them of the scoping meeting and comment deadline.

Tribes, agencies, and members of the public provided written questions and observations during the comment period, either on comment forms, in formal written correspondence, or through email.

Why is it important to involve tribal governments in the project?

Tribal governments can help identify social issues and solutions that may affect tribal members or be of interest to the tribes.

What is scoping?

Scoping is a formal process for identifying project elements, potential effects, and mitigation measures to be analyzed in an environmental document. WSDOT holds scoping meetings with agencies, tribes, and the public during the scoping process.

WSDOT Executive Order E1025.00

WSDOT Executive Order E1025.00 is based on the Centennial Accord between the Federally Recognized Tribes in Washington State and the State of Washington (1989) and the Washington State/Tribal Government-to Government Implementation Guidelines (1999).

WSDOT is committed to respectful, effective communication and consultation with tribal governments whose rights and interests may be affected by the project activities.

This commitment to an effective working relationship with tribal governments is established in WSDOT Executive Order E1025.00 on Tribal Consultation (February 19, 2003). The I-405 public involvement team initiated consultation with tribal governments during preparation of the I-405 Corridor Program EIS. This consultation is continuing as part of the Bellevue Nickel Improvement Project and will help to ensure that tribal governments are involved in each stage of the environmental analysis.

What types of outreach efforts did we use?

The I-405 Corridor Program developed an extensive public involvement plan seeking to educate, inform, and engage the public about the project and encourage community participation.

During previous phases of the I-405 Corridor Program, WSDOT conducted a series of public meetings, distributed a project newsletter, hosted a speaker's bureau, developed and maintained a project website, and provided information to the local media.

For the Bellevue Nickel Improvement Project, we continue these efforts by inviting the public to meetings, distributing questionnaires and comment cards, and soliciting web-based input.

In addition to these efforts, we made a special effort to reach low-income, minority, and disabled populations by interviewing social service organizations that serve these groups. These efforts are designed to further the community's understanding of the project and to gather additional insights on project effects and benefits.

We also made special efforts to reach members of the public whose primary language is not English. We produced several flyers and posters describing the project in Spanish, Russian, Chinese, Korean, and Tagalog. Please see the Environmental Justice Discipline Report for additional information on public outreach.

What are the community's major concerns?

Noise was the primary issue brought to our attention at the public scoping meeting. We received 66 comment forms, of

which 28 specifically addressed noise. Of this total, 14 respondents advocated the use of noise barriers, walls, or berms to mitigate noise effects.

Four respondents suggested the use of sound-reducing building materials such as “quiet asphalt.” Many respondents were concerned about the noise effects of nighttime construction, and one respondent supported the use of speed limits to control noise as well as higher taxes for louder vehicles.

Respondents concerned about traffic and circulation identified intersections where congestion might occur and expressed a need for carefully planned detour routes during the construction period.

Respondents also voiced concern about air quality, including concerns about debris, dust, and other particulate matter settling on the decks and outside living areas of nearby residences.

Several respondents also voiced concerns about water quality and potential effects to Mercer Slough and the Mercer Slough wetlands.

While the topics described above dominated the public’s concerns, a number of other issues were brought to our attention. Several individuals told us that aesthetic issues and design concerns were their primary issues. A number of people said they were concerned about light and glare reflecting off of retaining walls and other surfaces and the bright lights that would be used during nighttime construction. Several respondents voiced strong support for the project.



We developed an extensive public involvement plan to educate, inform, and engage the public about the program.

Potential Effects

What methods did we use to evaluate the potential effects to social elements?

Much of our analysis is qualitative in nature. In addition to using the data and published statistics we described earlier, we used other methods such as professional judgment, our understanding of the project area, interviews with city planners and social service providers who know the study area, citizen input, field observations, and information from other discipline reports prepared for this project.

How will project construction affect communities and neighborhoods?

Construction of the Bellevue Nickel Improvement Project will take place over 3 years beginning in spring 2007. During construction, heavy equipment (for example, excavators, front loaders, bulldozers, and graders) will operate within the project area. Large trucks will transport building materials, excavated dirt, and fill material to and from the site. Trucks will access the construction site via I-405 and are not expected to use the City of Bellevue street system. The actual truck routes will not be known until a construction contract is assigned.

If not properly mitigated, construction activities can generate higher than normal levels of noise, dust, and exhaust emissions. Nighttime construction activities can create bothersome noise from diesel generators and glare from construction lighting



Typical highway construction scene

equipment. Construction-related activities such as operation and storage of construction equipment, cut-and-fill activities, vegetation removal, and stockpiling materials will temporarily affect visual quality.

The neighborhoods most likely to experience these effects include the western portions of the Woodridge Neighborhood and several multi-family residential developments on 118th Avenue SE.

Higher than normal levels of noise, dust, and exhaust emissions during construction may also affect the Mercer Slough Nature Park, several trails within the park that parallel 118th Avenue SE, and the existing bike route on 118th Avenue SE.

WSDOT may temporarily shift or realign the north- and southbound lanes of I-405 to maintain traffic flow through the construction area. WSDOT does not anticipate the need for weekday daytime lane closures. However, constructing the new Wilburton Tunnel may require temporary night and weekend closures of the SB lanes. Full freeway closures may be necessary on occasion to shift traffic between phases of construction. These closures would be brief and are expected to occur only during nights and on weekends.

WSDOT anticipates that the widening of the NB bridge over the BNSF railroad and the southbound bridge over SE 8th Street can be completed without lane closures on either bridge. All freeway lanes can be maintained by narrowing the shoulders on the bridges.

WSDOT does not anticipate the need to divert traffic from I-405 onto city streets during project construction. However, during lane and/or street closures, drivers may seek alternate routes to avoid heavy congestion. Some neighborhoods and communities in the surrounding area may experience above-normal traffic volumes during these periods.

Streets west of I-405 most likely to be used as alternative routes include SE 8th Street, 112th Avenue SE (south of SE 8th Street), Bellevue Way SE (south of 112th Avenue SE), 118th Avenue SE (south of SE 8th Street) and Lake Washington Blvd. SE (south of I-90). Streets east of I-405 include SE 8th Street and Richards Road. Residents who use these streets for access and egress to their neighborhoods and homes may experience increased travel times during temporary road closures.

How will the project affect communities and neighborhoods?

The effects of a transportation improvement project (like the Bellevue Nickel Improvement Project) can be both positive

(beneficial) and/or negative depending on the type, intensity, and duration of the effects. The additional travel lanes to be added to I-405 will immediately benefit local residents, commuters, transit riders, and freight haulers.

These benefits will last until regional population and employment growth increases freeway demand to a point where the benefits of the project begin to decrease, especially during the morning and afternoon peak travel periods. By 2014, with or without the project, we expect freeway speeds to fall and vehicle throughput volumes to decline compared to conditions today.

In terms of local surface streets, our traffic model predicts future traffic volumes and congestion levels will increase slightly compared to existing conditions. The change will not be noticeable to most drivers and all intersections along SE 8th Street between 112th Avenue SE and Richards Road are expected to operate in 2014 with only short delays during both the A.M. and P.M. peak hours. This indicates that traffic patterns on local streets and overall driving behavior are not expected to change noticeably as a result of the proposed project.

Because all project-related improvements will occur within existing WSDOT right of way, no relocations of homes or businesses will be required. Access to nearby parks, trails, and other recreational facilities will remain unchanged and none of these facilities will be negatively affected by the project. Existing and proposed pedestrian and bicycle facilities, including the City of Bellevue's plan for a future bicycle and pedestrian path along the BNSF Railroad right of way, will be unaffected by the proposed project.

The project will also slightly increase traffic related noise levels in the project area. WSDOT will construct a new noise wall approximately 700 feet in length and as high as 16 feet along the eastern edge of I-405, approximately 1,000 feet north of the I-90/I-405 interchange, to minimize adverse traffic noise effects to residents of the Juniper Ridge Apartments. Approximately 11 homes east of I-405 in the Woodridge Neighborhood will experience future noise levels that approach or exceed FHWA's Noise abatement criteria of 67 dBA. We evaluated a number of options to reduce noise levels at these homes, including noise insulation and noise barriers, but none met FHWA's criteria for being "feasible" and "reasonable" and were therefore not included as part of the project. For more information on Noise, please see the Noise Discipline Report.

We also expect the project to bring permanent changes to the quality of visual environment for both I-405 users and neighbors.

The potential effects include additional expanses of pavement, removal of existing trees and vegetation, construction of high retaining walls along the southbound lanes, and construction of the large noise wall near the Juniper Ridge Apartments. We have incorporated a number of landscaping and architectural treatments into the design to minimize adverse visual effects and to make the project more aesthetically pleasing.

Does the project have other effects that are delayed or distant from the project?

WSDOT identified no additional effects from the project on neighborhoods, parks, recreation, or pedestrian and bicycle facilities that would occur later in time or further removed from the study area.

Did we consider potential cumulative effects for the Build and No Build Alternatives?

Per FHWA guidance, cumulative effects analysis is resource-area-specific and generally performed for the resource areas directly affected by the action (such as a transportation project) under study. However, not all of the resource areas directly affected by a project will require a cumulative effects analysis. The resource areas subject to cumulative effects analysis should be determined on a case-by-case basis early in the NEPA process, generally as part of early coordination or scoping. Consistent with the *I-405 Corridor Program Final EIS* and the results of scoping for the Bellevue Nickel Improvement Project, cumulative effects were not analyzed for this resource area.

Measures to Avoid or Minimize Project Effects

What will we do to avoid or minimize negative effects on communities and neighborhoods?

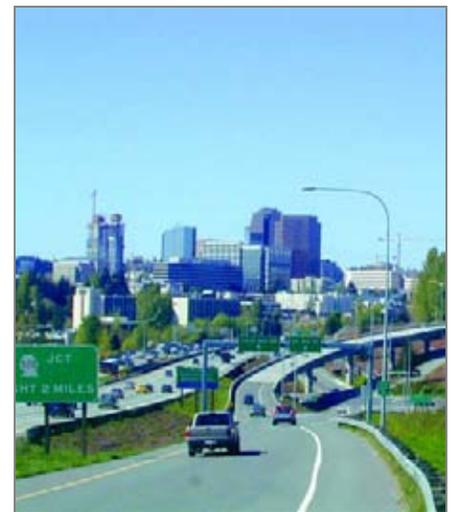
The project will be designed and constructed to reduce potential effects on neighborhood and the surrounding community. These measures include:

- Installing a permanent noise barrier to reduce noise effects to adjacent properties.
- Including landscaping and architectural treatments to soften the appearance of retaining walls and the new Wilburton tunnel.
- Revegetating areas disturbed by construction with native plant species.

The potential effects analysis integrates the findings of ongoing community involvement efforts to ensure community concerns are addressed. To address identified project effects and benefits to social elements, we evaluated potential avoidance and minimization measures. We also considered the proposed Context Sensitive Solutions (CSS) being developed for the I-405 Corridor and the specific project activities developed to minimize effects to social resources. CSS is a way of involving neighbors in the design of a transportation facility that meets their needs and fits within the unique physical environment of the project area.

Context Sensitive Solutions (CSS)

An approach to roadway design that involves all stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic, and environmental resources while maintaining safety and mobility.



The Bellevue skyline from NB I-405

What will we do to minimize the temporary effects of construction?

WSDOT will implement a variety of plans and avoidance and minimization measures to ensure that construction activities do not adversely affect nearby residents, neighborhoods, or communities. The following measures are assumed to be part of the project:

- WSDOT will develop and implement a Traffic Management Plan that identifies and clearly marks temporary detour routes for motorized vehicles, bicycles, and pedestrians. Please see Appendix A for additional description of the Traffic Management Plan.
- WSDOT will maintain access to the parks, trails, and bicycle routes in the project area.
- WSDOT will implement best management practices (BMPs) to minimize dust and other airborne pollutants (for example, watering areas of bare soil and turning off mechanical equipment when not in use).

How will the project mitigate unavoidable negative effects?

We anticipate no unavoidable negative effects on Social Elements from the Bellevue Nickel Improvement Project.



Additional travel lanes will immediately benefit local residents, commuters, transit riders, and freight haulers.

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Appendix A

Avoidance and Minimization Measures

Avoidance and Minimization Measures

The following sections describe the established design and construction practices that WSDOT will include to avoid or minimize effects to the various environmental resources during both the construction and operation phases of the project.

Project Measures to Avoid or Minimize Effects During Construction

Design elements, such as modifications to boundaries of areas that can be affected, have been incorporated into the project specifications, construction plans, and procedures, to help avoid or minimize most potential construction impacts. When appropriate, monitoring will be conducted to ensure that these design and construction measures are effective.

Measures for Geology, Soils, and Groundwater

- WSDOT will prepare and implement a Temporary Erosion and Sedimentation Control (TESC) plan consisting of operational and structural measures to control the transport of sediment. Operational measures include removing mud and dirt from trucks before they leave the site, covering fill stockpiles or disturbed areas, and avoiding unnecessary vegetation clearing. Structural measures are temporary features used to reduce the transport of sediment, such as silt fences and sediment traps.
- WSDOT will reduce degradation of moisture-sensitive soils by limiting major earthwork to the drier, late spring through early fall construction season; by maintaining proper surface drainage to avoid ponding of surface water or groundwater; by minimizing ground disturbance through limiting the use of heavy equipment, limiting turns, and/or not tracking directly on the subgrade; and by covering the final subgrade elevation with a working mat of crushed rock and/or geotextile for protection. Mixing a soil admix such as cement into the subgrade may also add strength and stabilize the ground.
- WSDOT will determine acceptable limits for off-site construction-related ground vibration before construction begins and demonstrate that off-site ground vibrations are within the limits set for the project through the use of vibration-monitoring equipment.
- WSDOT will identify areas subject to shaking from a large earthquake and will mitigate risks using ground modifications or other procedures identified in the WSDOT Geotechnical Design Manual.
- WSDOT will implement construction procedures identified in the geotechnical investigation to maintain or enhance slope stability in areas potentially underlain by landslide-prone soils.
- WSDOT will protect the Kelsey Creek aquifer from contamination by construction-related spills by development and implementation of BMPs and a Spill Prevention Control and

Countermeasures plan (SPCCP). The SPCC will specifically address fuel spills from vehicles and from spills of other chemicals commonly transported over I-405. Spill response equipment will be located at regular and specified intervals within the project area for minimizing countermeasure response times.

- WSDOT will ensure only clean fill is imported and placed for the project and will require documentation for fill brought onto the site from the supplier certifying that the fill does not exceed Washington State soil cleanup standards. If documentation is not available, testing of imported fill soils will be required prior to placement. Suspect soils encountered during project construction will be tested and, where necessary, removed from the site and disposed of in accordance with Washington State regulations.
- WSDOT will identify and develop staging areas for equipment repair and maintenance away from all drainage courses. Washout from concrete trucks will not be dumped into storm drains or onto soil or pavement that carries stormwater runoff. A wash down area for equipment and concrete trucks will be designated and the use of thinners and solvents to wash oil, grease, or similar substances from heavy machinery or machine parts will be prohibited.
- WSDOT will obtain a NPDES (National Pollutant Discharge Elimination System) permit and will conduct a regular program of testing and lab work to ensure that water encountered during construction meets the water quality standards specified in the NPDES permit.
- WSDOT will to meet the NPDES water quality standards prior to the discharge of the encountered water to a surface water body, such as Kelsey Creek. If necessary, water quality will be improved, such as by using sediment ponds to allow sediment to settle out prior to discharge.
- If it is necessary to install seepage drains to control seepage for retaining walls and fill embankments, WSDOT will include special provisions in the design to discharge drain flow back into affected areas, including wetlands.

Measures for Water Quality

In addition to measures for geology, soils, groundwater, and for hazardous materials that are protective of water quality, the following measures would be implemented for water quality.

- WSDOT will identify and develop staging areas for equipment repair and maintenance away from all drainage courses.
- Washout from concrete trucks will not be dumped into storm drains or onto soil or pavement that carries stormwater runoff.
- Thinners and solvents will not be used to wash oil, grease, or similar substances from heavy machinery or machine parts.
- WSDOT will designate a wash down area for equipment and concrete trucks.

Measures for Wetlands

- WSDOT will protect, preserve, and enhance wetlands in the project area during the planning, construction, and operation of transportation facilities and projects consistent with USDOT Order 5660.1A, Executive Order 11990, and Governor's Executive Orders EO 89-10 and EO 90-04.
- WSDOT's project-level design and environmental review has included avoidance, minimization, restoration, and compensation of wetlands. WSDOT will implement these measures prior to or concurrent with adverse effects on wetlands, to reduce temporal losses of wetland functions.
- WSDOT will follow guidance contained in the wetlands section of the WSDOT Environmental Procedures Manual (WSDOT 2004a), which outlines the issues and actions to be addressed prior to authorizing work that could affect wetlands.
- WSDOT will use high-visibility fencing to clearly mark wetlands to be avoided in the construction area.

Measures for Upland Vegetation and Wildlife

- WSDOT will ensure mitigation measures established in the I-405 Corridor EIS will be implemented on the Bellevue Nickel Improvement Project.
- WSDOT will prepare and implement a revegetation plan. In addition, areas with mixed forest will not be removed for temporary use (i.e., construction staging). If an area of mixed forest must be removed for roadway construction, it will be replaced with plantings of native tree and shrub species within the affected area.
- WSDOT will adhere to project conditions identified in the Biological Assessment and agency concurrence letters.
- WSDOT will limit construction activity to a relatively small area immediately adjacent to the existing roadway to minimize vegetation clearing and leave as many trees as possible.

Measures for Fisheries and Aquatic Resources

- WSDOT will implement construction BMPs (such as silt fencing or sedimentation ponds) to avoid disturbing sensitive areas during the development and use of any staging areas, access roads, and turnouts associated with resurfacing activities.
- WSDOT will not allow in-water work to occur except during seasonal work windows established to protect fish.
- WSDOT will require that all stormwater treatment wetland/detention facilities are sited and constructed at a sufficient distance from named and unnamed streams so no grading or filling in the streams or the streamside zones will be required.

Measures for Air Quality

- WSDOT will require preparation and implementation of a Fugitive Dust Control Plan in accordance with the Memorandum of Agreement between WSDOT and PSCAA Regarding Control of Fugitive Dust from Construction Projects (October 1999).
- During dry weather, exposed soil will be sprayed with water to reduce emissions of and deposition of particulate matter (PM₁₀).
- WSDOT will provide adequate freeboard (space from the top of the material to the top of the truck), cover truckloads, and, in dry weather, wet materials in trucks to reduce emission of and deposition of particulate matter during transport.
- WSDOT use wheel washers to remove particulate matter that would otherwise be carried offsite by vehicles to decrease deposition of particulate matter on area roadways.
- WSDOT will remove particulate matter deposited on public roads to reduce mud on area roadways.
- WSDOT will cover or spray with water any dirt, gravel, and debris piles during periods of high wind when the stockpiles are not in use to control dust and transmissions of particulate matter.
- WSDOT will route and schedule construction trucks to reduce travel delays and unnecessary fuel consumption during peak travel times, and therefore reduce secondary air quality impacts (i.e. emissions of carbon monoxide and nitrogen oxides) that result when vehicles slow down to wait for construction trucks.

Measures for Noise

- Noise berms and barriers will be erected prior to other construction activities to provide noise shielding.
- The noisiest construction activities, such as pile driving, will be limited to between 7 AM and 10 PM to reduce construction noise levels during sensitive nighttime hours.
- Construction equipment engines will be equipped with adequate mufflers, intake silencers, and engine enclosures.
- Construction equipment will be turned off during prolonged periods of nonuse to eliminate noise.
- All equipment will be maintained appropriately and equipment operators will be trained in good practices to reduce noise levels.
- Stationary equipment will be stored away from receiving properties to decrease noise.
- Temporary noise barriers or curtains will be constructed around stationary equipment that must be located close to residences.
- Resilient bed liners will be required in dump trucks to be loaded on site during nighttime hours.

- WSDOT use Occupational Safety and Health Administration (OSHA)-approved ambient sound-sensing backup alarms that would reduce disturbances during quieter periods.

Measures for Hazardous Materials

Known or Suspected Contamination within the Build Alternative Right of Way

- WSDOT will prepare an SPCCP that provides specific guidance for managing contaminated media that may be encountered within the right of way (ROW).
- WSDOT may be responsible for remediation and monitoring of any contaminated properties acquired for this project. WSDOT will further evaluate the identified properties before acquisition or construction occurs. Contamination in soils will be evaluated relative to the Model Toxics Control Act (MTCA).
- If WSDOT encounters an underground storage tank (UST) within the ROW, WSDOT will assume cleanup liability for the appropriate decommissioning and removal of USTs. If this occurs, WSDOT will follow all applicable rules and regulations associated with UST removal activities.
- WSDOT will conduct thorough asbestos-containing material/lead paint building surveys by an Asbestos Hazard Emergency Response Act (AHERA)-certified inspector on all property structures acquired or demolished. WSDOT will properly remove and dispose of all asbestos-containing material/lead-based paint in accordance with applicable rules and regulations.
- Construction waste material such as concrete or other harmful materials will be disposed of at approved sites in accordance with Sections 2-01, 2-02, and 2-03 of the WSDOT Standard Specifications.
- WSDOT may acquire the responsibility for cleanup of any soil or groundwater contamination encountered during construction (that must be removed from the project limits) within WSDOT ROW. Contamination will be evaluated relative to Model Toxics Control Act (MTCA) cleanup levels.
- WSDOT will consider entering into pre-purchaser agreements for purpose of indemnifying itself against acquiring the responsibility for any long-term cleanup and monitoring costs.
- All regulatory conditions imposed at contaminated properties (e.g., Consent Decree) associated with construction will be met. These conditions could include ensuring that the surrounding properties and population are not exposed to the contaminants on the site: i.e., WSDOT will ensure that the site is properly contained during construction so that contaminants do not migrate offsite, thereby protecting the health and safety of all on-site personnel during work at the site.

Known or Suspected Contamination Outside of the Right of Way

- Contaminated groundwater originating from properties located up-gradient of the ROW could migrate to the project area. WSDOT generally will not incur liability for groundwater contamination that has migrated into the project footprint as long as the agency does not

acquire the source of the contamination. However, WSDOT will manage the contaminated media in accordance with all applicable rules and regulations.

Unknown Contamination

- If unknown contamination is discovered during construction, WSDOT will follow the SPCCP as well as all appropriate regulations.

Worker and Public Health and Safety and other Regulatory Requirements

The WSDOT will comply with the following regulations and agreements:

- State Dangerous Waste Regulations (Chapter 173-303 WAC);
- Safety Standards for Construction Work (Chapter 296-155 WAC);
- National Emission Standards for Hazardous Air Pollutants (CFR, Title 40, Volume 5, Parts 61 to 71);
- General Occupational Health Standards (Chapter 296-62 WAC); and
- Implementing Agreement between Ecology and WSDOT Concerning Hazardous Waste Management (April 1993).

Hazardous Materials Spills During Construction

- WSDOT will prepare and implement a SPCCP to minimize or avoid effects on human health, soil, surface water and groundwater.

Measures for Traffic and Transportation

- WSDOT will coordinate with local agencies and other projects to prepare and implement a Traffic Management Plan (TMP) prior to making any changes to the traffic flow or lane closures. WSDOT will inform the public, school districts, emergency service providers, and transit agencies of the changes ahead of time through a public information process. Pedestrian and bicycle circulation will be maintained as much as possible during construction.
- Prior to and during construction, WSDOT will implement strategies to manage the demand on transportation infrastructure. These transportation demand management strategies will form an important part of the construction management program and will be aimed at increasing public awareness and participation in HOV travel. The major focus will be on expanding vanpooling and van-share opportunities. Other elements of the transportation demand management plan may include:
 - increased HOV awareness and public information, and
 - work-based support and incentives.

Measures for Visual Quality

- WSDOT will follow the I-405 Urban Design Criteria. Where the local terrain and placement of light poles allow, the WSDOT will reduce light and glare effects by shielding roadway lighting and using downcast lighting so light sources will not be directly visible from residential areas and local streets.
- WSDOT will restore (revegetate) construction areas in phases rather than waiting for the entire project to be completed.

Measures for Neighborhoods, Businesses, Public Services and Utilities

- WSDOT will prepare and implement a transportation management plan (TMP). If local streets must be temporarily closed during construction, WSDOT will provide detour routes clearly marked with signs.
- WSDOT will coordinate with school districts before construction.
- WSDOT will implement and coordinate the TMP with all emergency services prior to any construction activity.
- WSDOT will coordinate with utility providers prior to construction to identify conflicts and resolve the conflicts prior to or during construction. Potential utility conflicts within WSDOT ROW will be relocated at the utility's expense prior to contract award.
- WSDOT will prepare a consolidated utility plan consisting of key elements such as existing locations, potential temporary locations and potential new locations for utilities; sequence and coordinated schedules for utility work; and detailed descriptions of any service disruptions. This plan will be reviewed by and discussed with affected utility providers prior to the start of construction.
- WSDOT will field verify the exact locations and depths of underground utilities prior to construction.
- WSDOT will notify neighborhoods of utility interruptions by providing a scheduled of construction activities in those areas.
- WSDOT will coordinate with utility franchise holders and provide them with project schedules to minimize the effects of utility relocations (for example, equipment procurement times, relocation ahead of construction, etc.)
- WSDOT will notify and coordinate with fire departments for water line relocations that may affect water supply for fire suppression, and establish alternative supply lines prior to any breaks in service; and to ensure that fire departments can handle all calls during construction periods and to alleviate the potential for increased response times.
- WSDOT will notify and coordinate with police departments to implement crime prevention principles and to ensure that they have adequate staffing to provide traffic and pedestrian control.

- WSDOT will maintain access to businesses throughout the construction period through careful planning of construction activities and an awareness of the needs to provide adjacent properties with reasonable access during business hours. As part of construction management, WSDOT will prepare access measures. WSDOT will make provisions for posting appropriate signs to communicate the necessary information to potential customers.
- WSDOT will keep daytime street closures to a minimum to provide access for businesses during regular business hours.

Measures for Cultural Resources

- WSDOT will prepare an Unanticipated Discovery Plan for the project that WSDOT will follow. This will avoid or minimize unanticipated effects to historic, cultural, and archaeological resources.

Project Measures to Avoid or Minimize Effects During Project Operation

The following sections describe the measures that WSDOT will implement during project operation.

Measures for Surface Waters and Water Quality

- WSDOT will follow the Highway Runoff Manual for both the design and implementation of stormwater facilities. WSDOT is not required to manage flow where drainage is directly to Mercer Slough. Where drainage is to a tributary to Mercer Slough, WSDOT will construct a stormwater management system that does provide flow control.

Measures for Fisheries and Aquatic Resources

- WSDOT will compensate for adverse effects to fish habitat and aquatic resources by providing in-kind mitigation. This in-kind mitigation will take the form of on-site, off-site, or a combination of on- and off-site mitigation.
- Off-site mitigation could include planting native riparian vegetation outside of the study area in areas where restoring native riparian buffers may have a greater benefit to fish and aquatic species. Mitigation could be concentrated along streams with high fish use where important stream processes and functions related to riparian buffers (for example, large woody debris [LWD] recruitment levels, litter fall, and bank stabilization) are impaired.
- On-site/off-site mitigation could include installing in-stream habitat features (for example, boulders or LWD) in the streambed downstream of the project footprint to increase the habitat complexity of the affected waterbody.

- Ongoing maintenance (during and post-construction) of stormwater treatment and detention facilities by WSDOT will not include the application of any chemical weed control agents (e.g., herbicides).

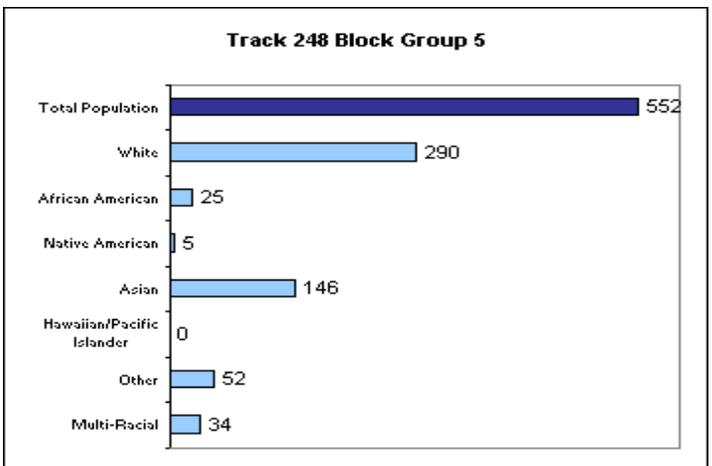
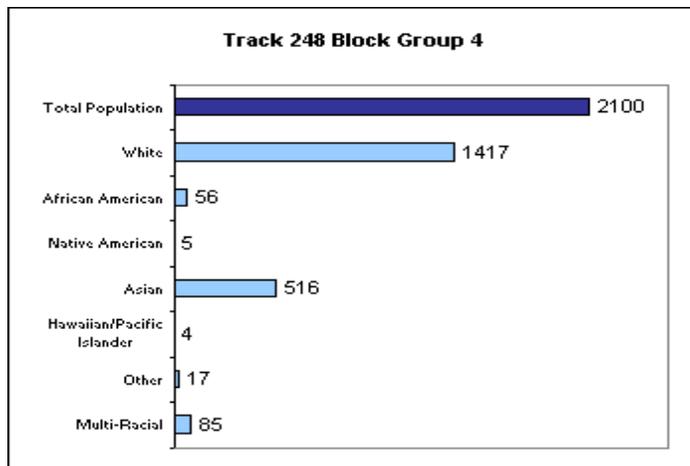
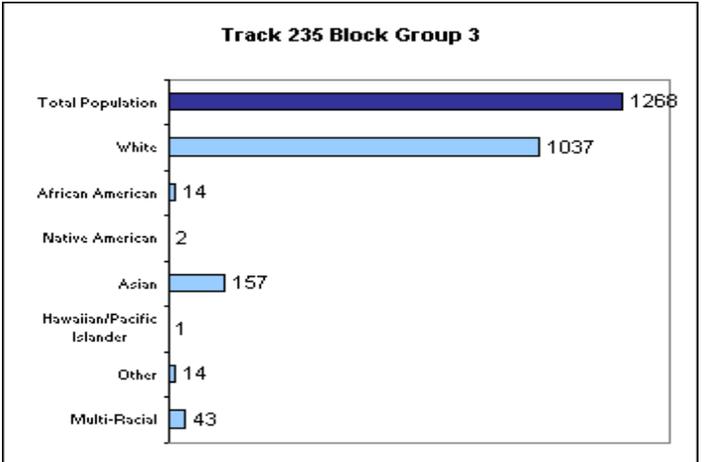
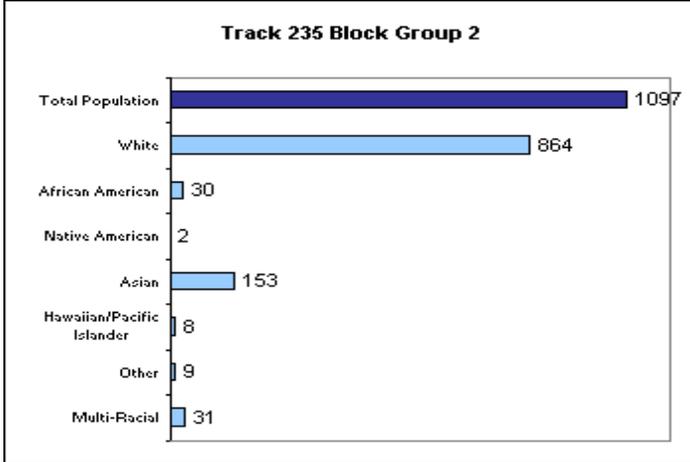
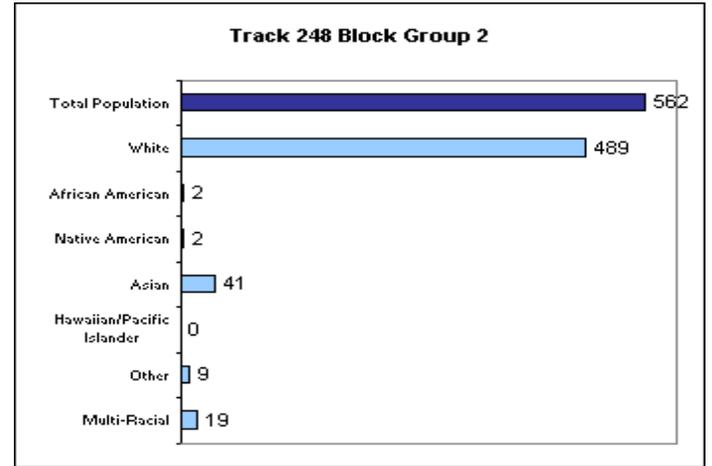
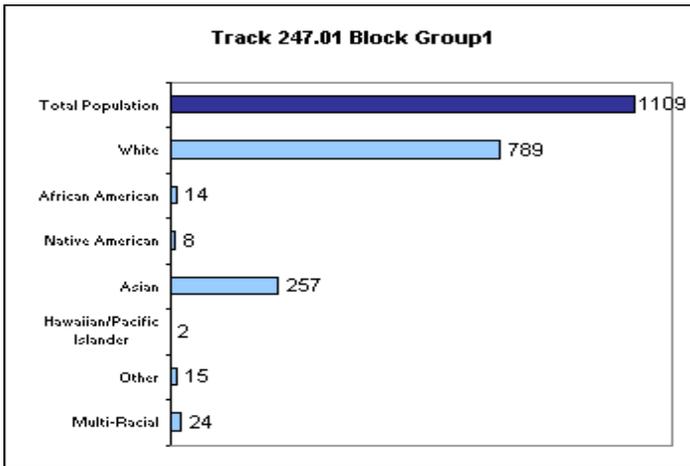
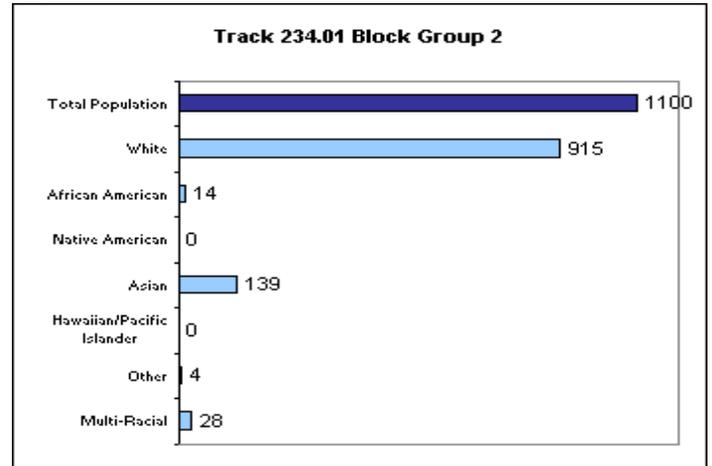
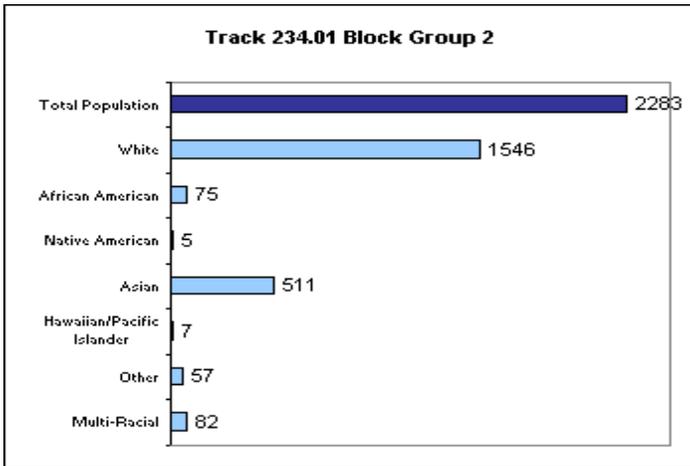
Measures for Upland Vegetation and Wildlife

- WSDOT will replace areas of mixed forest that will be permanently removed for roadway construction with plantings of native tree and shrub species within the affected area.

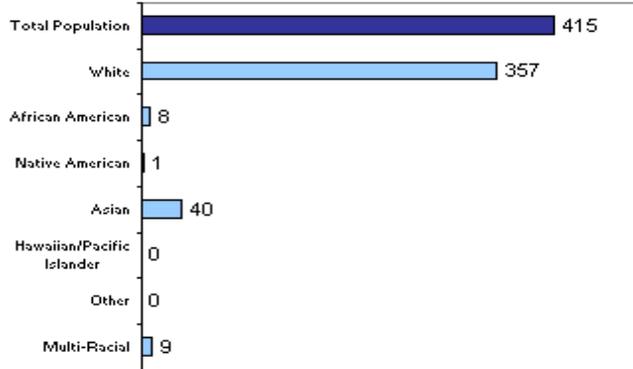
Appendix B

Demographic Data

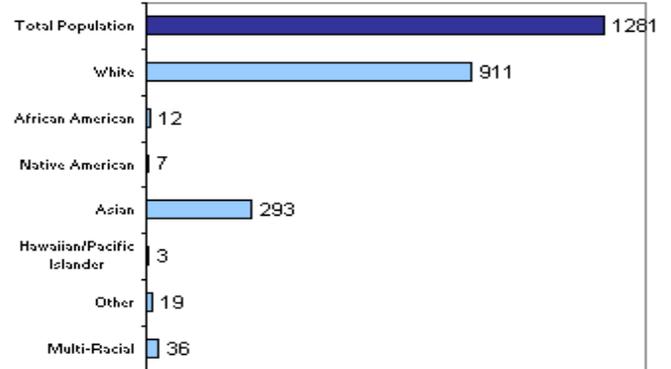
I-405 Corridor Program – Bellevue EA-Study Area Census 2000 Data – Race



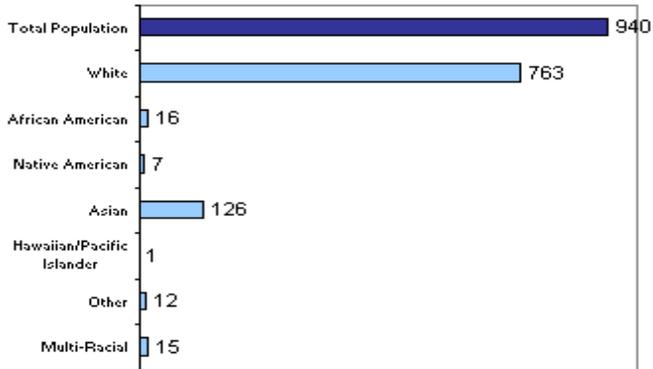
Track 236.01 Block Group 3



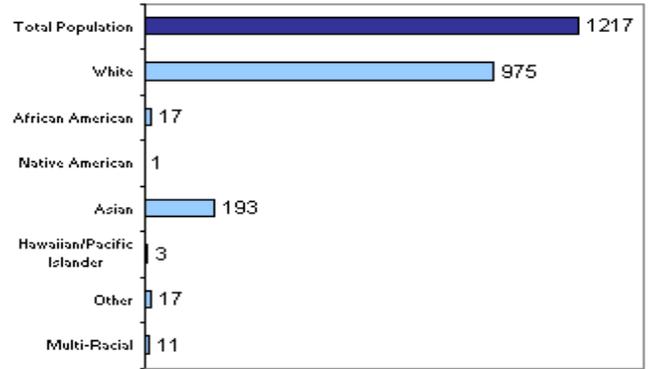
Track 236.01 Block Group 4



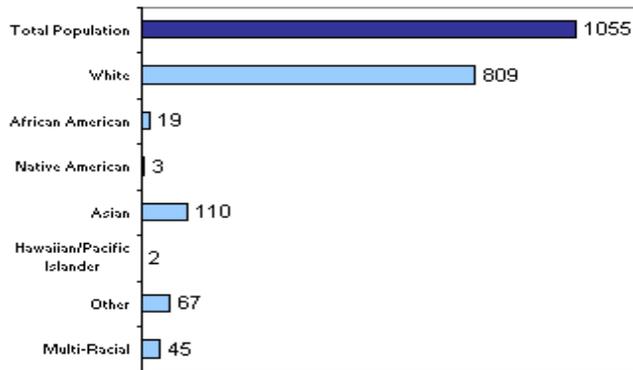
Track 238.01 Block Group 3



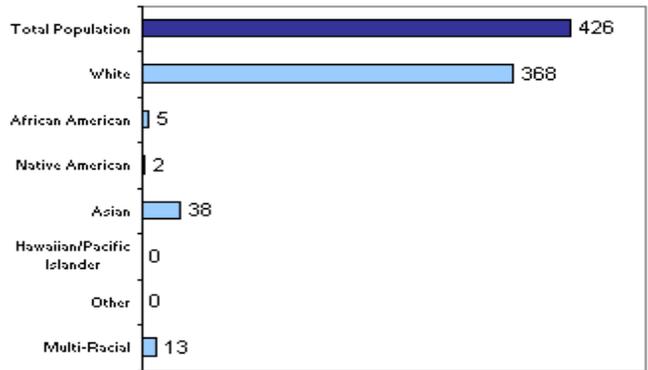
Track 238.02 Block Group 1



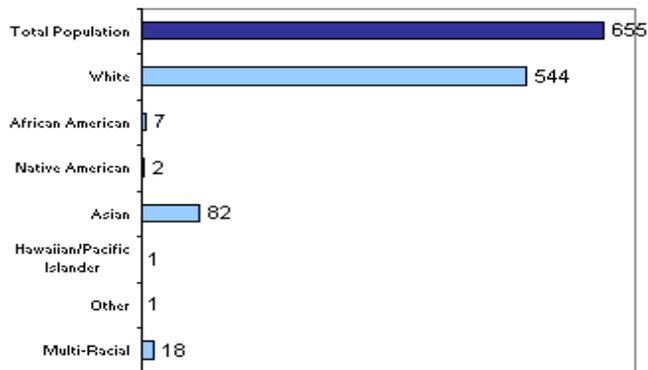
Track 238.01 Block Group 1



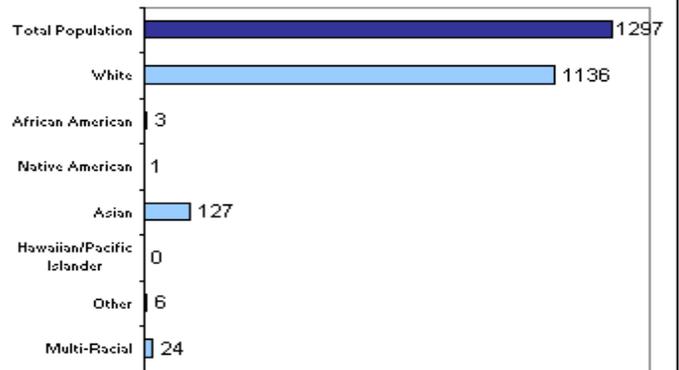
Track 238.01 Block Group 2



Track 239 Block Group 6



Track 239 Block Group 7



**Census Tract 238.01
Block Group 3**

Total Population: 940

White: 763 (81%)

African American: 16 (2%)

Native American: 7 (1%)

Asian: 126 (13%)

Hawaiian/Pacific

Islander: 1 (0%)

Hispanic: 37 (4%)

Other: 12 (1%)

Multi-Racial: 15 (2%)

Low Income: 81 (9%)

**Census Tract 239.00
Block Group 6**

Total Population: 655

White: 544 (83%)

African American: 7 (1%)

Native American: 2 (0%)

Asian: 82 (13%)

Hawaiian/Pacific

Islander: 1 (0%)

Hispanic: 12 (2%)

Other: 1 (0%)

Multi-Racial: 18 (3%)

Low Income: 7 (1%)

**Census Tract 239.00
Block Group 7**

Total Population: 1297

White: 1136 (88%)

African American: 3 (0%)

Native American: 1 (0%)

Asian: 127 (10%)

Hawaiian/Pacific

Islander: 0 (0%)

Hispanic: 28 (2%)

Other: 6 (0%)

Multi-Racial: 24 (2%)

Low Income: 56 (5%)

**Census Tract 247.01
Block Group 1**

Total Population: 1109

White: 789 (71%)

African American: 14 (1%)

Native American: 8 (1%)

Asian: 257 (23%)

Hawaiian/Pacific

Islander: 2 (0%)

Hispanic: 23 (2%)

Other: 15 (1%)

Multi-Racial: 24 (2%)

Low Income: 0 (0%)

**Census Tract 238.01
Block Group 1**

Total Population: 1055

White: 809 (77%)

African American: 19 (2%)

Native American: 3 (0%)

Asian: 110 (10%)

Hawaiian/Pacific

Islander: 2 (0%)

Hispanic: 111 (11%)

Other: 67 (6%)

Multi-Racial: 45 (4%)

Low Income: 150 (15%)

**Census Tract 238.02
Block Group 1**

Total Population: 1217

White: 975 (80%)

African American: 17 (1%)

Native American: 1 (0%)

Asian: 193 (16%)

Hawaiian/Pacific

Islander: 3 (0%)

Hispanic: 31 (3%)

Other: 17 (1%)

Multi-Racial: 11 (1%)

Low Income: 120 (11%)

**Census Tract 238.01
Block Group 2**

Total Population: 426

White: 368 (86%)

African American: 5 (1%)

Native American: 2 (0%)

Asian: 38 (9%)

Hawaiian/Pacific

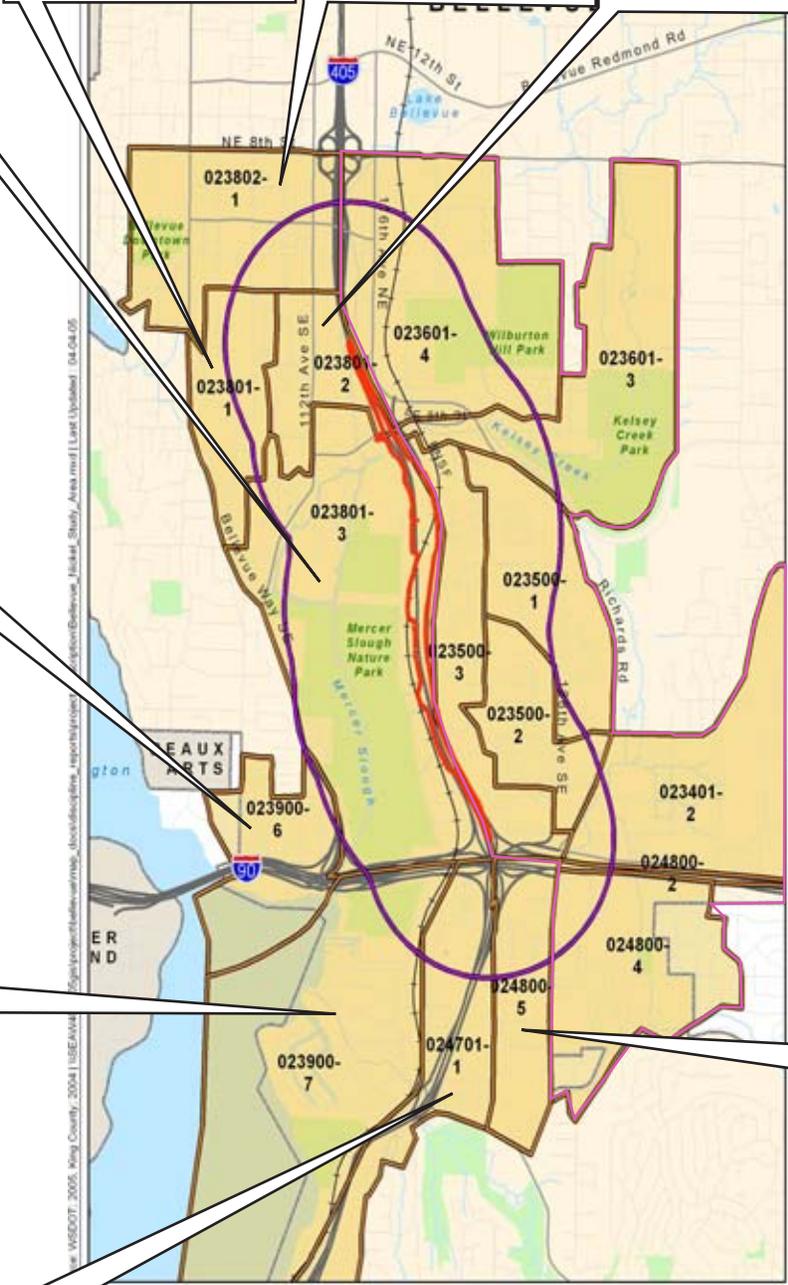
Islander: 0 (0%)

Hispanic: 5 (1%)

Other: 0 (0%)

Multi-Racial: 13 (3%)

Low Income: 6 (1%)



Legend

- Streams
- Local Road
- Arterial Road
- Freeway
- Railroad
- Lake
- Park
- Municipality
- Project Footprint
- 1/2 mile buffer
- Block Groups

**Census Tract 248.00
Block Group 5**

Total Population: 552

White: 290 (53%)

African American: 25 (5%)

Native American: 5 (1%)

Asian: 146 (26%)

Hawaiian/Pacific

Islander: 0 (0%)

Hispanic: 117 (21%)

Other: 52 (9%)

Multi-Racial: 34 (6%)

Low Income: 41 (7%)

See Exhibit 2 for Demographic Information for this Area

**Exhibit 1
Demographic Information
for the Study Area**

**Census Tract 236.01
Block Group 4**
 Total Population: 1281
 White: 911 (71%)
 African American: 12 (1%)
 Native American: 7 (1%)
 Asian: 293 (23%)
 Hawaiian/Pacific
 Islander: 3 (0%)
 Hispanic: 42 (3%)
 Other: 19 (1%)
 Multi-Racial: 36 (3%)
 Low Income: 82 (6%)

**Census Tract 235.00
Block Group 1**
 Total Population: 1100
 White: 915 (83%)
 African American: 14 (1%)
 Native American: 0 (0%)
 Asian: 139 (13%)
 Hawaiian/Pacific
 Islander: 0 (0%)
 Hispanic: 16 (1%)
 Other: 4 (0%)
 Multi-Racial: 28 (3%)
 Low Income: 47 (5%)

**Census Tract 236.01
Block Group 3**
 Total Population: 415
 White: 357 (86%)
 African American: 8 (2%)
 Native American: 1 (0%)
 Asian: 40 (10%)
 Hawaiian/Pacific
 Islander: 0 (0%)
 Hispanic: 5 (1%)
 Other: 0 (0%)
 Multi-Racial: 9 (2%)
 Low Income: 5 (1%)

**Census Tract 235.00
Block Group 3**
 Total Population: 1268
 White: 1037 (82%)
 African American: 14 (1%)
 Native American: 2 (0%)
 Asian: 157 (12%)
 Hawaiian/Pacific
 Islander: 1 (0%)
 Hispanic: 33 (3%)
 Other: 14 (1%)
 Multi-Racial: 43 (3%)
 Low Income: 22 (2%)

**Census Tract 235.00
Block Group 2**
 Total Population: 1097
 White: 864 (79%)
 African American: 30 (3%)
 Native American: 2 (0%)
 Asian: 153 (14%)
 Hawaiian/Pacific
 Islander: 8 (1%)
 Hispanic: 30 (3%)
 Other: 9 (1%)
 Multi-Racial: 31 (3%)
 Low Income: 19 (2%)

**Census Tract 234.01
Block Group 2**
 Total Population: 2283
 White: 1546 (68%)
 African American: 75 (3%)
 Native American: 5 (0%)
 Asian: 511 (22%)
 Hawaiian/Pacific
 Islander: 7 (0%)
 Hispanic: 135 (6%)
 Other: 57 (2%)
 Multi-Racial: 82 (4%)
 Low Income: 336 (15%)

**Census Tract 248.00
Block Group 2**
 Total Population: 562
 White: 489 (87%)
 African American: 2 (0%)
 Native American: 2 (0%)
 Asian: 41 (7%)
 Hawaiian/Pacific
 Islander: 0 (0%)
 Hispanic: 33 (6%)
 Other: 9 (2%)
 Multi-Racial: 19 (3%)
 Low Income: 0 (0%)

**Census Tract 248.00
Block Group 4**
 Total Population: 2100
 White: 1417 (67%)
 African American: 56 (3%)
 Native American: 5 (0%)
 Asian: 516 (25%)
 Hawaiian/Pacific
 Islander: 4 (0%)
 Hispanic: 78 (4%)
 Other: 17 (1%)
 Multi-Racial: 85 (4%)
 Low Income: 249 (12%)



See Exhibit 1 for Demographic Information for this Area

**Exhibit 2
Demographic Information
for the Study Area**