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Attachment B Environmental Justice Impact Assessment Methodology Memorandum
Attachment C Study Area Demographic Data
## Acronyms and Abbreviations

<table>
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<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADA</td>
<td>Americans with Disabilities Act</td>
</tr>
<tr>
<td>CC Rider</td>
<td>Columbia County Rider</td>
</tr>
<tr>
<td>EIS</td>
<td>Environmental Impact Statement</td>
</tr>
<tr>
<td>EJ</td>
<td>Environmental Justice</td>
</tr>
<tr>
<td>FHWA</td>
<td>Federal Highway Administration</td>
</tr>
<tr>
<td>GSA Alternative</td>
<td>Grade-Separated Option A Alternative</td>
</tr>
<tr>
<td>OSPI</td>
<td>Washington Office of Superintendent of Public Instruction</td>
</tr>
<tr>
<td>PGSB Alternative</td>
<td>Partial Grade-Separated Option B Alternative</td>
</tr>
<tr>
<td>SR</td>
<td>State Route</td>
</tr>
<tr>
<td>WSDOT</td>
<td>Washington State Department of Transportation</td>
</tr>
<tr>
<td>USDOT</td>
<td>U.S. Department of Transportation</td>
</tr>
</tbody>
</table>
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1.0 INTRODUCTION

The Industrial Way/Oregon Way Intersection Project is located in the industrial area of Longview, Washington at the intersection of Industrial Way (State Route (SR) 432), Oregon Way, and SR 433. This intersection provides a critical connection of two Highways of Statewide Significance that support significant passenger and freight truck movement. The purpose of the project is to develop an affordable long-term solution that:

- Maintains or improves emergency response
- Improves travel reliability for all vehicles
- Accommodates current and future freight truck and passenger vehicle movement through the intersection and across the region and states.

The purpose of this document is to describe the existing social, economic, public service, and environmental justice conditions, discuss effects and benefits the project would have on those conditions (including relocations), and recommend mitigation measures to address disproportionately high and adverse effects. The U.S. Department of Transportation (USDOT) defines disproportionately high and adverse effects as an adverse effect that (1) is predominantly borne by a minority population and/or a low-income population; or (2) will be suffered by the minority population and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the nonminority population and/or non-low-income population. The information contained in this technical analysis supports the project's Environmental Impact Statement (EIS).

Methodology for the analysis contained in this document is presented in the Impact Assessment Methodology memoranda included as Attachments A and B.

2.0 DESCRIPTION OF ALTERNATIVES

Three alternatives are being evaluated to address the project’s purpose and need: the No Build Alternative, the Grade-Separated Option A Alternative (GSA Alternative), and the Partial Grade-Separated Option B Alternative (PGSB Alternative). Each alternative is described in Chapter 2 of the project’s EIS.

3.0 AFFECTED ENVIRONMENT

This document is prepared in compliance with the following laws, regulations, and policies:

- Title 23, USC, Section 109(h)
- Title VI of the Civil Rights Act of 1964 (49 CFR Part 21)
- Section 504 of the Rehabilitation Act of 1973 (49 CFR Part 27)
- American with Disabilities Act of 1990 (Title II)
- Presidential Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
- Presidential Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency
Consistent with Title VI and FHWA’s policy on environmental justice, this section describes the affected environment as related to environmental justice populations, which includes:¹

- Minority and low-income residents living within the study area
- Businesses providing goods and/or services to minority or low-income customers and clients, and/or employing minorities and/or low-income persons
- Social services and community resources utilized by minority and low-income residents such as parks and churches, and community cohesion

There has been extensive public engagement for the project to-date, including specific outreach to neighborhoods and to businesses that may employ or provide services to traditionally underserved populations. Public input has informed both the characterization of the affected environment and helped identify concerns about project impacts. This information is documented in the Industrial Way/Oregon Way Intersection Project Public Involvement Summary Report, included as Appendix B to the EIS, and referenced in the sections below, where relevant.

3.1 Population Demographics, Residential Areas and Community Cohesion

3.1.1 Overview

As illustrated in Figure 1, the study area includes residential neighborhoods (including Highlands Neighborhood, St. Helens Neighborhood, and seven mobile home parks), industrial lands owned by the Port of Longview and the City of Longview, and privately-owned lands zoned for industrial and

¹ The US DOT Order 5610.2(a) (Actions to Address Environmental Justice in Minority Populations and Low-Income Populations) provides these definitions:

a. Low-Income means a person whose median household income is at or below the US Department of Health and Human Services poverty guidelines.

b. Minority means a person who is:
   (1) Black: a person having origins in any of the black racial groups of Africa;
   (2) Hispanic or Latino: a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race;
   (3) Asian American: a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent;
   (4) American Indian and Alaskan Native: a person having origins in any of the original people of North America, South America (including Central America), and who maintains cultural identification through tribal affiliation or community recognition; or
   (5) Native Hawaiian and Other Pacific Islander: people having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.
commercial uses in Longview (City of Longview 2014b). The study area also includes land zoned heavy industrial in Rainier, Oregon (City of Rainier 2015). The Impact Assessment Methodology memoranda included in Attachment A and Attachment B further explain how the study area boundary was developed.

The US Census Bureau, Washington’s Office of Superintendent of Public Instruction (OSPI), and the Oregon Department of Education were the primary sources of demographic data; demographic data from the US Census Bureau is included in Attachment C. The 11-square mile (7,100-acre) socioeconomic study area encompasses 10 census block groups in Cowlitz County, Washington, and one block group in Columbia County, Oregon, as shown in Figure 2.

Residents in the study area are demographically diverse with concentrations of traditionally underserved populations, including individuals who are low-income, minority, disabled, elderly, youth, transit-dependent and/or those who have limited English proficiency. The residential areas that are within and directly adjacent to the project footprint are the Highlands Neighborhood and the Columbia Trailer Court, which is included in the Industrial Way and California Way Neighborhood (Figure 1). The Highlands Neighborhood and the Industrial Way and California Way Neighborhood have a higher proportion of racial or ethnic minority and low-income individuals compared to the overall study area composition (Figure 3). As reported in the U.S. Census Bureau data (2010 and 2016), the demographic composition of residents/households in Highlands Neighborhood and Industrial Way and California Way Neighborhood is characterized as low income (41 and 54 percent, respectively) and racial or ethnic minority (25 and 21 percent, respectively) compared to the study area population of 15 percent racial or ethnic minority and 26 percent low-income. The demographic composition of individuals living in the Highlands Neighborhood and Industrial Way and California Way Neighborhood\(^2\) for other traditionally underserved categories are shown in Table 1.

\(^2\) The U.S. Census Bureau block group that contains the Industrial Way and California Way Neighborhood also includes the Mint Farm Neighborhood and all the industrial/commercial lands east of Oregon Way between Tennant Way/SR 432 and the Cowlitz River and south Industrial Way between Oregon Way and approximately Memorial Park Drive (a map is provided in Appendix L, Figure 2). Due to the industrial uses of most of the land in this block group, all or nearly all of the residents live within the Industrial Way and California Neighborhood; thus, demographic data for this block group is summarized in the draft EIS as pertaining to this neighborhood.
Figure 1. Study Area with Neighborhoods and Mobile Home Parks

Legend:
- Study Area
- Project Footprint
- Waterbody
- Industrial/Commercial Lands
- Mobile Home Park
- State Boundary

Neighborhoods within the Study Area:
- Barlow Point
- Memorial Park
- Mint Farm
- Highlands
- St. Helens
- Industrial Way & California Way
- Western Rainier

Mobile Home Parks:
1. Delray Mobile Home Park
2. Motel California RV Park
3. El Patio Mobile Home Park
4. Columbia Trailer Court
5. De Luxe Mobile Home Park
6. Plaza Mobile Home Park
7. River’s Edge Mobile Home Park
Figure 2. Geographic Boundaries of Demographic Data

Legend:
- Study Area
- Waterbody
- Block Group & Census Tract Boundaries
- Mobile Home Park
- State Boundary

Block Groups (BG) and Census Tracts (CT):

A. BG 1/CT 5.02
B. BG 2/CT 5.01
C. BG 3/CT 5.01
D. BG 1/CT 5.01
E. BG 3/CT 5.02
F. BG 1/CT 5.02
G. BG 1/CT 3
H. BG 1/CT 19
I. BG 1/CT 7.03
J. BG 1/CT 7.02
K. BG 1/CT 9703

Mobile Home Parks:
1. Delray Mobile Home Park
2. Motel California RV Park
3. El Patio Mobile Home Park
4. Columbia Trailer Court
5. De Luxe Mobile Home Park
6. Plaza Mobile Home Park
7. River’s Edge Mobile Home Park

Elementary School Boundaries within the Study Area:
- Mint Valley Elementary School
- Olympic Elementary School
- St. Helens Elementary School
- Kessler Elementary School
- Northlake Elementary School
- Hudson Park Elementary School

N

0 0.5 1 Miles
Table 1. Demographic Composition of the Highlands Neighborhood and Industrial Way and California Way Neighborhood

<table>
<thead>
<tr>
<th></th>
<th>Highlands Neighborhood</th>
<th>Industrial Way and California Way Neighborhood</th>
<th>Study Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Racial or ethnic minority</td>
<td>25%</td>
<td>21%</td>
<td>15%</td>
</tr>
<tr>
<td>Low-income</td>
<td>42%</td>
<td>54%</td>
<td>26%</td>
</tr>
<tr>
<td>Disabled</td>
<td>39%</td>
<td>41%</td>
<td>32%</td>
</tr>
<tr>
<td>Elderly (over age 65)</td>
<td>6%</td>
<td>20%</td>
<td>13%</td>
</tr>
<tr>
<td>Youth (ages 0-17)</td>
<td>33%</td>
<td>18%</td>
<td>26%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>21%</td>
<td>19%</td>
<td>12%</td>
</tr>
<tr>
<td>Transit dependent</td>
<td>15%</td>
<td>32%</td>
<td>8%</td>
</tr>
<tr>
<td>Limited English proficiency</td>
<td>6%</td>
<td>22%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Local school demographics for children from the Highlands Neighborhood and Industrial Way and California Way Neighborhood that attend the public elementary schools indicate that 39-51 percent of the students are a racial minority and 27-38 percent are Hispanic/Latino (Washington Office of Superintendent of Public Instruction 2017). In addition, 82-95 percent qualify for the free/reduced lunch program, which further emphasizes the presence of low-income households in the Highlands Neighborhood and Industrial Way and California Way Neighborhood. A high proportion of residents in these two neighborhoods (55-69 percent) also live in rental units compared to owner-occupied housing.

According to the City of Longview’s 2014-2018 Consolidated Housing Plan, the Highlands Neighborhood has the highest poverty rates and greatest number of households receiving public assistance in Longview (City of Longview 2015a). Approximately 200 households in the Highlands Neighborhood and St. Helens Neighborhood (directly north of Highlands Neighborhood) qualify for either federal or state rental assistance because of low incomes (Longview Housing Authority 2017). Residents identifying as
one or more traditionally underserved populations also reside in Rainier, Oregon, although at lower proportions.

Based on the demographic composition of individuals and households in the study area, all study area residents are considered traditionally underserved populations for the purpose of this project. The concentration of racial minority and low-income individuals located within the Highlands Neighborhood and the Industrial Way and California Way Neighborhood indicates that these two neighborhoods are considered environmental justice populations.

3.1.2 Community Resources and Public Services

Community resources and public services in the study area were documented during a December 14, 2015, site visit, and are identified on Figure 4.

Resources of importance to study area populations include:

- Archie Anderson Park, located northwest of the Industrial Way/Oregon Way intersection
- Public and private elementary schools, with associated fields and playgrounds
- Highlands Trail
- Some sidewalks and crosswalks allowing for pedestrian and bicycle connectivity to jobs and other resources in the study area
- Transit
- Unimproved path along west side of 3rd Avenue between Tennant Way and California Way connecting to large, retail and industrial employers
- Churches
- Grocery stores, food markets and restaurants which provide ethnic foods and serve as gathering places, including but not limited to: Holts Market (with Western Union), Don Pedro Restaurant, The Store ‘N Deli, and La Mexicana Meat Market/El Ranchero Mexican Restaurant

There is a health clinic with specialty care and laboratory services (Pacific Surgical Institute) located in the study area between California Avenue and Tennant Way, and a pathology laboratory located just north of the study area at 14th Avenue and Oregon Way. A full-service hospital (PeaceHealth St. John Medical Center) is located north of the study area, about 0.75 miles from the intersection of Oregon Way and Beech Street.

---

3 Portions of the study area do not currently have sidewalks, particularly the south side of Industrial Way east of Oregon Way, and all Industrial Way west of Oregon Way.
Figure 4. Community Resources and Public Services

MOBILE HOME PARKS
1. Delray Mobile Home Park
2. Motel California RV Park
3. El Patio Mobile Home Park
4. Columbia Trailer Court
5. De Luxe Mobile Home Park
6. Plaza Mobile Home Park
7. River's Edge Mobile Home Park

ETHNIC RESTAURANTS
8. El Ranchero Mexican Restaurant
9. Holt's Market Get & Go
10. La Mexicana Meat Market
11. Don Pedro's Mexican Food
12. Regent Chinese Restaurant

HEALTH CARE PROVIDERS
13. Lower Columbia Pathologists
14. Pacific Surgical Institute Building
15. PeaceHealth St. John Medical Center
16. Columbia Wellness

OTHER FOOD RETAILERS
17. The Store N' Deli
18. Miller's Market
19. Walmart Supercenter
20. Industrial Way Food Mart, Chevron
21. AMPM
22. Time Saver Food Mart, Chevron
23. Speedy Mart
24. St. Helens Shopping Center
25. Twentieth Avenue Grocery

HOUSING SERVICES (TRANSITIONAL HOUSING)
26. Oxford House Bridgeway
27. Oxford House Baltimore

HOUSING SERVICES
28. 20th Ave Laundermat

SCHOOLS & PARKS
29. St. Helens Elementary School
30. St. Rose Catholic School
31. Mark Morris Senior High School
32. Archie Anderson Park
33. Cloney Park

CHURCHES
34. Longview Foursquare Church
35. Highlands Baptist Church
36. Grace Lutheran Church
37. St. Rose Catholic Church
38. First Baptist Church

PUBLIC SERVICE PROVIDERS
39. Longview Police Department
40. Longview Fire Department
41. Longview Utilities Operations Center
3.1.3 Demographics for Neighborhoods and Industrial/Commercial Areas

Highlands Neighborhood

The Highlands Neighborhood is identified on Figure 1 and encompasses the areas (census block groups) identified as A, E and F. The Highlands Neighborhood is primarily characterized by smaller, older single-family homes and multi-unit properties on tree-lined, residential streets, availability of public utilities, schools, a park, and easy access to major roads and transit. Approximately 69 percent of Highlands residents live in rental housing.

The neighborhood has connectivity to services via Industrial Way, Oregon Way, Washington Way, Alabama Street, Beech Street, Baltimore Street, Cypress Street, and Nichols Boulevard. Residents can access businesses on the east side of Oregon Way (for goods, services or employment) or job sites south of Industrial Way via cross walks at signalized intersections. However, there are roads that do not have sidewalks, or have sidewalks in disrepair, and there are intersections without crosswalks, leading to some use of informal, unimproved paths. Pedestrian safety for children, especially those living in the Highlands Neighborhood, is a significant concern that residents have expressed to the project team during public engagement activities. Community members have noted that there are many pedestrians and bicyclists, especially children, throughout the neighborhood. Archie Anderson Park serves as a gathering place for neighborhood residents. The Highlands Neighborhood has an active and engaged neighborhood association.

The Highlands Neighborhood represents about 13 percent of Longview’s population, and has a diverse mix of residents, including residents who identify as one or more traditionally underserved populations (Figure 5 and Table 2).

There is a substantially higher percentage of low-income residents (34-49 percent, Figure 5) in the Highlands Neighborhood compared to the study area (26 percent). There are also higher percentages of disabled persons, children, minorities, and those who are transit dependent (Figure 5). The Highlands Neighborhood also has the highest percentage of residents on public assistance, the highest unemployment rate, the highest percentage of single parent households, and the highest percentage of individuals without a high school diploma of all neighborhoods in Longview (Northwest Health Foundation 2017).
Figure 5. Highlands Neighborhood Traditionally Underserved Populations

Table 2. Highlands and St. Helens Neighborhood Elementary School Demographic Data

<table>
<thead>
<tr>
<th>Elementary School (ES)</th>
<th>Racial Minority</th>
<th>Hispanic/Latino (of any race)</th>
<th>Qualifies for Free/Reduced Lunch Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kessler ES (WA)</td>
<td>43%</td>
<td>27%</td>
<td>94%</td>
</tr>
<tr>
<td>St. Helens ES (WA)</td>
<td>51%</td>
<td>38%</td>
<td>95%</td>
</tr>
</tbody>
</table>


The following is from the City of Longview’s 2014-2018 Consolidated Housing Plan:

“There is a concentration of family households with children, as well as Hispanic populations. Housing is dense and units are small and overcrowded. This [Highlands] neighborhood experiences the highest poverty rates as well as public assistance [in Longview]... Much of the housing is rental stock, but needs visible improvement. Families live in crowded units that have deferred maintenance issues. Older homeowners are unable to care for their units and...
may be financially unable to afford improvements” (City of Longview 2015).

Important community resources include St. Helens Elementary School, Archie Anderson Park, Cloney Park, and the Highlands Trail (Figure 4). Neighborhood revitalization, including street improvement needs like sidewalks and lighting, are highlighted in various local planning documents. The City of Longview and the Highlands Neighborhood Association prioritized revitalization of the Highlands Neighborhood in the Kelso-Longview 2014-2018 Consolidated Housing Plan (City of Longview 2014a). Projects recommended in the Highlands Revitalization Plan include housing repair, street and yard beautification, street and alley lighting, and sidewalk repair (City of Longview 2008). This plan describes the Highlands Neighborhood as experiencing the highest rates of poverty and level of public assistance in the Longview-Kelso area (City of Longview 2015).

**St. Helens Neighborhood**

The St. Helens Neighborhood is identified on Figure 1, and encompasses the areas (census block groups) identified as B, C and D. It is located immediately north of the Highlands Neighborhood. The St. Helens Neighborhood does not have a formally-designated neighborhood association with the City of Longview. However, this neighborhood appears visually consistent with and similar to the Highlands Neighborhood, in terms of it being an intact and cohesive residential neighborhood comprised of primarily smaller, older single-family homes and multi-family units, along a tree-line street grid. Approximately 37 percent of St. Helens residents live in rental housing. Many of the same resources (schools, parks, the Highlands Trail) are utilized by residents in the St. Helens Neighborhood as in the Highlands Neighborhood, and, from a visual perspective, there is no distinct boundary between the two neighborhoods. The St. Helens Neighborhood is connected to services via Industrial Way, Oregon Way, Washington Way, Alabama Street, Beech Street, Baltimore Street, Cypress Street, and Nichols Boulevard.

The St. Helens Neighborhood, like the Highlands Neighborhood, also has a diverse mix of residents, including those who identify as one or more traditionally underserved populations (Figure 6). The Highlands and St. Helens neighborhoods feed into the same elementary schools: Kessler Elementary School and St. Helens Elementary School. School demographic data for the St. Helens Neighborhood is displayed in Table 2.

Since the Highlands and St. Helens neighborhoods are so close together, the community resources and public services that would be important to traditionally underserved populations in the St. Helens Neighborhood are the same as those for residents of the Highlands Neighborhood (Figure 4).
Industrial Way and California Way Neighborhood and Mint Farm Neighborhood

The Industrial Way and California Way and Mint Farm Neighborhoods are identified on Figure 1, and encompass the area (census block group) identified as G, which extends west to Barlow Point. This census block group is much larger than the block groups representing the Highlands and St. Helens Neighborhoods, largely because most of this area is commercial and industrial, with small pockets of mobile home parks and individual residences, as opposed to distinct neighborhoods with higher population concentrations. There are six mobile home parks (Figure 1) located within the Industrial Way and California Way area, including one (Columbia Trailer Court) immediately east of Oregon Way between Alabama Street and Beech Street. Approximately 55 percent of residents in the Industrial Way and California Way and Mint Farm area live in rental housing. This area feels much more commercial and industrial than it does feel like a distinct, cohesive neighborhood.

The exception would be the individual mobile home parks, which are: Delray Mobile Home Park, Motel California RV Park, El Patio Mobile Home Park, Columbia Trailer Court, De Luxe Mobile Home Park, and Plaza Mobile Home Park. There are about 20 small and microhomes, the size of a single-wide mobile home or smaller, located between Oregon Way and the Plaza Mobile Home Park. Persons who identify as a traditionally underserved population could live anywhere within this block group. However, mobile homes are often an affordable housing option, so it is reasonable to assume that some residents in the six mobile home parks are low-income.

The Industrial Way and California Way and Mint Farm area has a diverse mix of residents; based on decennial census data and American Community Survey data.

---

Note: Map ID corresponds to the census block group(s) mapped on Figure 2 for this neighborhood. Transit Dependency and Limited English Proficiency are reported at the census tract (CT) geography only, so the CT number corresponds to the census tract for that neighborhood.
there are substantially higher percentages of disabled, low-income and transit dependent persons in this area compared to the study area. As shown in Figure 7 and Table 3, residents who identify as one or more population of concern reside in this area. Due to the substantially larger size of the block group that encompasses this area, several elementary schools draw students from this area. Elementary schools closest to the project footprint, however, are Northlake, Kessler and St. Helens elementary schools.

Figure 7. Industrial Way and California Way Neighborhood and Mint Farm Neighborhood Traditionally Underserved Populations

Note: Map ID corresponds to the census block group(s) mapped on Figure 2 for this neighborhood. Transit Dependency and Limited English Proficiency are reported at the census tract (CT) geography only, so the CT number corresponds to the census tract for that neighborhood.

Table 3. Industrial Way and California Way Area Elementary School Demographic Data

<table>
<thead>
<tr>
<th>Elementary School (ES)</th>
<th>Racial Minority</th>
<th>Hispanic/Latino (of any race)</th>
<th>Qualifies for Free/Reduced Lunch Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kessler ES (WA)</td>
<td>43%</td>
<td>27%</td>
<td>94%</td>
</tr>
<tr>
<td>Mint Valley ES (WA)</td>
<td>26%</td>
<td>16%</td>
<td>78%</td>
</tr>
<tr>
<td>Northlake ES (WA)</td>
<td>55%</td>
<td>44%</td>
<td>83%</td>
</tr>
<tr>
<td>Olympic ES (WA)</td>
<td>39%</td>
<td>27%</td>
<td>82%</td>
</tr>
<tr>
<td>St. Helens ES (WA)</td>
<td>51%</td>
<td>38%</td>
<td>95%</td>
</tr>
</tbody>
</table>

Note: School demographic data is summarized for the entire student population of that school. Depending on the relationship between the school boundary and the study area boundary, some to all the students reside within the study area.

Barlow Point and Memorial Park

Barlow Point and Memorial Park are identified on Figure 1 and encompass the area (census block group) identified as H (Barlow Point) and I and J (Memorial Park). Barlow Point and Memorial Park are areas characterized primarily as commercial and industrial lands with interspersed single-family residences. A small cluster of single-family homes is located along Bradford Place off Mt. Solo Road (Google 2016). The
Barlow Point and Memorial Park areas within the study area are different than the Highlands and St. Helens neighborhoods as they are not on an urban street grid, and houses are further spread apart and/or generally are on larger lots. Only 22 percent of residents in these areas live in rental housing.

The Barlow Point and Memorial Park areas show more demographic similarity with the study area, as shown in Figure 8 through Figure 10. The school demographic data for schools drawing from Barlow Point and Memorial Park areas are shown in Table 4.

**Figure 8. Barlow Point Traditionally Underserved Populations**

Note: Map ID corresponds to the census block group(s) mapped on Figure 2 for this neighborhood. TD and LEP are reported at the census tract (CT) geography only, so the CT number corresponds to the census tract for that neighborhood.

**Figure 9. Memorial Park (Map ID I) Traditionally Underserved Populations**

Note: Map ID corresponds to the census block group(s) mapped on Figure 2 for this neighborhood. TD and LEP are reported at the census tract (CT) geography only, so the CT number corresponds to the census tract for that neighborhood.
Figure 10. Memorial Park (Map ID J) Traditionally Underserved Populations

Table 4. Barlow Point and Memorial Park Elementary School Demographic Areas

<table>
<thead>
<tr>
<th>Elementary School (ES)</th>
<th>Racial Minority</th>
<th>Hispanic/Latino (of any race)</th>
<th>Qualifies for Free/Reduced Lunch Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mint Valley ES (WA)</td>
<td>26%</td>
<td>16%</td>
<td>78%</td>
</tr>
<tr>
<td>Olympic ES (WA)</td>
<td>39%</td>
<td>27%</td>
<td>82%</td>
</tr>
</tbody>
</table>

Note: School demographic data is summarized for the entire student population of that school. Depending on the relationship between the school boundary and the study area boundary, some to all of the students reside within the study area.

Western Rainier, Oregon

Rainier is located south of the Industrial Way/Oregon Way intersection and across the Columbia River in Oregon (Figure 1). The study area encompasses the western area of Rainer (census block group) identified as K. A portion of this block group extends beyond Rainier city limits and encompasses unincorporated Columbia County.

Western Rainier consists of a few small, rural residential single-family homes and multi-family buildings. The total population of the western Rainer block group that intersects the study area is 994 people, so this area represents substantially fewer individuals in the study area than the combined block...
groups in Longview. Residents are connected to community resources and services primarily by Dike Road and Highway 30. Approximately 29 percent of residents in the block group lives in rental housing.

The demographics of the western area of Rainier are relatively similar to the study area as a whole, and in some instances, there are lower percentages of traditionally underserved populations compared to the study area (Figure 11 and Table 5).

**Figure 11. Rainier Traditionally Underserved Populations**

Note: Map ID corresponds to the census block group(s) mapped on Figure 2 for this neighborhood. TD and LEP are reported at the census tract (CT) geography only, so the CT number corresponds to the census tract for that neighborhood.

**Table 5. Rainier Elementary School Demographic Data**

<table>
<thead>
<tr>
<th>Elementary School (ES)</th>
<th>Racial Minority</th>
<th>Hispanic/Latino (of any race)</th>
<th>Qualifies for Free/Reduced Lunch Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hudson Park ES (OR)</td>
<td>11%</td>
<td>6%</td>
<td>57%</td>
</tr>
</tbody>
</table>


Note: School demographic data is summarized for the entire student population of that school. Depending on the relationship between the school boundary and the study area boundary, some to all of the students reside within the study area.

### 3.2 Tribal Consultation

FHWA, Washington State Department of Transportation (WSDOT), and Cowlitz County have engaged with Native American tribes through a tribal consultation process developed for this project. Early on, a Tribal Coordination Plan was shared with seven tribes that have an interest in the project area, including:

- Chinook Tribe
- Confederated Tribes of the Grand Ronde Community of Oregon
- Confederated Tribes of the Umatilla
Confederated Tribes of Warm Springs
Cowlitz Indian Tribe
Nez Perce Tribe
Yakama Nation.

Each of these tribes were invited to engage as participating agencies as part of the project’s overall agency coordination plan. The Chinook Tribe and Cowlitz Indian Tribe accepted the invitation to serve as participating agencies; as such, these tribes have received regular project updates and been asked to provide comments on the methodology for assessing impacts to resources as well as the range of alternatives considered for the project. The Confederated Tribes of Grand Ronde Community of Oregon, Confederated Tribes of the Umatilla, Confederated Tribes of Warm Springs, Nez Perce Tribe, and Yakama Nation declined the invitation to serve as participating agencies.

In addition, all seven tribes have had the opportunity to review the Area of Potential Effects (APE), methodology, and findings for the cultural resources investigations in compliance with Section 106 of the National Historic Preservation Act. None of the tribes have submitted substantive comments; the Cowlitz Indian Tribe confirmed that the project would not affect any tribal housing.

Currently, the tribes have not identified any potential adverse impacts to their Tribal Consultation Areas, which intersect with the project. WSDOT will continue to coordinate with the tribes throughout the project development phase.

3.3 Commercial/Industrial Areas

The following section describes commercial/industrial areas within the study area. There are a few residences located in some of these areas, but these areas are dominated by commercial/industrial uses and are not considered residential neighborhoods. The commercial/industrial areas employ thousands of workers, many of whom commute from regional towns and cities to the study area for employment.

Memorial Park

Memorial Park is located between the Mint Farm and Barlow Point (Figure 1). The portion of Memorial Park within the study area is a mixed-use commercial/industrial district. Much of Memorial Park’s land within the study area is currently vacant, but there are a few commercial, industrial, government, and single-family residential properties. Several storage businesses, a metals salvage business, and the Bonneville Power Administration Longview Headquarters are located here.

Barlow Point

Barlow Point is a waterfront property along the Columbia River (Figure 1) and is made up of mostly vacant land currently zoned mixed use residential and commercial but recently approved for heavy industrial zoning (The Daily News 2017). Prominent features include a high-power Bonneville Power Association easement and the Mt. Solo Landfill. In 2010, the Port of Longview purchased 280-acres of Barlow Point for expansion of the Port’s facilities, which are nearing capacity. The Port anticipates using Barlow Point to develop its terminal and industrial properties to meet future demands and opportunities. Phase I master planning for the Port’s site revealed plans for industrial and commercial investments, and Phase II is currently underway (Port of Longview 2016). The employment estimates included in the Port of Longview’s Barlow Point Master Plan Phase I Feasibility Study range from 377 to 424 employees (KPFF 2016).
Mint Farm

The Mint Farm is a 435-acre Industrial Park for which the City of Longview assumed the role of developer to encourage industrial land development in the area (Figure 1). The site represents a public/private partnership and has over 200 acres of buildable land—much of which is pending sale to various industries—with an expected 20-year buildout. The property includes two wetland mitigation sites, parcels ranging from 3 to 178 acres, and has infrastructure in place for development (e.g., high-capacity utilities). Currently, 13 sites are fully developed and 10 sites are available for development. Property tenants, some of which occupy more than one site, include Flexible Foam, Mint Farm Energy Center, ToyocomEpson Seattle, and the Mint Farm Regional Water Plant (The Mint Farm 2017). At full operation, the Mint Farm is estimated to provide over 600 jobs (City of Longview 2007a).

Other Commercial/Industrial Areas

Land south of Industrial Way between Barlow Point and SR 433 is within unincorporated Cowlitz County. This area contains several active industrial uses that represent the character and activity within the study area, including the Port of Longview, Weyerhaeuser, and Millennium Bulk Terminals (located on the former Reynolds Metal Company facility). The Port of Longview operates eight marine terminals and waterfront industrial property along the Columbia River. Weyerhaeuser operates various mills, wood product processing machines, and logging exports on the site. Millennium Bulk Terminals currently imports and exports alumina and coal and is currently undertaking permitting and environmental review since 2012 to develop the site into a high-capacity coal export facility (Millennium Bulk Terminals 2016).

3.4 Pedestrian, Transit, and Bicycle Facilities

While the study area is largely car-dependent, there are alternative transportation options throughout the area. As illustrated in the graphs presented in Section 3.1, approximately 3-32 percent of households in study area neighborhoods are transit-dependent, which indicates that those households do not have a vehicle and are likely dependent on transit, walking, or bicycling for their modes of transportation.
Pedestrian and Bicycle Facilities

The study area is characterized by a mixed degree of sidewalk presence and connectivity. In some areas, such as Oregon Way, and in the Highlands and St. Helens neighborhoods, there is a connected sidewalk system for pedestrians and bicyclists. For instance, the sidewalk on Oregon Way connects to the Highlands Trail and is signed as a bike route. In other areas, such as the commercial/industrial areas, sidewalks exist on some parcels, but not others. For example, a pedestrian or bicyclist in the Industrial Way and California Way area would utilize a combination of disconnected sidewalks and local streets for travel, instead of a connected and protected sidewalk system, or bike lane.

In Longview, there are no dedicated bike lanes on roadways within the study area and few roadways have shoulders that provide adequate space for bicycle use.

According to the Cowlitz-Wahkiakum Council of Government’s (CWCOG) 2016 Bicycle and Pedestrian Assessment, the majority of pedestrian or bicycle accidents in the region occurred in three locations: the Longview/Kelso area, the Chehalis/Centralia area, and the Aberdeen-Hoquiam area. Several of these pedestrian or bicycle accidents occurred in the study area, particularly along Oregon Way and in the Highlands and St. Helens neighborhoods (CWCOG 2016). The plan’s short-term pedestrian and bicycle priority list includes pedestrian/bicycle roadway construction and roadway widening/restriping to accommodate a trail from the public access area of the Barlow Point property (southwest corner) to Barlow Point roadway. No other pedestrian or bicycle improvements are proposed as short-term priorities.

In Rainier, Highway 30 does not have a dedicated bicycle lane, but there are roadway shoulders and signs to warn drivers about sharing the road with frequent bicyclists. This stretch of Highway 30 is part of the Portland to the Coast bicycle route (Ride Oregon 2016).

Trips to and from Barlow Point, Mint Farm, Memorial Park, and the Oregon portion of the study area are heavily car-dependent, where most travel requires a car (WalkScore 2016).

Transit

RiverCities Transit provides bus and LIFT services in and around Longview and Kelso. LIFT service is shared-ride, origin-to-destination transportation for persons with disabilities that make it difficult for them to use the regular fixed route bus service offered by RiverCities Transit. Within the study area, bus
routes operate along Baltimore Street, Beech Street, Alabama Street, 20th Avenue, and Washington Way. Service along these routes occurs at 60-minute intervals with peak service at 30-minute intervals between 10 am and 5 pm Monday through Friday (RiverCities Transit 2016).

Columbia County Rider (CC Rider) transit serves the study area in Rainier and into Longview and Kelso. A bus route connects from Highway 30 across the Lewis and Clark Bridge to SR 433 and Oregon Way. The bus runs three times a day at 5-hour intervals (CC Rider 2015).

**Public School Transportation**

Longview Public Schools provides bus service to and from the study area, as well as door-to-door transport to and from residences where special needs students live. Currently, the congestion in the study area, especially on Fridays and when trains block vehicular travel, causes students to occasionally arrive late to school or return home from school (as reported in the Public Involvement Summary Report, Appendix B of the Draft EIS).

### 3.5 Regional Economy, Businesses and Employment

The local and regional economy of the greater Longview area was built upon industry and manufacturing, which over time have leveraged the rail, interstate highway, and marine transportation network. Continual investments by local municipalities and businesses have incrementally enhanced the industrial- and manufacturing-driven economy. Most recently, the deepening of the Columbia River channel was completed in 2010 and enhanced navigation access and related commerce. The Port of Longview is Washington State’s third largest port, and the first deep draft, full-service operating port on the Columbia River inland from the Pacific Ocean. Cargo imported and exported through the Port of Longview moves on to communities throughout Washington, including fertilizers used throughout the state’s agriculture industry and steel vital to Washington’s transportation infrastructure.

Today, the principal industries in the study area and its surrounding cities and counties include marine-based bulk exports, wood/paper products, manufacturing, agriculture, fishing, and tourism. Moreover, Longview is the state’s largest timber exporting point. Many of these businesses depend on the efficient and reliable movement of freight, service providers, customers, and employees through the Industrial Way/Oregon Way intersection, which has over 20 million tons of annual gross truck tonnage, making it one of Washington’s busiest truck tonnage intersections. This is reflected in the Washington State Freight Mobility Plan designating the SR 432 corridor as a T1 Truck Freight Economic Corridor, carrying more than 10 million tons of freight by truck per year, an R-1 Rail Route, moving more than 5 million tons of freight by rail per year, and a W-1 Economic Waterway, moving more than 25 million tons by water per year via the Columbia River (WSDOT 2014).

Cowlitz County, Washington, is part of the Longview Metropolitan Statistical Area (MSA). In 2015, one-sixth of employment in Cowlitz County was in manufacturing. For the last twenty years, Cowlitz County unemployment rates have stayed about two percent above national averages despite an increase in jobs in recent years as shown in Table 6. Employment is expected to continue increasing moderately unless major industrial developments (such as Mint Farm, Barlow Point, Millennium Bulk Terminals – Longview project or other similar endeavors) create new employment opportunities (Washington Employment Security Department 2017). Median household income in Cowlitz County is notably lower than that of the state.
Columbia County, Oregon, is part of the Portland MSA. Principle industries in the county include agriculture, lumber and wood/paper products, fishing, and tourism. The county has 62 miles of Columbia River waterfront, deep-water ports, and high-quality industrial property. Over 20 percent of employment in Columbia County is in the government sector (Oregon Employment Department 2017). About half of county residents commute outside the county for work (US Census Bureau 2016). Unemployment in Columbia County has remained around two percent higher than national averages, though it has seen a small but steady increase in jobs (Oregon Employment Department 2017).

Businesses in the study area represent a mix of heavy industry, light industry, commercial and retail. Business range from the large industrial Weyerhaeuser, Capstone, Pacific Fibre and Port of Longview operations, which employ hundreds of people, to mid- to large-sized retail like WalMart and Les Schwab tires, to small, independently-owned businesses such as car repair shops, fuel stations, and ethnic food markets, restaurants, and cafes that employ ten or fewer people. Businesses are highly dependent upon the efficient and reliable movement of materials, finished products, and employees.

Currently, congestion at the Industrial Way/Oregon Way intersection and on the Lewis and Clark Bridge across the Columbia River causes travel to and from businesses to be unreliable. Freight trucks are often delayed, waiting in congestion for extended periods of time. Bumper-to-bumper traffic during PM peak hours requires freight trucks and passenger vehicles to wait for gaps to enter and exit business driveways and parking lots. Additionally, the Cowlitz County Economic Development Council identified infrastructure improvements as a goal in its 2014-2017 Strategic Plan to foster business recruitment and retention (Cowlitz County Economic Development Council 2017).

As part of the project outreach, Cowlitz County conducted door-to-door surveys of the owners of five ethnic food businesses in the study area that were located directly near the Industrial Way/Oregon Way intersection, as documented in the Public Involvement Summary Report (see Appendix B). The survey objective was to understand the extent that these businesses employ minorities or low-income employees and/or provide goods or services to traditionally underserved populations. Four of the five businesses completed the survey; three responded in Spanish. Each of the responding businesses employs less than 10 employees, both full-time and part-time, and the respondents indicated that at least some of their employees are non-white and potentially low-income. Their main concerns about the project are adverse traffic impacts during construction, the length of the construction schedule, and travel speeds through the corridor.

### Table 6. Non-farm Employment and Unemployment and Median Income at the County and State Level

<table>
<thead>
<tr>
<th>Geographic Area</th>
<th>Median Household Income (2015 inflation-adjusted)</th>
<th>Number of Jobs</th>
<th>Change</th>
<th>Unemployment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>January 2016</td>
<td>January 2017</td>
<td>Number of Jobs</td>
</tr>
<tr>
<td>Cowlitz County/Longview MSA</td>
<td>$39,858 (MSA)</td>
<td>37,300</td>
<td>38,200</td>
<td>900</td>
</tr>
<tr>
<td>Washington</td>
<td>$61,062</td>
<td>3,151,300</td>
<td>3,240,000</td>
<td>88,700</td>
</tr>
<tr>
<td>Columbia County</td>
<td>$53,179</td>
<td>10,730</td>
<td>10,580</td>
<td>150</td>
</tr>
<tr>
<td>Oregon</td>
<td>$51,243</td>
<td>1,801,900</td>
<td>1,818,700</td>
<td>16,800</td>
</tr>
</tbody>
</table>

3.6 Public Engagement Activities and Comments from and relevant to EJ Populations

The project team has regularly engaged residents, businesses, public agencies, and other stakeholder groups, such as emergency service providers, public schools, business groups, and social service providers, to develop a project that benefits the community. All public involvement activities have both provided information (sharing information and updates) and gathered information (collected comments and feedback). Moreover, the project team has provided contact information at all events so the public can request additional time with the project team to discuss any concerns.

3.6.1 Engagement Activities

The public engagement activities conducted to date are summarized in Table 7 below.

Table 7. Summary of Engagement Activities

<table>
<thead>
<tr>
<th>Engagement Activity</th>
<th>Dates</th>
<th>Distribution/Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Updates (Most in English &amp; Spanish)</td>
<td>January 2016 February 2016 March 2016 May 2016 September 2016 October 2016 February 2017 April 2017 October 2017</td>
<td>Distributed via project website, mail, and email</td>
</tr>
<tr>
<td>Project Flyers, Newspaper Display Ads, and Press Releases Announcing Open Houses (English &amp; Spanish)</td>
<td>September 2015 March 2016 August/September 2016 January 2017</td>
<td>Distributed via mail and email; Flyer #3 distributed at local businesses, St. Rose de Viterbo Catholic Church, and mobile food bank</td>
</tr>
<tr>
<td>Engagement Activity</td>
<td>Dates</td>
<td>Distribution/Location</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------------------------------------</td>
<td>--------------------------------------------</td>
</tr>
</tbody>
</table>
| Open Houses (Spanish Translation Available) | September 17, 2015  
March 16, 2016  
September 16, 2016  
January 26, 2017 | 5:00pm – 7:00pm  
Cowlitz PUD Auditorium  
961 12th Ave, Longview, WA |
| Stakeholder Meetings        | Businesses/Business Groups:  
November 2, 2015  
December 16, 2015  
January 20, 2016  
January 6, 2016  
January 14, 2016  
February 19, 2016  
March 8, 2016  
March 17, 2016  
May 16, 2016  
May 24, 2016  
May 26, 2016  
August 26, 2016  
September 15, 2016  
September 19, 2016  
October 27, 2016  
November 7, 2016  
November 18, 2016  
January 10, 2017  
January 11, 2017  
January 24, 2017  
January 25, 2017  
February 2, 2017  
February 13, 2017  
January 25, 2018  
January 26, 2018  
February 21, 2018  
Emergency service providers:  
August 10, 2015  
July 8, 2016  
February 23, 2017  
Public school transportation /transit providers:  
August 12, 2015  
August 30, 2016  
January 22, 2018  
Mobile home park:  
September 26, 2016 (teleconference)  
April 20-21, 2017 (email exchange)  
January 22, 2018 |
| Stakeholder Meetings        | Stakeholder Groups:  
August 12, 2015  
August 30, 2016  
January 22, 2018  
Emergency service providers:  
August 10, 2015  
July 8, 2016  
February 23, 2017  
Public school transportation /transit providers:  
August 12, 2015  
August 30, 2016  
January 22, 2018  
Mobile home park:  
September 26, 2016 (teleconference)  
April 20-21, 2017 (email exchange)  
January 22, 2018 |
| Stakeholder Meetings        | Stakeholder Groups:  
August 12, 2015  
August 30, 2016  
January 22, 2018  
Emergency service providers:  
August 10, 2015  
July 8, 2016  
February 23, 2017  
Public school transportation /transit providers:  
August 12, 2015  
August 30, 2016  
January 22, 2018  
Mobile home park:  
September 26, 2016 (teleconference)  
April 20-21, 2017 (email exchange)  
January 22, 2018 |
| Stakeholder Meetings        | Stakeholder Groups:  
August 12, 2015  
August 30, 2016  
January 22, 2018  
Emergency service providers:  
August 10, 2015  
July 8, 2016  
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| Stakeholder Meetings        | Stakeholder Groups:  
August 12, 2015  
August 30, 2016  
January 22, 2018  
Emergency service providers:  
August 10, 2015  
July 8, 2016  
February 23, 2017  
Public school transportation /transit providers:  
August 12, 2015  
August 30, 2016  
January 22, 2018  
Mobile home park:  
September 26, 2016 (teleconference)  
April 20-21, 2017 (email exchange)  
January 22, 2018 |
### Engagement Activity

<table>
<thead>
<tr>
<th>Engagement Activity</th>
<th>Dates</th>
<th>Distribution/Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community groups/ residents:</td>
<td>September 14, 2015, September 16, 2015, September 21, 2015, March 10, 2016, September 15, 2016, February 16, 2017, January 25, 2018</td>
<td></td>
</tr>
<tr>
<td>National Night Out:</td>
<td>August 2, 2016</td>
<td>Archie Anderson Park</td>
</tr>
<tr>
<td>Surveys</td>
<td>Business survey: September 2015</td>
<td>Distributed via email; survey online</td>
</tr>
<tr>
<td></td>
<td>Residential survey (English &amp; Spanish): December 2015</td>
<td>Distributed by mail</td>
</tr>
<tr>
<td></td>
<td>Ethnic food retailers survey (English &amp; Spanish): June 2016</td>
<td>Distributed by mail; conducted in-person interviews at businesses’ locations</td>
</tr>
<tr>
<td></td>
<td>Survey of potentially displaced businesses: September 2017</td>
<td>Distributed by mail; conducted follow-up phone call interviews</td>
</tr>
</tbody>
</table>

#### 3.6.2 Comments from and relevant to Environmental Justice Populations

Comments collected during public engagement activities to date that were either from or relevant to environmental justice populations are summarized in Table 8. A response describing how the project team is considering and addressing each comment is provided.

<table>
<thead>
<tr>
<th>#</th>
<th>Engagement Activity Name</th>
<th>Summary of substantive concern or adverse impact</th>
<th>How the project is addressing this concern or adverse impact</th>
<th>Mitigation measures, if warranted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Highland Neighborhood Association Meeting (7/27/2015)</td>
<td>Concern about residences being displaced from Highlands Neighborhood.</td>
<td>The design was adjusted to avoid displacing any residences.</td>
<td>No mitigation recommended</td>
</tr>
<tr>
<td>#</td>
<td>Engagement Activity Name</td>
<td>Summary of substantive concern or adverse impact</td>
<td>How the project is addressing this concern or adverse impact</td>
<td>Mitigation measures, if warranted</td>
</tr>
<tr>
<td>----</td>
<td>----------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>2</td>
<td>Highland Neighborhood Association Meeting (7/27/2015)</td>
<td>Concern about impacts to the Highlands Trail.</td>
<td>The terminus of the trail at Oregon Way would be temporarily closed during construction. No permanent changes to the trail would occur. Detours would be implemented during construction.</td>
<td>No mitigation recommended</td>
</tr>
<tr>
<td>3</td>
<td>Stakeholder Interview with Longview School District Transportation Manager (9/8/2015)</td>
<td>The intersection and its roads are at a complete standstill the Friday before any holiday weekend so the school district has to reroute its buses to avoid that area making students late to school and late getting home.</td>
<td>The project would reduce congestion and delay and improve travel reliability for typical vehicle volumes, including morning, midday and afternoon/evening peak travel periods. Roadway improvements and investments are not typically made to address the higher than average vehicle volumes using the intersection for special events and holiday peak travel.</td>
<td>No mitigation recommended</td>
</tr>
<tr>
<td>4</td>
<td>Stakeholder Interview with Longview School District Transportation Manager (9/8/2015)</td>
<td>The large number of special needs students in the Highlands area is difficult because they must be transported to individual homes and any slow down at the intersection makes getting students home on time very difficult.</td>
<td>The project would reduce congestion and delay and improve travel reliability for typical vehicle volumes, including morning, mid-day and afternoon/evening peak travel periods when school buses would pick up and return students to homes in the Highlands Neighborhood.</td>
<td>No mitigation recommended</td>
</tr>
<tr>
<td>5</td>
<td>Public Open House (9/17/2015)</td>
<td>Concern that elevated structures would create areas beneath the structures where transients would congregate and crime and vandalism may occur</td>
<td>During the final design phase of the project, the project team will consider design features to deter crime/vandalism and transients congregating under structures including landscaping and physical barriers, for example.</td>
<td>Mitigation included in Section 5.0 of this report and in Chapter 4 of the EIS for impacts to Neighborhoods, Community Resources, and Environmental Justice Populations</td>
</tr>
<tr>
<td>6</td>
<td>Public Open House (9/17/2015)</td>
<td>Need safe, accessible public transportation links between Columbia County, Oregon, and Washington</td>
<td>Improving or increasing public transit options between Columbia County, Oregon and Longview, Washington is outside the scope of this project.</td>
<td>No mitigation recommended</td>
</tr>
<tr>
<td>#</td>
<td>Engagement Activity Name</td>
<td>Summary of substantive concern or adverse impact</td>
<td>How the project is addressing this concern or adverse impact</td>
<td>Mitigation measures, if warranted</td>
</tr>
<tr>
<td>----</td>
<td>--------------------------</td>
<td>-----------------------------------------------</td>
<td>----------------------------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>7</td>
<td>Public Open House (9/17/2015)</td>
<td>Provide safe public transit stops and links to Longview transit system</td>
<td>There are no fixed bus routes that currently travel through the intersection; therefore, no new bus stops would be added to the intersection. The closest route travels along Alabama Street and Oregon Way north of Alabama Street. Bus stops are located along that route.</td>
<td>No mitigation recommended</td>
</tr>
<tr>
<td>8</td>
<td>Public Open House (9/17/2015)</td>
<td>Be mindful of including beautification components into the design. This is the primary gateway to Longview.</td>
<td>The project team will consider opportunities for landscaping and public art during the final design phase.</td>
<td>Mitigation included in in Chapter 4 of the EIS for impacts to Visual Resources</td>
</tr>
<tr>
<td>9</td>
<td>Public Open House (9/17/2015)</td>
<td>Extend the Highlands bike trail beside Industrial Way from Ocean Beach Highway (west end) to Tennant Way (east end).</td>
<td>Extending the trail is outside the scope of the project. New pedestrian and bicycle facilities would be added to the intersection to improve safety and connectivity. This project would not preclude extension of the trail as part of a separate project.</td>
<td>No mitigation recommended</td>
</tr>
<tr>
<td>10</td>
<td>Highlands Neighborhood Association Meeting (2/22/2015)</td>
<td>Be sure to take pedestrian safety into account, especially for kids</td>
<td>New pedestrian facilities would be added to the intersection to improve safety and connectivity for all users, including children.</td>
<td>No mitigation recommended</td>
</tr>
<tr>
<td>11</td>
<td>Highlands Neighborhood Association Meeting (2/22/2015)</td>
<td>Consider a separated-grade solution to keep trucks from cutting through neighborhoods.</td>
<td>The project is considering two alternatives: one is a fully grade-separated solution, and one is a partially grade-separated solution. Both alternatives would benefit all vehicles traveling through the intersection, including trucks.</td>
<td>No mitigation recommended</td>
</tr>
<tr>
<td>12</td>
<td>Highlands Neighborhood Association Meeting (2/22/2015)</td>
<td>Consider pedestrian bridges.</td>
<td>The project considered various options to provide pedestrians safe routes through the intersection. A pedestrian bridge is not proposed, but additional sidewalks and marked crossings are included.</td>
<td>No mitigation recommended</td>
</tr>
<tr>
<td>#</td>
<td>Engagement Activity Name</td>
<td>Summary of substantive concern or adverse impact</td>
<td>How the project is addressing this concern or adverse impact</td>
<td>Mitigation measures, if warranted</td>
</tr>
<tr>
<td>----</td>
<td>--------------------------</td>
<td>-----------------------------------------------</td>
<td>--------------------------------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>13</td>
<td>Highlands Neighborhood Association Meeting (2/22/2015)</td>
<td>Distribute flyers at laundry mats, the YMCA, senior center, and in students’ backpacks, and post notices in the Longview Daily News.</td>
<td>The project has and will continue to share information with the community, including distributing flyers and publishing notices in the local newspaper.</td>
<td>No mitigation recommended</td>
</tr>
<tr>
<td>14</td>
<td>Public Open House (3/16/2016)</td>
<td>Do not cut off Alabama to/from Oregon Way. A lot of people depend on that intersection to get to Industrial Way.</td>
<td>There is no proposal to close the Oregon Way/Alabama Street intersection. The GSA Alternative would construct a roundabout at this intersection to support all movement directions. The PGSB Alternative would limit movements to right-in/right-out; improvements would be made to 14th Avenue to facilitate travel to Beech Street that has a signalized intersection at Oregon Way and allows all movement directions.</td>
<td>No mitigation recommended</td>
</tr>
<tr>
<td>15</td>
<td>Public Open House (3/16/2016)</td>
<td>Consider improving the alley (located between Oregon Way and 15th Avenue) to provide access to homes along Oregon Way, rather than having so many driveways along that roadway.</td>
<td>Improving this alley is outside the scope of this project.</td>
<td>No mitigation recommended</td>
</tr>
<tr>
<td>16</td>
<td>Public Open House (3/16/2016)</td>
<td>Cutting off the connection of Alabama Street to Oregon Way would be problematic for emergency responders traveling to that neighborhood; there are a lot of elderly people living there.</td>
<td>The project team is coordinating closely with emergency service providers, including Longview Fire Department, to avoid adverse impacts to emergency response times. The project would reduce congestion and delay, which in turn improves emergency response times and benefits the community who depend on these services.</td>
<td>No mitigation recommended</td>
</tr>
<tr>
<td>#</td>
<td>Engagement Activity Name</td>
<td>Summary of substantive concern or adverse impact</td>
<td>How the project is addressing this concern or adverse impact</td>
<td>Mitigation measures, if warranted</td>
</tr>
<tr>
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</tr>
<tr>
<td>17</td>
<td>Public Open House (3/16/2016)</td>
<td>A raised intersection could create a new homeless camp and emergency services would need to access that area.</td>
<td>During the final design phase of the project, the project team will consider design features to deter crime/vandalism and transients congregating under structures including landscaping and physical barriers, for example.</td>
<td>Mitigation included in Section 5.0 of this report and in Chapter 4 of the EIS for impacts to Neighborhoods, Community Resources, and Environmental Justice Populations</td>
</tr>
<tr>
<td>18</td>
<td>Public Open House (3/16/2016)</td>
<td>Low-income persons live in the Highlands Neighborhood.</td>
<td>Demographic data was included in the project analysis and design solutions were developed to minimize impacts as well as include enhancements where feasible for the Highlands Neighborhood residents.</td>
<td>No mitigation recommended</td>
</tr>
<tr>
<td>19</td>
<td>Public Open House (9/21/2016)</td>
<td>Some residents avoid congestion at the intersection of Oregon Way and Alabama Street, and instead use the intersection of streets north of Alabama Street.</td>
<td>Design solutions for the intersection were developed in tandem with evaluating impacts and connectivity to the local street network.</td>
<td>No mitigation recommended</td>
</tr>
<tr>
<td>20</td>
<td>Public Open House (9/21/2016)</td>
<td>Transit bus route accesses Oregon Way at Alabama Street.</td>
<td>Transit service near the intersection is documented in the Transportation Discipline Report.</td>
<td>No mitigation recommended</td>
</tr>
<tr>
<td>21</td>
<td>Highlands Neighborhood Association Meeting (1/23/2017)</td>
<td>Some Highlands Neighborhood residents expressed approval for the roundabout at Alabama Street.</td>
<td>The roundabout is part of the GSA Alternative.</td>
<td>No mitigation recommended</td>
</tr>
<tr>
<td>22</td>
<td>Highlands Neighborhood Association Meeting (1/23/2017)</td>
<td>Lack of clarity about how Highlands Neighborhood residents would access the two-phase signalized intersection (east of the intersection on Industrial Way) in PGSB Alternative.</td>
<td>The EIS provides information and maps on this design element of the PGSB Alternative. The project team is available to answer questions at public meetings or via other modes of contact listed in the EIS Fact Sheet.</td>
<td>No mitigation recommended</td>
</tr>
<tr>
<td>#</td>
<td>Engagement Activity Name</td>
<td>Summary of substantive concern or adverse impact</td>
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<tr>
<td>23</td>
<td>Public Open House (1/26/2017)</td>
<td>Maintain access to/from Columbia Trailer Court</td>
<td>Both the GSA and PGSB Alternatives maintain the current right-in/right-out access to/from Oregon Way to this property. The PGSB Alternative would construct 14th Avenue between Alabama Street and Beech Street to city standards, in turn providing residents of the mobile home park with an additional access to circulate in/out.</td>
<td>No mitigation recommended</td>
</tr>
<tr>
<td>24</td>
<td>Public Open House (1/26/2017)</td>
<td>Improvements to 14th Avenue would benefit tenants of the Columbia Trailer Court.</td>
<td>Improvements to 14th Avenue are proposed as part of the PGSB Alternative.</td>
<td>No mitigation recommended</td>
</tr>
<tr>
<td>25</td>
<td>Public Open House (1/26/2017)</td>
<td>Some residents fronting Oregon Way (south of Alabama Street) use the alley behind their residences for parking.</td>
<td>The project would not alter this alley.</td>
<td>No mitigation recommended</td>
</tr>
<tr>
<td>26</td>
<td>Public Open House (1/26/2017)</td>
<td>Elevated roundabouts are difficult for truck drivers.</td>
<td>An elevated roundabout was considered by the project team, but was dismissed for further study in the EIS.</td>
<td>No mitigation recommended</td>
</tr>
<tr>
<td>27</td>
<td>Public Open House (1/26/2017)</td>
<td>Concern about the impact on Columbia Court Trailer Park.</td>
<td>Both right-in/right-out driveways on Oregon Way would be retained under both build alternatives. This property would experience impacts from the project related to noise, air quality (construction phase only), and visual changes.</td>
<td>Mitigation included in in Chapter 4 of the EIS for impacts to Air Quality, Noise, and Visual Resources</td>
</tr>
<tr>
<td>28</td>
<td>Stakeholder Meeting with RiverCities Transit and City of Longview Public Works (2/28/2017)</td>
<td>RiverCities Transit and Public Works need full access to/from Oregon Way.</td>
<td>Travel routes to/from these properties may change as a result of the project; however, these route changes would not be expected to adversely affect services provided by the City of Longview or RiverCities Transit.</td>
<td>No mitigation recommended</td>
</tr>
<tr>
<td>#</td>
<td>Engagement Activity Name</td>
<td>Summary of substantive concern or adverse impact</td>
<td>How the project is addressing this concern or adverse impact</td>
<td>Mitigation measures, if warranted</td>
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</tr>
<tr>
<td>30</td>
<td>Email from Columbia Trailer Court Manager (4/19/2017)</td>
<td>Concern about displacements of individuals from Columbia Trailer Court who may not be able to find replacement low-income housing.</td>
<td>The project would not displace any residents, including any residents living at the Columbia Trailer Court.</td>
<td>No mitigation recommended</td>
</tr>
<tr>
<td>31</td>
<td>Stakeholder Meeting with RiverCities Transit and City of Longview Public Works (1/22/2018)</td>
<td>Proposed driveway closures to Oregon Way and Alabama Street under GSA Alternative would cause the relocation of RiverCities Transit's bus fleet.</td>
<td>Final impact will be reviewed and addressed following the identification of a preferred alternative. PGSB Alternative is not expected to adversely affect bus services provided by RiverCities Transit from their current location.</td>
<td>Mitigation included in Section 5.0 of this report and Chapter 4 of the EIS for impacts to Land Use</td>
</tr>
<tr>
<td>32</td>
<td>Stakeholder meeting with Columbia Trailer Court property manager (1/22/2018)</td>
<td>Concern about driveway closures that would impact the mainly low-income community that lives at the mobile park</td>
<td>Both the GSA and PGSB Alternatives would not close the two driveways from Oregon Way. If the driveways would need to be reconstructed due to temporary construction impacts, the contractor will be required to do so while maintaining access to the mobile park.</td>
<td>No mitigation recommended</td>
</tr>
<tr>
<td>33</td>
<td>Highlands Neighborhood Association Meeting (1/22/2018)</td>
<td>The retaining wall for the elevated north leg in front of residences along Oregon Way (south of Alabama Street) could isolate these properties and invite crime.</td>
<td>The elevated north leg may create a sense of isolation for residences that front Oregon Way (south of Alabama Street). During final design, community members would be provided with an opportunity to review and provide input on wall textures. Additionally, special attention will be given to street illumination of the local surface road that would front these properties.</td>
<td>No mitigation recommended</td>
</tr>
</tbody>
</table>
4.0 ENVIRONMENTAL CONSEQUENCES

This section describes the potential adverse, beneficial or neutral effects to the community across multiple factors that affect daily life activities and quality of life: access to and from residences and businesses and anticipated acquisitions and displacements; security; bicycle and pedestrian access and safety; on-street parking; employment, freight and employee mobility and sales tax revenues; noise and vibration; air quality; hazardous materials; and visual quality.

An explanation of how the project would affect environmental justice populations is included. For the purpose of analysis, any impacts to residents in the Highlands Neighborhood and the Industrial Way and California Way Neighborhood are assumed to affect environmental justice populations due to the high percentage of residents who are minority and/or low-income.

Effects are discussed in terms of temporary effects during construction, direct effects resulting from project implementation and associated with the operation and maintenance of the facility, and indirect effects which are caused by the action at a later time or farther removed in distance but still reasonably foreseeable. Cumulative effects of the project with other past, present and reasonably foreseeable future activities are documented in the Cumulative Effects Discipline Report prepared for the project and included as Appendix F to the EIS.

4.1 No Build Alternative

4.1.1 Direct Effects

The intersection currently experiences congestion during most of the day and particularly during the late afternoon/early evening commute period. All travelers that rely on the intersection, including passenger and freight vehicles, would experience significant congestion and delays as a result of population and employment growth in the Longview area. In addition, increased rail service would lead to higher...
frequency of trains crossing the Reynolds Lead and extended IRC, which would exacerbate traffic congestion and result in delays to freight truck and passenger vehicle traffic when trains block surface roadways on each leg of the Industrial Way/Oregon Way intersection. As vehicular traffic increases over time, all travel through this intersection would be less reliable, including commuting to and from work, whether by personal vehicle, transit, bicycle, or on foot. This increased congestion would lengthen travel times to all trips made through the intersection. Delays for passenger vehicles, while negatively affecting all drivers, would be particularly cumbersome for drivers trying to access jobs within the study area and would negatively impact the local economy.

Travel reliability is especially important to persons who work hourly jobs, or low-income persons who may incur additional expenses, such as childcare, the longer time they spend waiting in traffic. For low-income persons, the additional childcare costs can decrease or eliminate funds for other critical expenses such as food and health care. During times of severe congestion, school buses would continue to need to be rerouted around the project intersection causing students to be late to school and late returning home from school. The No Build Alternative could result in reduced travel reliability which would impact all users, but could have more acute adverse financial impacts on low-income persons.

4.1.2 Indirect Effects

If no improvements are made to the intersection, freight truck costs and travel times would increase over time, which would adversely affect truck-dependent business operations. These worsened business operating conditions would have detrimental effects to the financial health of businesses in the study area and the region, and could in turn adversely affect workers at all levels, including those who are hourly wage earners who may also be low-income. The loss of business could result in workers becoming under-employed or unemployed all together, which could result in more individuals potentially qualifying as low-income under the Health and Human Services Guidelines.

4.2 Grade-Separated Option A (GSA) Alternative

4.2.1 Effects during Construction

Construction of the GSA Alternative would occur over 5 years. The following construction-related effects to the neighborhoods, community resources, and environmental justice populations during construction would occur as a result of the GSA Alternative. Table 9 summarizes these impacts for each alternative.

**Detours and access:** During construction of the GSA Alternative, there would be times when one or more existing traffic lanes would be closed. It is possible that some drivers would use residential streets to avoid the intersection construction area, particularly cutting through the Highlands and St. Helens neighborhoods. The possible increases in cut-through traffic, if realized, would increase traffic noise levels and could result in longer travel times to, from and within the neighborhood if increased traffic causes queuing. Sidewalks and the Highlands Trail would experience intermittent detours or closures during construction. During portions of project construction, the segment of the Highlands Trail between Oregon Way and 17th Avenue would be closed to pedestrians and bicyclists. However, the trail access point at 17th Avenue is ADA accessible and would still provide a connection to sidewalks in the Highlands Neighborhood; signage would direct people to this detour route. The ADA-accessible trail access point at Archie Anderson Park would also remain open during construction. For periods when sidewalks along Oregon Way are closed, detour signage to ADA-accessible routes would be provided. Therefore, pedestrians and bicyclists could incur some out-of-direction travel. Access to and from non-displaced businesses and residences, including the Columbia Court Trailer Park immediately adjacent to Oregon Way, would be maintained, although changes in access point or routes would likely occur.
Pedestrian and bicycle safety: Pedestrian and bicycle conflicts with vehicles could increase with increased cut-through traffic in the Highlands and St. Helens Neighborhoods.

Freight and employee mobility: Potential lane closures would cause delays and reduce travel reliability for all modes of traffic; this could cause intermittent delays in freight movement and employee travel time to and from places of employment.

Employment and economics: Project construction could generate temporary jobs during construction. During construction, some businesses may be able to benefit from selling supplies or materials for construction activities and from sales to construction workers (e.g. food, fuel). Lengthy delays in freight movement caused by lane closures during construction could have negative economic effects to businesses, which rely on travel reliability for goods movement planning and business operations, especially companies that rely on employees who work shifts. Some potential customers of study area businesses may choose to avoid the study area during construction. Travel reliability is particularly important for low-income individuals who may not have disposable income to pay for additional childcare costs which could arise from commuting delays.

Noise and vibration: During construction, areas near the project footprint, particularly Highlands, and Columbia Trailer Court residences that are adjacent to the project footprint would be exposed to construction noise in addition to traffic-related noise. The GSA Alternative would take approximately 5 years to construct with intermittent noise from construction equipment. Some of these residents living adjacent to the project footprint in single and multi-family residences in the Highlands Neighborhood and residences in the Columbia Trailer Court are likely to be minority and/or low-income residents. These persons would likely experience intermittent and temporary increases in noise associated with construction activities. Construction-related noise, vibration, and dust would not be expected to adversely affect any schools or children at bus stops. Standard specifications would be utilized during construction to avoid or minimize construction noise during nighttime activities.

Air quality: Mud and particulates from trucks could also be of concern if construction trucks are routed along major arterial streets (such as Oregon Way and Industrial Way) near sensitive land uses such as the Highlands and St. Helens neighborhoods, mobile home parks, the Highlands Trail, and Archie Anderson Park, where people live and play. Standard specifications would be utilized during construction to avoid or minimize mud and particulates from becoming airborne.

Hazardous materials: Some soil removed with excavation work for construction of the GSA Alternative is anticipated to be contaminated, and some groundwater extracted with excavation work is anticipated to be contaminated due to the largely industrial nature of the study area. The removal of contaminated materials is unlikely to affect drinking water in the study area because there are no critical aquifer recharge areas near the project intersection. Workers and residents living close to sites of concern could be at risk from exposure to hazardous materials and waste encountered or generated during construction. Most hazardous materials sites of concern are located in commercial or industrial areas; demographic data for all employees working near sites of concern is unavailable. Six low or moderate sites of concern that would be directly impacted by GSA Alternative construction are near residential areas (Highlands Neighborhood) that could house minority and/or low-income residents. These include five low risk sites of concern (Sites 3, 4, 5, 7, and 9) and one moderate risk site of concern (Site 8) (Figure 12). For further details about these sites, please refer to the project’s Hazardous Materials Discipline Report (Appendix I of the Draft EIS).
Columbia Trailer Court, which is likely to house low-income residents, is adjacent to one low risk site of concern (Site 3: Longview City Shop) where soil disturbance would be required for construction of the GSA Alternative. The contractor would be required to develop construction plans that specify procedures, including best management practices to be employed for construction of the project. The plans would include direction for: spill prevention, control, and countermeasure plans, temporary erosion and sedimentation control plans, and plans for handling and disposal of known and unanticipated contamination. The contractor would also be required to develop a site-specific Health and Safety Plan describing monitoring requirements and the use of personal protective equipment to ensure worker safety. These control and safety measures would avoid or minimize adverse effects to all persons living and working near construction of the GSA Alternative.

**Visual quality:** Construction equipment, lighting, and materials, including material stockpiles and brightly colored signs and vehicles, would add temporarily visually distracting elements to key viewpoints; several key viewpoints are located in neighborhoods with a high concentration of minority and/or low-income persons. However, construction staging areas would consolidate equipment when not in use to minimize visual disturbance. Viewers at the residences that are on the Oregon Way and Highlands Trail perimeter of the Highlands Neighborhood as well as residences at the Columbia Trailer Court would be expected to experience a higher degree of visual quality impact during construction; any visual quality degradation during construction would be temporary.
4.2.2 Direct Effects

The following direct effects would occur under the GSA Alternative. Table 9 provides summary of the benefits and impacts under the GSA Alternative and compares the impacts to the No Build and PGSB Alternatives.

Residential relocations and driveway access: There are no anticipated residential relocations under the GSA Alternative. Moreover, no individuals from environmental justice populations would be displaced. Existing driveways within 130 feet of the new roundabout at the Oregon Way/Alabama Street intersection would be closed or relocated, including driveways for one house and one multi-family housing unit immediately south of Alabama Street on Oregon Way. Other driveways adjacent to the project footprint could also be altered; for example, all driveways on Oregon Way that are located over 130 feet south of Alabama Street would be changed to right-in/right-out only under the GSA Alternative.

On-street parking: Approximately 113 on-street parking spaces would be removed under the GSA Alternative. Specific locations where on-street parking spaces would be removed include:

- 57 unmarked parking spaces along East Port Way from Terminal Way to Industrial Way – these spaces are adjacent to industrial land uses where some businesses also have ample off-street parking. Based on observation, it is estimated that approximately 10 of the 57 on-street parking spaces are used on a regular basis and the remaining spaces are used infrequently. This loss of parking could have a minor adverse impact on some businesses along East Port Way.
- 25 unmarked parking spaces along the east side of Oregon Way from Industrial Way to Alabama Street – these spaces are adjacent to commercial and industrial land uses and the CDID Ditch No. 3. Based on observation, it is estimated that few if any of these spaces are regularly used.
- 3 unmarked parking spaces along the east side of Oregon Way from Alabama Street to approximately 90 feet south Alaska Street – these spaces are adjacent to the Columbia Trailer Court and appear to be used frequently.
- 15 unmarked parking spaces along the west side of Oregon Way from Alabama Street to the Highlands Trail – these spaces are adjacent to residences in the Highlands Neighborhood and appear to be used frequently.
- 13 unmarked parking spaces along the west side of Oregon Way from the Highlands Trail to Industrial Way – these spaces are adjacent to the CDID Ditch No. 3 and commercial land uses. Based on observation, it is estimated that few if any of these spaces are regularly used.

Business displacements and access to business areas: The study area for socioeconomics represents hundreds of small, medium and large businesses, with thousands of employees. Ten small businesses (each with less than 50 employees), would be displaced under the GSA Alternative (see Appendix J, Land Use Technical Analysis). Therefore, less than 5 percent of total jobs would be displaced. Based on the August/September 2017 business survey, four businesses of the 10 potentially displaced businesses under the GSA Alternative are minority-owned businesses (non-white and/or Hispanic/Latino-owned). Based on estimates from business owners, of the 121 total employees who would potentially be displaced under the GSA Alternative, 29 employees (24 percent) are minority (non-white), 14 employees are Hispanic/Latino (11 percent), and 63 (49 percent) are low-income. There are over 1,200 acres of vacant land in the study area, most of which is zoned for industrial development (over 900 acres) or mixed use commercial/industrial (over 180 acres), where the 10 displaced industrial and commercial businesses could potentially relocate.
WSDOT follows a standard, systematic process for relocation of property-owners, residents and tenants, in compliance with the Uniform Relocation Assistance and Real Property Acquisition Polices Act of 1970 as amended. The legal requirements and relocation process are described in Right-of-Way Manual M 26-01 Chapter 12. Compensation would be provided for businesses to relocate if they are physically displaced by the project or if property values decrease as a result of the project. Other businesses may choose to relocate if altered property access and/or traffic patterns do not meet the needs of a specific business, but these businesses would not be compensated. RiverCities Transit’s bus facility at the northeast corner of Alabama Street and Oregon Way could be adversely affected by the closure of key access points, which would limit bus circulation on the site, under the GSA Alternative.

As depicted in Figure 13, a few specific vehicular travel routes to and from businesses would include minor out-of-direction travel under the GSA Alternative. Driveways along Industrial Way between Columbia Boulevard and Oregon Way would be changed to right-in/right-out only.

**Security:** The Washington Utilities and Transportation Commission and members of the local community expressed concern about safety in areas beneath structures (e.g. the bridge needed to elevate the Industrial Way/Oregon Way intersection). The main concern was that those areas may be isolated, and may potentially attract transient persons and people engaged in crime. WSDOT maintenance crews, while sympathetic to homeless persons’ circumstances, are also not trained to address any issues related to homeless encampments such as mental health issues, property disputes or health hazards (WSDOT 2014). The GSA Alternative would include an elevated structure that could create these isolated spaces underneath.

**Noise:** Of 81 total modeled sites, 20 residences adjacent to Oregon Way in the Highlands Neighborhood, in the Columbia Trailer Court, and along the Highlands Trail are predicted to experience traffic noise levels above the Noise Abatement Criteria (NAC) of 66 dBA with the GSA Alternative in 2040. However, the impacted residences and trail would also be above impact criteria under the No Build Alternative. The noise technical analysis determined that the three noise barriers analyzed for the GSA Alternative were either not reasonable or not feasible (see Appendix K, Noise Technical Analysis). Minority and low-income persons who live on the perimeter of the Highlands Neighborhood that is adjacent to the Highlands Trail and Oregon Way as well as those Columbia Trailer Court residents living next to Oregon Way may experience higher noise impacts than other residents in the study area that are further away from the project area.

**Air quality:** No long-term adverse air quality impacts are expected under the GSA Alternative, so no residents, including minority and/or low-income persons, would experience adverse air quality impacts.

**Neighborhood access, public services, and community cohesion:** Under the GSA Alternative, changes in vehicular access to and from some neighborhoods and businesses (e.g. access point, circulation) would occur. For example, travel routes for 12 residences on Oregon Way, between Industrial Way and Alabama Street would result in 0.6 miles of out-of-direction travel to access southbound Oregon Way (Figure 13 and Figure 14). Reasonable vehicular access would be maintained for all properties with non-relocated residences and businesses. Changes in directional movements into and out of a property may not meet the needs of the specific business currently occupying the property, so some businesses may choose to relocate as a result of these changes.
Figure 13. Comparison of Existing Vehicle Travel Routes to and from Businesses and Vehicle Travel Routes under the GSA Alternative

**Existing Travel Routes**

- From SR 433 to Industrial Way North Side Businesses
- From Industrial Way North Side Businesses to SR 433
- From west on Industrial Way to Industrial Way North Side Businesses
- From East Port Way to Industrial Way eastbound

**GSA Travel Routes**

- From SR 433 to Industrial Way North Side Businesses via elevated structure
- From SR 433 to Industrial Way North Side Businesses via surface streets
- From Industrial Way North Side Businesses to SR 433
- From west on Industrial Way to Industrial Way North Side Businesses
- From East Port Way to Industrial Way eastbound
The roadway facilities proposed as part of the GSA Alternative would not bisect any existing neighborhoods. The elevated structures slightly change some circulation patterns, such as needing to travel on surface roads and sidewalks to access the elevated intersection. However, no neighborhood would be bisected and the local street network and public amenities would all remain and would continue to contribute to the cohesiveness of the Highlands Neighborhood and the Industrial Way and California Way Neighborhood. Access to public services such as parks and healthcare clinics would remain, although travel routes to and from these locations may change slightly, such as by needing to use local roads to travel to the roundabout at Alabama Street.

Minority and low-income persons living in the Highlands Neighborhood and the Industrial Way and California Way Neighborhood could be employed at the commercial and industrial areas south of Industrial Way. Under the GSA Alternative, pedestrian and bicycle access to and from neighborhoods and businesses would be improved with the addition of the following ADA-compliant improvements:

- A new shared-use path along East Port Way that runs north-south, crosses under the east leg of the elevated intersection, runs east-west and crosses under the north leg of the elevated intersection, and connects to the Highlands Trail on the west side of Oregon Way
- Reuse or reconstruction of the existing Oregon Way sidewalk (west side) on the one-way surface roadway that runs along the west side of Oregon Way from Highlands Trail to the Oregon Way/Alabama Way roundabout
- New sidewalk on the new surface roadway that runs along the east side of Oregon Way from the new shared-use path to the Oregon Way/Alabama Way roundabout
• Reuse or reconstruction of the existing Industrial Way sidewalk (north side) on the north side of
the new surface road along Industrial Way from the shared-use path to Columbia Boulevard
• New sidewalk on south side of Industrial Way from the point where Industrial Way touches
down on the surface to Columbia Boulevard

Visual quality: The elevated intersection would result in visual change for all persons living, walking,
biking or driving in the study area by adding fill material, an overcrossing, and artificial street lighting,
and preventing some views of hills in the distance from residences along both Industrial Way and
Oregon Way. However, along Industrial Way the vegetated berm would also have the benefit of
shielding viewers, especially residents in the southeast corner of the Highlands Neighborhood along
Industrial Way, some of whom could be minority and/or low-income viewers, from existing views of
trains, trucks, buildings and utilities in this highly industrial area. In addition, along Industrial Way the
vegetated berm would be back to grade by approximately 17th Avenue, resulting in little to no change in
the view for residents northwest of 17th Avenue. Similarly, along Oregon Way the elevated roadway
would connect to grade just south of the intersection with Alabama Street, which would result in little to
no change in the view for residents north of Alabama Street. The change in visual quality is expected to
be more severe for the residents who live in the houses along the perimeter of the Highlands
Neighborhood along Oregon Way between Industrial Way and Alabama Street and along the Highlands
Trail from Industrial Way to approximately 17th Avenue. Similar visual quality impacts would be
experienced by Columbia Trailer Court residents whose houses are on the Oregon Way perimeter.

Hazardous materials: Removal of any discovered hazardous materials that may exist on the site would
reduce future adverse effects to human health and the environment. This removal of discovered
hazardous materials would benefit all persons similarly.

Transportation: The following transportation-related benefits are anticipated to result from the GSA
Alternative and would be distributed across all populations in the study area. Separating most local and
through vehicular traffic from train crossings via the elevated structure would reduce congestion at the
intersection and improve travel reliability, allowing for better travel reliability and more reliable
departure and arrival times for public school and transit buses.

• Traffic flow and travel reliability would be substantially improved under the GSA Alternative as
nearly all motorists would no longer be delayed by train crossings. At-grade rail crossings of the
intersection legs would be eliminated for vehicles. One surface street that connects East Port
Way to Industrial Way and Columbia Boulevard would have an at-grade roadway/railroad
crossing. Bicyclists and pedestrians using sidewalks and the shared-use path would also have at-
grade railroad crossings. Travel reliability is especially important to persons who work hourly
jobs, or low-income persons who may incur additional expenses, such as childcare, the longer
time they spend waiting in traffic. For low-income persons, the additional childcare costs can
decrease or eliminate funds for other critical expenses such as food and health care.

• Over the long term, travel reliability and truck mobility would be substantially improved under
the GSA Alternative, which would be economically beneficial to small, medium and large
businesses in the study area, and for businesses outside the study area that use the intersection
to transport materials and products. These businesses would incur fewer fuel costs, for example,
from reduced idling in congestion, and could schedule material and product movement travel
more reliably. Employees commuting by transit or personal vehicle would have more reliable
commute times to work. Similarly, employees walking or bicycling to work would have safer
facilities that allow them to avoid the roadway congestion, although they would still have to wait for train crossings.

- Commuters traveling to and from, and through, the study area would benefit from reduced congestion and improvements in travel reliability, particularly those traveling from cities and towns farther outside of the study area.

- Emergency service response times would mostly improve under the GSA Alternative compared with conditions under the future No Build Alternative, benefitting all persons.

- Vehicular safety would improve because congestion at intersections is anticipated to decrease compared to the No Build Alternative, which in turn would likely decrease rear-end, sideswipe and angle crashes and benefit all persons similarly. In addition, the roundabout at Alabama Street would improve safety for vehicles that currently make a left turn at the existing unsignalized intersection and cross several travel lanes to travel on Oregon Way.

- All bicyclists and pedestrians would benefit from enhanced pedestrian and bicycle facilities, contributing to an improved network of facilities and providing enhanced connectivity between neighborhoods and employment locations.

### Table 9. Summary of Impacts and Benefits to Residences, Businesses, and Community Resources

<table>
<thead>
<tr>
<th></th>
<th>No Build Alternative</th>
<th>GSA Alternative</th>
<th>PGSB Alternative</th>
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</thead>
</table>
| **Construction-related impacts** | Not applicable | Impacts to all travelers, including environmental justice populations:  
- Temporary road detours over 5 years  
- Some out-of-direction travel  
- Increased travel time and decrease in travel reliability  
**Disproportionate impacts experienced by environmental justice populations:**  
- Possible increase in neighborhood cut-through traffic  
- Diminished quality of life from equipment noise and vibration, airborne dust, and artificial lighting | Impacts to all travelers, including environmental justice populations:  
- Temporary road detours over 3.5 years  
- Some out-of-direction travel  
- Increased travel time and decrease in travel reliability  
**Disproportionate impacts experienced by environmental justice populations:**  
- Possible increase in neighborhood cut-through traffic  
- Diminished quality of life from equipment noise and vibration, airborne dust, and artificial lighting |  |
<p>| <strong>Residential Displacements</strong> | No residences displaced | |  |</p>
<table>
<thead>
<tr>
<th>No Build Alternative</th>
<th>GSA Alternative</th>
<th>PGSB Alternative</th>
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</table>
| Business and job displacements | No minority-owned businesses or ethnic food retailers displaced | Impacts to all study area businesses and employees, including environmental justice populations:  
- 10 businesses displaced  
- Approximately 121 employees displaced  
- Removal of 95 on-street parking spaces near industrial/commercial land uses | Impacts to all study area businesses and employees, including environmental justice populations:  
- 7 businesses displaced  
- Approximately 65 employees displaced  
- Removal of 95 on-street parking spaces near industrial/commercial land uses |
| | | Disproportionate impacts experienced by environmental justice populations:  
- Of the 10 businesses displaced, 4 are minority-owned  
- Of the 121 total employees who would be displaced, 24% are racial minorities (non-white), 11% are Hispanic/Latino, and 49% are low-income | Disproportionate impacts experienced by environmental justice populations:  
- Of the 7 businesses displaced, 3 are minority-owned  
- Of the 65 employees who would be displaced, 15% are minority (non-white), 9% are Hispanic/Latino, and 42% are low-income |
| North/South bicycle and pedestrian connectivity to employers south of Industrial Way | Limited and disconnected bicycle and pedestrian facilities | Expanded ADA-compliant bicycle and pedestrian facilities and enhanced and safer connectivity |
| Access and on-street parking changes to neighborhoods | None | Disproportionate impacts experienced by environmental justice populations:  
- 0.6 miles out-of-direction travel for 12 Highlands Neighborhood residences south of Alabama Street  
- Removal of 18 on-street parking spaces near residential areas | Disproportionate impacts experienced by environmental justice populations:  
- 1.3 miles out-of-direction travel for 12 Highlands Neighborhood residences south of Alabama Street  
- Removal of 18 on-street parking spaces near residential areas |
| Security concern beneath structures | None | Disproportionate impacts experienced by environmental justice populations:  
- Creation of isolated spaces could attract crime or vandalism and require additional maintenance |
| Environmental Justice Determination | Not applicable | Disproportionately high and adverse impact on an area with low-income and minority populations |
4.2.3 Indirect Effects

Over the long-term, the project would reduce delay and provide more reliable travel for freight truck and passenger vehicles through the intersection, which benefits local and regional economies with reduced travel related costs and potentially increased employment opportunities for the region. Enhanced job opportunities in the region would benefit all persons, but particularly low-income persons who are unemployed or under-employed may be able to find new and/or higher-wage jobs and develop additional skills, which could be used to leverage future employment opportunities.

With improved pedestrian and bicycle facilities at the Industrial Way/Oregon Way intersection that provide safer and more direct connections between employees’ homes and their places of employment, more people may choose to convert trips from passenger vehicle and transit modes to biking and walking.

With lower levels of congestion, businesses would be able to plan and implement freight shipments on more reliable schedules, thereby lowering business costs. Over time, this increased efficiency for business-related and freight truck travel through the Industrial Way/Oregon Way intersection would enhance the regional and national economic competitiveness of the Port of Longview and improve economic opportunities for international bulk import/export business development at Barlow Point and on available developable land such as the Mint Farm Industrial Park.

Most of the existing businesses in the study area would not be displaced through right-of-way acquisition required from the GSA and PGSB Alternatives; however, some of these businesses could experience indirect effects. Over time, some businesses may determine that changes in directional movements into and out of their property (for example, a change to a right-in/right-out driveway) or changes in travel routes may no longer suit their business needs; thus, these businesses may choose to relocate to more suitable locations. Relocating could have indirect effects on businesses because of the costs of relocation, including costs to secure a replacement site; moving costs; profits lost during the moving period; or higher lease/rental costs at a replacement site. Furthermore, relocating could alter the volume of customers a business receives – it could take customers some time to find the business in its new location, and the new location could attract a different type or number of customers. These indirect effects could ultimately affect the long-term viability of businesses currently located near the Industrial Way/Oregon Way intersection.

4.3 Partial Grade-Separated Option B (PGSB) Alternative

4.3.1 Effects during Construction

Construction of the PGSB Alternative would take 3.5 years, which is less than the 5 years under the GSA Alternative. For the PGSB Alternative, the construction-related effects, including detours and access, pedestrian and bicycle safety, freight and employee mobility, employment and economics, noise and vibration, air quality, and visual quality would be the similar to the GSA Alternative although the construction duration would be shorter. Construction-related effects regarding hazardous materials under the PGSB Alternative would differ from the GSA Alternative.

**Hazardous materials:** Some soil removed with excavation work for construction of the PGSB Alternative is anticipated to be contaminated, and some groundwater extracted with excavation work is anticipated to be contaminated due to the largely industrial nature of the study area. Like the GSA Alternative, the removal of contaminated material is unlikely to affect drinking water in the study area because there are no critical aquifer recharge areas near the project intersection. Workers and residents living close to
sites of concern could be at risk from exposure to hazardous materials and waste encountered or generated during construction. Six low risk sites of concern (Sites 3, 4, 5, 6, 7, and 9) and one moderate risk site of concern (Site 8) that would be directly impacted by construction of the PGSB Alternative are near residences in the Highlands Neighborhood that could house minority and/or low-income residents (Figure 15). Like the GSA Alternative, the PGSB Alternative would require construction activities on one low risk site of concern (Site 3) adjacent to the Columbia Trailer Court, which is likely to house low-income residents.

Figure 15. Hazardous Materials Sites of Concern in Proximity to Residential Areas – PGSB Alternative

**4.3.2 Direct Effects**

Direct effects would be the same under PGSB Alternative as under the GSA Alternative for on-street parking, security, air quality, and hazardous materials. The direct effects resulting from the PGSB Alternative that would be different than the GSA Alternative are described below. Table 9 in Section 4.2.2 provides a summary of the benefits and impacts under the PGSB Alternative and compares the impacts to the No Build and GSA Alternatives.

**Residential relocations and driveway access:** There are no anticipated residential relocations under the PGSB Alternative. Moreover, no individuals from environmental justice populations would be displaced. Existing driveways adjacent to the project footprint could also be altered; for example, all driveways on Oregon Way south of Alabama Street would be changed to right-in/right-out only under the PGSB Alternative.
**Business displacements and access to businesses:** Seven small businesses (each is less than 50 employees), would be displaced under the PGSB Alternative (see Appendix J, Land Use Technical Analysis). This is three fewer business displacements than under the GSA Alternative.

Three of the seven potentially displaced businesses are minority-owned businesses (non-white and/or Hispanic/Latino-owned). Of the 65 employees who would potentially be displaced, 10 employees (15 percent) are minority (non-white), 6 employees are Hispanic/Latino (9 percent), and 27 employees (42 percent) are low-income. As described under the GSA Alternative, there are over 1,200 acres of vacant land in the study area, most of which is zoned for industrial development (over 900 acres) or mixed use commercial/industrial (over 180 acres), where the displaced industrial and commercial businesses could potentially relocate. The access points for RiverCities Transit’s bus facility are not anticipated to be adversely affected under the PGSB Alternative.

As depicted in Figure 17, a few specific vehicular travel routes to and from businesses would include minor out-of-direction travel under the PGSB Alternative.

**Noise:** Of 81 total modeled sites, 20 residences adjacent to Oregon Way in the Highlands Neighborhood, in the Columbia Trailer Court, and along the Highlands Trail are predicted to experience traffic noise levels above the Noise Abatement Criteria (NAC) of 66 dBA with the PGSB Alternative in 2040. However, the impacted residences would also be above impact criteria under the No Build Alternative. WSDOT’s noise barrier analysis determined that the two noise barriers analyzed for the PGSB Alternative were either not reasonable or not feasible (WSP 2017). Minority and low-income persons who live on the perimeter of the Highlands Neighborhood that is adjacent to the Highlands Trail and Oregon Way as well as those Columbia Trailer Court residents living next to Oregon Way may experience higher noise impacts than other residents in the study area that are further away from the project area.

**Neighborhood access, public services, and community cohesion:** Under the PGSB Alternative, changes in vehicular access to and from some neighborhoods and businesses (e.g. access point, circulation) would occur. For example, travel routes for 12 residences on Oregon Way, between Industrial Way and Alabama Street would result in 1.3 miles of out-of-direction travel to access southbound Oregon Way (Figure 16 and Figure 17). Reasonable vehicular access would be maintained for all properties with non-relocated residences and businesses. Altered access may not meet the needs of the specific business currently occupying the property, so some businesses may choose to relocate as a result of these changes.

The roadway facilities proposed as part of the PGSB Alternative would not bisect any existing neighborhoods. The elevated structures slightly change some circulation patterns, such as needing to travel on surface roads and sidewalks to access the elevated intersection. However, no neighborhood would be bisected and the local street network and public amenities would all remain and would continue to contribute to the cohesiveness of the Highlands Neighborhood and the Industrial Way and California Way Neighborhood. Access to public services such as parks and healthcare clinics would remain, although travel routes to and from these locations may change slightly, such as by needing to use surface roads to travel to the roundabout at Industrial Way and Oregon Way, or using 14th Avenue to reach Beech Street.

Minority and low-income persons living in the Highlands Neighborhood and the Industrial Way and California Way Neighborhood could be employed at the commercial and industrial areas south of Industrial Way. Pedestrian and bicycle access to and from neighborhoods and businesses would be improved with the addition of the following ADA-compliant improvements under the PGSB Alternative:
- A new shared-use path along East Port Way that runs north-south, crosses at the new surface roundabout with a crosswalk, connecting to the Highlands Trail on the west side of Oregon Way
- Reuse or reconstruction of the existing Oregon Way sidewalk (west side) on the new one-way surface roadway that runs along the west side of Oregon Way from the Highlands Trail to just north of the Oregon Way/Alabama Way intersection
- New sidewalk on the new surface roadway that runs along the east side of Oregon Way from the new shared-use path to the Oregon Way/Alabama Way roundabout
- New sidewalk on the north and south sides of Alabama Street from Oregon Way to 14th Avenue
- New sidewalk on the east and west sides of 14th Avenue from Alabama Street to Beech Street
- Reuse or reconstruction of the existing Industrial Way sidewalk (north side) on the north side of the new surface road along Industrial Way from the shared-use path to Columbia Boulevard
- New sidewalk on south side of Industrial Way from the point where Industrial Way touches down on the surface to Columbia Boulevard.

Figure 16. Access to Neighborhoods and Residential Areas under the PGSB Alternative
Figure 17. Comparison of Existing Vehicle Travel Routes to and from Businesses and Vehicle Travel Routes under PGSB Alternative

**Existing Travel Routes**

- From SR 433 to Industrial Way North Side Businesses
- From Industrial Way North Side Businesses to SR 433
- From west on Industrial Way to Industrial Way North Side Businesses
- From East Port Way to Industrial Way eastbound

**PGSB Travel Routes**

- From SR 433 to Industrial Way North Side Businesses via elevated structure
- From Industrial Way North Side Businesses via surface streets
- From Industrial Way North Side Businesses to SR 433
- From west on Industrial Way to Industrial Way North Side Businesses via elevated structure
- From west on Industrial Way to Industrial Way North Side Businesses via surface streets
- From West/East Port Way to Industrial Way eastbound
**Visual quality:** The elevated intersection would result in visual change by adding fill material, an overcrossing, and artificial street lighting, and preventing some views of hills in the distance. Some portions of the elevated structure would potentially shield viewers, especially residents in the southeast corner of the Highlands Neighborhood, from existing views of trains, trucks, buildings and utilities in this highly industrial area. However, this benefit would be less under PGSB than under the GSA Alternative, because there would be openings in the vegetated berm that would still retain views toward the industrial area, including trains and trucks. In addition, the elevated portion of Industrial Way would continue until approximately 21st Avenue and the elevated portion of Oregon Way would continue north of the intersection of Alabama Street, which would change the view for more residents than under the GSA Alternative. However, the change in visual quality is expected to be more severe for the residents who live in the houses along the perimeter of the Highlands Neighborhood along Oregon Way between Industrial Way and just north of Alabama Street and along the Highlands Trail from Industrial Way to approximately 21st Avenue. Similar visual quality impacts would be experienced by Columbia Trailer Court residents whose houses are on the Oregon Way perimeter.

**Transportation:** The transportation benefits from this alternative would be similar to the benefits described under the GSA Alternative, including benefits that would be particularly positive for minority and/or low-income residents. With only part of the intersection grade-separated under the PGSB Alternative, travel reliability would differ slightly compared to the GSA Alternative.

Traffic flow and travel reliability would be substantially improved under the PGSB Alternative as many motorists would no longer be delayed by train crossings. At-grade rail crossings of the intersection legs that carry the higher traffic volumes would be eliminated for vehicles. Surface roadways associated the surface roundabout would have at-grade roadway/railroad crossing; however, there would be lower volumes of vehicular traffic that would experience roadway blockages when trains cross the roadway.

### 4.3.3 Indirect Effects

Indirect effects associated with the PGSB Alternative would be similar to those described under the GSA Alternative.

### 5.0 MEASURES TO AVOID OR MINIMIZE PROJECT EFFECTS

The GSA and the PGSB Alternatives have been designed to avoid residential displacements and to improve safety. During construction, information on the project status would be shared with the public using media releases, updates to the project website, and notices in local newspapers.

To minimize project effects to neighborhoods, including traditionally underserved populations, and businesses during construction, the following measures would be implemented:

- Send English and Spanish notices/flyers to residents, businesses, project stakeholders, schools, churches, community service organizations, Kelso/Longview Chamber of Commerce, and local media in advance of construction activities to provide information about upcoming construction activities and schedule, detour routes, and temporary utility service disruptions, if any.
- Install variable message signs in advance of construction activities to allow travelers to plan alternate routes.
- Consider installing signs near residential areas to encourage “local access only,” and to discourage cut-through traffic, particularly the Highlands and St. Helens neighborhoods.
• Where construction work zones impact existing pedestrian facilities, ensure that ADA-compliant alternate routes and detour signage are provided.

• If feasible, incorporate goals in the construction contract that contractors utilize a designated percentage of women and minorities during construction of the project.

To minimize long-term project effects to neighborhoods, including traditionally underserved populations, and businesses, WSDOT would implement the following measures:

• Follow WSDOT’s standard, systematic process for business relocations in compliance with the Uniform Relocation Assistance and Real Property Acquisition Polices Act of 1970 as amended. The legal requirements and relocation process are described in WSDOT Right-of-Way Manual M 26-01 Chapter 12.

• Ensure that pedestrian facilities (existing and newly constructed) associated with this roadway project are ADA-compliant and provide connectivity between the affected neighborhoods and employers south of Industrial Way.

• Consider proactive design techniques to discourage people congregating beneath elevated structures to minimize security concerns.

• Consider community input on the aesthetics of any walls constructed as part of the project.

• Coordinate with the City of Longview to promote safety and security by installing illumination in areas where the elevated intersection creates isolated or concealed spaces.

Please refer to Chapter 4 of the Draft EIS for mitigation measures that would avoid or minimize any minor adverse effects to air quality, hazardous materials, noise, transportation (including pedestrian, bicycle and transit), and visual quality.

6.0 ENVIRONMENTAL JUSTICE DETERMINATION

The Highlands Neighborhood and Industrial Way and California Way Neighborhood located near the intersection would experience the majority of the construction-related and long-term impacts from both the GSA and PGSB Alternatives as summarized in Table 9. Based on the demographic data presented earlier, these neighborhoods are considered to be environmental justice populations for the purpose of this project.

The impacts to minorities and low-income populations that would result from the project would be unavoidable when undertaking any type of substantial improvement to the Industrial Way/Oregon Way intersection due to the proximity of these two neighborhoods. Thus, no practicable alternative to the GSA and PGSB Alternatives would avoid similar social and economic impacts to these residents and households. Mitigation measures to minimize construction-related impacts, such as measures to control dust, limit construction noise, avoid exposure to contaminated materials, and minimize neighborhood cut-through traffic, are incorporated into the GSA and PGSB Alternatives and would lessen some of the impacts; however, not all construction-related impacts could be completely avoided. Additional mitigation is proposed to lessen long-term impacts stemming from permanent changes to some residents’ views, noise impacts to residences along the perimeter of the Highlands Neighborhood and Columbia Trailer Court, and displacements of minority-owned businesses and businesses that employ minority and low-income staff. The mitigation for long-term changes could reduce some of the impact intensity, but affected residents, business owners, and employees would still experience substantive changes compared to existing conditions.
Community engagement opportunities were provided throughout the development of the project to provide information about the project and gather input from study area residents (owners and tenants) and businesses (owners and managers). Specific opportunities for environmental justice populations, as well as other traditionally underserved populations, to provide input on the project included: comment forum on the project website; flyers distributed at local businesses, a neighborhood church, a mobile foodbank event and a National Night Out event in the Highlands Neighborhood; project team presentations at the Highlands Neighborhood Association meetings; project team meetings with the Columbia Trailer Court manager; and residential and business surveys. Input from residents and business owners primarily asked about changes in travel routes that would result from the GSA and PGSB Alternatives, potential closures of driveways, creation of isolated spaces under the elevated portions of the intersection that could attract crime, and a concern about cut-through traffic that could occur during construction.

In conclusion, the project with incorporated mitigation measures would have an unavoidable and disproportionately high and adverse impact on the residential areas near the Industrial Way/Oregon Intersection, which have high concentrations of low-income and minority populations, as well as several minority-owned businesses and businesses that employ minority and low-income staff.

7.0 REFERENCES


Longview Housing Authority. 2017. Telephone call with Vickie Rose of the Longview Housing Authority to discuss low-income housing within the study area. April 17, 2017.


Table P5: Hispanic or Latino Origin by Race
Table P12: Sex by Age


Table B08201: Household Size by Vehicles Available
Table B16001 - Language Spoken at Home by Ability to Speak English for the Population 5 Years and Older
Table B17021: Poverty Status of Individuals in the Past 12 Months by Living Arrangement
Table C21007: Age by Veteran Status by Poverty Status in The Past 12 Months by Disability Status for the Civilian Population 18 Years and Over


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Attachment A: Relocation, Social, Economic and Public Services Impact Assessment Methodology Memorandum
Memorandum

To: Joanna Lowrey, PE, WSDOT Kelso Area Engineer
Claude Sakr, Cowlitz County Project Manager

From: Kirsten Tilleman, AICP, WSP

Date: April 1, 2016
Revised August 4, 2017

Subject: Impact Assessment Methodology: Relocation, Social, Economic and Public Services

1 Methodology Introduction

This memorandum presents the methodology used to analyze potential effects of the proposed Industrial Way/Oregon Way Intersection Project on relocation, social, economic, and public services. This analysis is included in Appendix L (Relocation, Social, Economic, Public Services, and Environmental Justice Technical Analysis) of the environmental impact statement (EIS) prepared for the project. The relocation, social, economic, and public services analysis includes analysis of environmental justice populations; however, the environmental justice population analysis was originally separate from this analysis so a separate impact assessment methodology memorandum was prepared for environmental justice.

2 Study Area

The study area for relocation, social, economic and public services is shown in Figure A-1. As defined by the Washington State Department of Transportation’s (WSDOT) TSK 458–a: Define the Social, Economic and Environmental Justice Study Area (2014), the study area for social and economic is defined as at least 1/2 mile on each side of the centerline (Industrial Way and Oregon Way), and follows neighborhood boundaries and census blocks for the residential areas near the intersection. While direct impacts would generally be limited to the land area within 1/2 on each side of the centerline, indirect impacts to social and economic may extend to a much larger geographic area. As described in the project’s purpose and need statement, the intersection of Industrial Way and Oregon Way/SR 433 is crucial to movement of truck freight from the Port of Longview and local industrial operations, most of which are located within a 2-mile radius of the intersection. The study area includes industrial lands that have the potential to experience the indirect impact of future development and/or redevelopment as a result of improved roadway operations from this project. Industrial lands include lands owned by the Port of Longview as well as privately-owned lands zoned for industrial uses in Longview and Cowlitz County, Washington and in Rainier and Columbia County, Oregon. Development and/or redevelopment could create additional employment opportunities and local economic impacts. This study area was also used to evaluate anticipated direct and indirect impacts to land use and associated with relocations and public services. U.S. Census Bureau demographic data were used for the social and economic analysis. The census block groups that are wholly within or intersect the study area were identified and included in the analysis documented in the EIS.
Figure A-1. Study Area for Relocation, Social, Economic, and Public Services
3 Regulations, Standards, or Guidelines

The relocation, social, economic, and public services analysis identifies and describes the federal and state policies and regulations that guide evaluating effects on social and economic resources, including:

- National Environmental Policy Act (NEPA) prohibits federal agencies from taking action without first evaluating potential effects on the environment
- Title VI of the Civil Rights Act of 1964, as amended, prohibits discrimination based on race, creed, color, national origin, and sex in programs and activities receiving federal financial assistance
- Title 49 of the Code of Federal Regulations (CFR) Part 21, Nondiscrimination in Federally Assisted Programs of the Department of Transportation, Effectuation of Title VI of the Civil Rights Act of 1964
- Title 23 of the United States Code (USC) Section 109(h), Federal Highway Administration Effectuation of Title VI of the Civil Rights Act of 1964
- Age Discrimination Act of 1975 prohibits discrimination against the elderly
- American with Disabilities Act of 1990 prohibits discrimination against disabled populations
- Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, establishes minimum standards for federally funded programs and projects that require the acquisition of real property (real estate) or displace persons from their homes, businesses, or farms
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency (65 FR 50121, 2000), requires all federal departments and agencies extending financial assistance to develop and make available guidance on how recipients should assess and address the needs of otherwise eligible limited English proficient persons seeking access to the programs and activities of recipients of federal financial assistance
- Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks (62 FR 19885, 1997), requires federal agencies to evaluate the effects of the planned regulation on children and explain why the regulation is preferable to potentially effective and reasonably feasible alternatives
- Washington State Environmental Policy Act (SEPA) prohibits state and local agencies from taking action without evaluating potential effects on the environment
- Governor’s Executive Order 93-07, Affirming Commitment to Diversity and Equity in the Service Delivery and in the Communities of the State [Washington] requires all executive agencies and institutions of higher education in the state to integrate the principles of diversity into all facets of workplace community and in the delivery of services
The federal and state guidelines include the following:

- Federal Highway Administration (FHWA) NEPA Guidelines
- FHWA Technical Advisory T6640.8A, Guidance for Preparing and Processing Environmental and Section 4(f) Documents
- FHWA’s Community Impact Assessment: A Quick Reference for Transportation

4 Sources of Existing Data

The following datasets were used:

- 2010 U.S. Census Bureau statistics and the most recent 5-year summary statistics will be used to provide the following data about the study area, City of Longview, Cowlitz County, and the State of Washington:
  - Population (2000 to current)
  - Income
  - Disability
  - Age
  - Limited English proficiency
  - Average household size
  - Transit-dependent population
- Student population data from the closest public elementary school serving the study area, via the State of Washington’s Office of Superintendent of Public Instruction (OSPI)
- Google Earth and Google Street View will be used for an initial desktop analysis
- State and local jurisdiction websites will be relied on for local economic conditions including employment (unemployment, largest employers, average wages, etc.) and tourism information
- Population and economic information will be obtained from the Bureau of Economic Analysis, Washington State Office of Financial Management, and the Washington State Employment Security Department
- Local government agency websites will be used, including those for the City of Longview, and Cowlitz County, to determine current zoning and comprehensive plan goals and objectives for the study area
- Project specific right-of-way, property acquisition and relocation data will be obtained from WSDOT. WSDOT standard forms and brochures will be referenced including: the most current version of the WSDOT Right of Way Manual (2014) and Relocation Assistance Program brochures (2014-2015)
While the relocation, social, economic and public services impacts will directly occur within the study area, in many instances data used to support the analysis will be compared to the city, county, and/or state level data. Where appropriate, data collection will be coordinated with other relevant disciplines such as air quality, energy and greenhouse gas, environmental justice, land use, noise, transportation, and visual resources.

5 Data Gathering or Development

In addition to the existing data described in Section 4, a site visit was conducted in coordination with the environmental justice site visit to obtain an overview of the social and economic context of the study area.

Particular community issues and concerns were identified by reviewing agency and public involvement and coordination records. These included the public involvement plan and summaries of the key stakeholder interviews, the scoping meetings, and the open house meetings. Additional information was obtained from meeting notes documenting the public outreach activities and the community’s issues and concerns about the project and their response to proposed mitigation.

The relocation, social, economic, and public services analysis also relies upon results from surveys of businesses and residents. These paper surveys were mailed or hand-delivered and were provided in both English and Spanish. An online project survey also included demographic and service-related questions relevant to the relocation, social, economic, and public services analysis. These surveys provide information about the number and types of businesses located adjacent to and near the study area, their employees and customers, property access from Industrial Way/Oregon Way, and on-site circulation. These surveys also provide information about the number and demographic makeup of households located adjacent to and near the study area.

Data from WSDOT designers were used to show the following for each alternative: 1) temporary construction footprint, including temporary construction easements and access changes; 2) permanent project footprint of the new facility; 3) the area to be acquired from each parcel; and 4) an assessment of whether or not acquisitions would result in residential and/or business displacements.

6 Analytical Techniques and Models

The relocation, social, economic, and public services analysis generally follows the process described in WSDOT’s Environmental Manual Sections 458.09; however, this analysis is also “right-sized” for the project. This includes analysis of the following: neighborhoods, social resources, community cohesion, displacements, relocations, business activity, jobs, and property value trends.

6.1 Construction Impacts

Construction impacts to the economic and social resources and -traditionally underserved populations listed above were assessed by overlaying the temporary construction footprint and evaluating how construction activities could impact these resources. The analysis:

- Qualitatively assesses the temporary adverse and/or beneficial impacts to regional economic activity
• Evaluates temporary adverse and/or beneficial economic impacts on businesses in the study area including: loss of parking, loss of freight delivery parking, loss of sidewalk and bicycle connectivity, detours and travel time, business visibility, etc.

• Qualitatively assesses temporary changes in vehicular through-traffic on neighborhood streets

• Qualitatively assesses construction expenditures and their effect on sales tax revenue

• Describes temporary jobs created during construction

6.2 Direct Impacts

Direct impacts to economic and social resources and traditionally underserved populations were identified through analysis of how the project improvements would affect the existing conditions. The analysis:

• Qualitatively describes the impacts of the project on the local economy

• Discusses impacts of property acquisitions as they relate to changes in government revenues

• Estimates the number of jobs displaced through property acquisitions

• Describes the adverse and/or beneficial impacts to traffic and access as they relate to business conditions and community cohesion

• Describes the adverse and/or beneficial impacts to designated freight corridors as they relate to transporting goods within the city and business districts

• Describes the adverse and/or beneficial impacts of the project improvements to local street, transit, bicycle and pedestrian access, emergency service provider response times, circulation, and connectivity

• Describes the adverse and/or beneficial impacts to social institutions, such as churches, homeless shelters, etc.

• Assesses and describes impacts to residential, businesses and/or traditionally underserved populations not covered in the environmental justice analysis (which is limited to low-income and minority populations), including displacements, air quality, noise, visual quality, etc.

6.3 Indirect Impacts

Indirect impacts to social and economic resources were assessed by reviewing how the project improvements spur or hinder social and economic resources and business vitality in the study area. Consistency with adopted comprehensive plans evaluated in the land use analysis was considered in the relocation, social, economic, and public services analysis.
7 Summary of Potential Impacts and Mitigation

The following is a brief summary of the types of benefits and adverse impacts that may result from the project, though actual project benefits and impacts were identified through the analysis methods described in Section 6. This section also includes mitigation measures that could be considered to reduce or eliminate adverse impacts.

7.1 Potential Benefits

Benefits could include:

- Improved traffic flow through the study area
- Opportunities for redevelopment of partially acquired parcels
- Increased vehicle, pedestrian and bicycle safety
- Improved regional and statewide movement of goods and people

7.2 Potential Adverse Impacts

Adverse impacts could include:

- Conversion of lands zoned for residential, commercial, industrial or other uses to right-of-way
- Residential and/or business displacements due to right-of-way acquisition
- Changed emergency service provider response times
- Modified access and/or out-of-direction travel to businesses, residences, and public services in the study area
- Disruption of economic activities to businesses in the study area
- Increased dust, noise and vibration during work hours
- Changes in property value resulting from project improvements

7.3 Potential Mitigation

Mitigation measures to avoid, minimize, or mitigate impacts to land uses were developed in consultation with WSDOT and Cowlitz County.

8 Limitations and Constraints

The relocation, social, economic, and public services analysis is limited to the most up-to-date data available from the U.S. Census: currently, the 2010 U.S. Decennial Census and the 2011-2015 American Community Survey (ACS) 5-year Summary. Where available, demographic data was also gathered from local schools and public service organizations to supplement the ACS data. If updated data become available during analysis, the analysis will be updated to reflect the new datasets.
American Community Survey (ACS) data are now the U.S. Census Bureau source for income data. The ACS is based on a sample of the total population, so there is a range of uncertainty in this data. In some cases, there are substantial margins of error for smaller geographies, such as block groups. To the extent possible, ACS data were compared against additional data sources (e.g., school demographic data).
Attachment B: Environmental Justice Impact Assessment
Methodology Memorandum
Memorandum

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<th>Joanna Lowrey, PE, WSDOT Kelso Area Engineer</th>
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<td>Claude Sakr, Cowlitz County Project Manager</td>
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<th>Stephanie Sprague, AICP, PMP</th>
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1 Methodology Introduction

This memorandum presents the methodology used to analyze potential effects of the proposed Industrial Way/Oregon Way Intersection Project on environmental justice populations. This analysis is included in Appendix L (Relocation, Social, Economic, Public Services, and Environmental Justice Technical Analysis) of the environmental impact statement (EIS) prepared for the project. The environmental justice population analysis was originally separate from the relocation, social, economic, and public services analysis so this separate impact assessment methodology memorandum was prepared for environmental justice.

2 Study Area

The study area for environmental justice is shown in Figure B-1. As defined by the Washington State Department of Transportation’s (WSDOT) Environmental Manual (June 2017), Chapter 458 and TSK 458a, Define the Social, Economic and Environmental Justice Study Area, the study area for environmental justice populations is defined as at least 1/2 mile on each side of the centerline (Industrial Way (SR 432), SR 433, and Oregon Way) of the project. The study area encompasses the area within which direct and/or indirect impacts to environmental justice populations would be anticipated to occur as a result of the project. The study area was extended beyond the ½ mile buffer to capture complete census block groups and encompass the City of Longview’s defined neighborhoods (Figure B-2). U.S. Census Bureau demographic data was used for the environmental justice analysis. The census block groups that are wholly within or intersect the study area were identified and included in the analysis documented in the EIS.
Figure B-1. Study Area for Environmental Justice
Figure B-2. Geographic Boundaries of Demographic Data within the Environmental Justice Study Area

Legend:
- Study Area
- Waterbody
- Block Group & Census Tract Boundaries
- Mobile Home Park
- State Boundary

Block Groups (BG) and Census Tracts (CT):
A. BG 1/CT 5.02
B. BG 2/CT 5.01
C. BG 3/CT 5.01
D. BG 1/CT 5.01
E. BG 3/CT 5.02
F. BG 1/CT 5.02
G. BG 1/CT 3
H. BG 1/CT 19
I. BG 1/CT 7.03
J. BG 1/CT 7.02
K. BG 1/CT 9703

Mobile Home Parks:
1. Delray Mobile Home Park
2. Motel California RV Park
3. El Patio Mobile Home Park
4. Columbia Trailer Court
5. De Luxe Mobile Home Park
6. Plaza Mobile Home Park
7. River’s Edge Mobile Home Park

Elementary Schools:
- Mint Valley Elementary School
- Olympic Elementary School
- St. Helens Elementary School
- Kessler Elementary School
- Northlake Elementary School
- Hudson Park Elementary School
3 Regulations, Standards, or Guidelines

The environmental justice analysis identifies and describes the federal, state, and local policies and regulations that guide evaluating effects on environmental justice populations, including:

- Civil Rights Act of 1964 (Pub. L. 88-352) (Title VI)
- Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (as amended). 49 CFR 24
- National Environmental Policy Act (NEPA) (1969)
- Presidential Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
- Presidential Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency
- Washington Administrative Code (WAC) 1998 State Environmental Policy Act (SEPA) WAC 197-11

4 Sources of Existing Data

The following sources of data were used to describe the existing low-income and minority residents in the study area:

- Most current census data available through EPA’s online EJScreen tool including the percent of low-income individuals, minority individuals, and limited English proficient individuals living in the study area compared to Cowlitz County
- Student population data from the closest public elementary school serving the study area via the State of Washington’s Office of Superintendent of Public Instruction (OSPI)
- Local service providers including those for the City of Longview and Cowlitz County, that provide housing, employment, and other social services
- Demographic information gathered through the public outreach program’s residential English and Spanish survey

The public outreach program for the project will also be a source for identifying low-income and minority households, minority-owned businesses and businesses that employ minority and low-income individuals or those businesses that provide services to low-income and minority persons. Specific questions, in English and other languages as appropriate, have been included in public outreach materials, including residential and business surveys, to identify these businesses, as well as to identify residences whose occupants are low-income and/or identify as a minority. The methodology of the analysis of impacts to other vulnerable populations (e.g., children, elderly, disabled) is described in the Relocations, Social, Economic and Public Services Impact Assessment Methodology Memo.
5 Data Gathering or Development

In addition to demographic data collected to document low-income and minority residents in the study area described above, a site reconnaissance was conducted in conjunction with the drive through done for the social and economic analysis to identify resources for environmental justice populations including social services providers, parks and recreation facilities, grocery stores, schools, churches and transportation and transit resources. Additionally, information gathered through the public outreach program was compiled and analyzed to help identify environmental justice populations, and minority-owned businesses or businesses providing goods and services to environmental justice populations, in the study area that may be impacted by the project.

6 Analytical Techniques and Models

6.1 Construction Impacts

Temporary construction impacts to environmental justice populations were assessed through coordination with WSDOT, Cowlitz County and the City of Longview to review the temporary construction footprint and how construction activities could impact those resources. The analysis:

- Discusses, qualitatively, the temporary adverse, and/or beneficial impacts to minority-owned businesses or those businesses that provide goods and services to environmental justice populations including: loss of parking, loss of freight delivery parking, loss of sidewalk and bicycle connectivity, detours and travel time, business visibility, access to transit, etc.

- Assesses temporary changes in vehicular through-traffic on streets in neighborhoods with concentrations of environmental justice populations

- Identifies and describes any temporary relocations that are necessary for construction, if any, and assess if those are disproportionately borne by environmental justice populations

- Describes temporary jobs created during construction and efforts to seek low-income or minority candidates to apply for those job openings

- Describes if other temporary impacts identified in the following technical analysis for the project would be disproportionately borne by environmental justice populations: social and economic, air quality, noise, visual, transportation, and hazardous materials

6.2 Direct Impacts

Direct impacts to environmental justice populations were identified through analysis of how the build alternative(s) would affect the existing conditions. The analysis considers the following and whether or not these impacts would be disproportionate and adverse to environmental justice populations:

- Discusses changes in community cohesion (splitting or isolating areas, generating new development, and separation from services)

- Considers changes in travel patterns, travel time, and accessibility for all modes
Identifies permanent displacements of households, businesses, and/or social services or other resources such as parks and churches and discuss the availability of replacement housing.

- Evaluates changes in traffic safety and overall public safety
- Qualitatively discusses impacts to human health from traffic noise, air pollution, and vibration
- Discusses direct project benefits to the community; whether distribution of benefits is equitable; and how benefits do or do not accrue for environmental justice populations
- Evaluates the potential impacts of access changes such as driveway closures or right-in/right-out only access to residences and businesses

6.3 Indirect Impacts

Once the analysis of direct impacts was complete, a qualitative assessment of potential indirect impacts to environmental justice populations was made.

7 Summary of Potential Impacts and Mitigation

The following is a brief summary of the types of benefits and adverse impacts that may result from the project. This section also includes mitigation measures that could be considered to reduce or eliminate adverse impacts.

7.1 Potential Benefits

Potential benefits could include, but may not be limited to:

- Improved vehicular and pedestrian/bicyclist safety
- Reduced congestion and improved mobility for all modes, thereby improving the overall predictability and reliability of travel times
- Improved emergency response times

7.2 Potential Adverse Impacts

Potential adverse impacts could include, but may not be limited to:

- Splitting or isolating areas, generating new development, and separation from social services
- Owner-occupied residential or business displacement, or displacement of rental units
- Increased travel time due to travel route changes and/or driveway closures (potential right-in/right-out driveways)
- Increased noise or air pollution from higher traffic volumes
- Reduced visual quality resulting from construction of new highway facilities
If the impacts are found to be disproportionate and adverse to environmental justice populations, those impacts will be disclosed to project stakeholders and communicated to environmental justice populations to seek their input on additional mitigation measures to avoid, minimize, or mitigate these impacts. Mitigation measures were developed in consultation with WSDOT, Cowlitz County and the City of Longview to confirm they achieve the project’s purpose and need are technically feasible.

### 7.3 Potential Mitigation

The project team identified and described potential mitigation measures and sought input from members of the study area’s environmental justice population. The project team documented how input gathered from environmental justice populations was incorporated into the selection of the preferred alternative. If mitigation measures identified by the members of the environmental justice population are not included in the preferred alternative, the reasons are documented.

### 8 Limitations and Constraints

The environmental justice analysis is limited to the most up-to-date data available from the U.S. Census: currently, the 2010 U.S. Decennial Census and the 2011-2015 American Community Survey (ACS) 5-year Summary. Where available, demographic data was also gathered from local schools and public service organizations to supplement the ACS data. If updated data become available during analysis, the analysis will be updated to reflect the new datasets.

American Community Survey (ACS) data are now the U.S. Census Bureau source for income data. The ACS is based on a sample of the total population, so there is a range of uncertainty in this data. In some cases, there are substantial margins of error (MOE) for smaller geographies, such as block groups. To the extent possible, ACS data were compared against additional data sources (e.g., school demographic data).
Attachment C: Study Area Demographic Data
Table C-1. Disabled Persons

<table>
<thead>
<tr>
<th>Map ID</th>
<th>Neighborhood</th>
<th>Geography (Block Groups)</th>
<th>Total Pop (ACS)</th>
<th>Total Pop (ACS; 18+)</th>
<th>Percent Disabled (18+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Highlands</td>
<td>Block Group 1, Census Tract 5.02, Cowlitz County, WA</td>
<td>1,663</td>
<td>1,096</td>
<td>28% (311)</td>
</tr>
<tr>
<td>B</td>
<td>St. Helens</td>
<td>Block Group 2, Census Tract 5.01, Cowlitz County, WA</td>
<td>1,125</td>
<td>765</td>
<td>13% (96)</td>
</tr>
<tr>
<td>C</td>
<td>St. Helens</td>
<td>Block Group 3, Census Tract 5.01, Cowlitz County, WA</td>
<td>735</td>
<td>571</td>
<td>31% (179)</td>
</tr>
<tr>
<td>D</td>
<td>St. Helens</td>
<td>Block Group 1, Census Tract 5.01, Cowlitz County, WA</td>
<td>1,028</td>
<td>852</td>
<td>34% (291)</td>
</tr>
<tr>
<td>E</td>
<td>Highlands</td>
<td>Block Group 3, Census Tract 5.02, Cowlitz County, WA</td>
<td>1,483</td>
<td>1,135</td>
<td>46% (517)</td>
</tr>
<tr>
<td>F</td>
<td>Highlands</td>
<td>Block Group 2, Census Tract 5.02, Cowlitz County, WA</td>
<td>1,634</td>
<td>1,140</td>
<td>42% (483)</td>
</tr>
<tr>
<td>G</td>
<td>Indust. &amp; CA Way; Mint Farm</td>
<td>Block Group 1, Census Tract 3, Cowlitz County, WA</td>
<td>601</td>
<td>429</td>
<td>41% (178)</td>
</tr>
<tr>
<td>H</td>
<td>Barlow Point</td>
<td>Block Group 1, Census Tract 19, Cowlitz County, WA</td>
<td>1,254</td>
<td>927</td>
<td>44% (411)</td>
</tr>
<tr>
<td>I</td>
<td>Memorial Park</td>
<td>Block Group 1, Census Tract 7.03, Cowlitz County, WA</td>
<td>1,429</td>
<td>1,193</td>
<td>33% (391)</td>
</tr>
<tr>
<td>J</td>
<td>Memorial Park</td>
<td>Block Group 1, Census Tract 7.02, Cowlitz County, WA</td>
<td>2,160</td>
<td>1,585</td>
<td>20% (322)</td>
</tr>
<tr>
<td>K</td>
<td>Western Rainier</td>
<td>Block Group 1, Census Tract 9703, Columbia County, OR</td>
<td>1,006</td>
<td>803</td>
<td>28% (226)</td>
</tr>
<tr>
<td>N/A</td>
<td>Study Area</td>
<td>Combined Study Area Block Groups</td>
<td>14,118</td>
<td>10,496</td>
<td>32% (3,405)</td>
</tr>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>City of Longview</td>
<td>35,669</td>
<td>27,827</td>
<td>28% (7,768)</td>
</tr>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>City of Rainier</td>
<td>1,961</td>
<td>1,545</td>
<td>17% (267)</td>
</tr>
</tbody>
</table>
### Table C-2. Elderly Persons (over Age 65)

<table>
<thead>
<tr>
<th>Map ID</th>
<th>Neighborhood</th>
<th>Geography (Block Groups)</th>
<th>Total Pop (Census)</th>
<th>Percent Elderly (65+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Highlands</td>
<td>Block Group 1, Census Tract 5.02, Cowlitz County, WA</td>
<td>1,941</td>
<td>6% (106)</td>
</tr>
<tr>
<td>B</td>
<td>St. Helens</td>
<td>Block Group 2, Census Tract 5.01, Cowlitz County, WA</td>
<td>724</td>
<td>16% (116)</td>
</tr>
<tr>
<td>C</td>
<td>St. Helens</td>
<td>Block Group 3, Census Tract 5.01, Cowlitz County, WA</td>
<td>932</td>
<td>16% (151)</td>
</tr>
<tr>
<td>D</td>
<td>St. Helens</td>
<td>Block Group 1, Census Tract 5.01, Cowlitz County, WA</td>
<td>1,170</td>
<td>11% (128)</td>
</tr>
<tr>
<td>E</td>
<td>Highlands</td>
<td>Block Group 3, Census Tract 5.02, Cowlitz County, WA</td>
<td>1,323</td>
<td>7% (97)</td>
</tr>
<tr>
<td>F</td>
<td>Highlands</td>
<td>Block Group 2, Census Tract 5.02, Cowlitz County, WA</td>
<td>1,594</td>
<td>6% (92)</td>
</tr>
<tr>
<td>G</td>
<td>Indust. &amp; CA Way; Mint Farm</td>
<td>Block Group 1, Census Tract 3, Cowlitz County, WA</td>
<td>509</td>
<td>20% (103)</td>
</tr>
<tr>
<td>H</td>
<td>Barlow Point</td>
<td>Block Group 1, Census Tract 19, Cowlitz County, WA</td>
<td>956</td>
<td>17% (163)</td>
</tr>
<tr>
<td>I</td>
<td>Memorial Park</td>
<td>Block Group 1, Census Tract 7.03, Cowlitz County, WA</td>
<td>1,601</td>
<td>22% (351)</td>
</tr>
<tr>
<td>J</td>
<td>Memorial Park</td>
<td>Block Group 1, Census Tract 7.02, Cowlitz County, WA</td>
<td>2,052</td>
<td>13% (258)</td>
</tr>
<tr>
<td>K</td>
<td>Western Rainier</td>
<td>Block Group 1, Census Tract 9703, Columbia County, OR</td>
<td>994</td>
<td>21% (208)</td>
</tr>
<tr>
<td>N/A</td>
<td>Study Area</td>
<td>Combined Study Area Block Groups</td>
<td>13,796</td>
<td>13% (1,173)</td>
</tr>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>City of Longview</td>
<td>36,648</td>
<td>18% (6,431)</td>
</tr>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>City of Rainier</td>
<td>1,895</td>
<td>18% (340)</td>
</tr>
</tbody>
</table>
### Table C-3. Youth (Ages 0 to 17)

<table>
<thead>
<tr>
<th>Map ID</th>
<th>Neighborhood</th>
<th>Geography (Block Groups)</th>
<th>Total Pop (Census)</th>
<th>Percent Youth (&lt;18)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Highlands</td>
<td>Block Group 1, Census Tract 5.02, Cowlitz County, WA</td>
<td>1,941</td>
<td>36% (691)</td>
</tr>
<tr>
<td>B</td>
<td>St. Helens</td>
<td>Block Group 2, Census Tract 5.01, Cowlitz County, WA</td>
<td>724</td>
<td>21% (155)</td>
</tr>
<tr>
<td>C</td>
<td>St. Helens</td>
<td>Block Group 3, Census Tract 5.01, Cowlitz County, WA</td>
<td>932</td>
<td>23% (213)</td>
</tr>
<tr>
<td>D</td>
<td>St. Helens</td>
<td>Block Group 1, Census Tract 5.01, Cowlitz County, WA</td>
<td>1,170</td>
<td>24% (280)</td>
</tr>
<tr>
<td>E</td>
<td>Highlands</td>
<td>Block Group 3, Census Tract 5.02, Cowlitz County, WA</td>
<td>1,323</td>
<td>31% (404)</td>
</tr>
<tr>
<td>F</td>
<td>Highlands</td>
<td>Block Group 2, Census Tract 5.02, Cowlitz County, WA</td>
<td>1,594</td>
<td>32% (511)</td>
</tr>
<tr>
<td>G</td>
<td>Indust. &amp; CA Way; Mint Farm</td>
<td>Block Group 1, Census Tract 3, Cowlitz County, WA</td>
<td>509</td>
<td>18% (89)</td>
</tr>
<tr>
<td>H</td>
<td>Barlow Point</td>
<td>Block Group 1, Census Tract 19, Cowlitz County, WA</td>
<td>956</td>
<td>23% (215)</td>
</tr>
<tr>
<td>I</td>
<td>Memorial Park</td>
<td>Block Group 1, Census Tract 7.03, Cowlitz County, WA</td>
<td>1,601</td>
<td>23% (362)</td>
</tr>
<tr>
<td>J</td>
<td>Memorial Park</td>
<td>Block Group 1, Census Tract 7.02, Cowlitz County, WA</td>
<td>2,052</td>
<td>25% (505)</td>
</tr>
<tr>
<td>K</td>
<td>Western Rainier</td>
<td>Block Group 1, Census Tract 9703, Columbia County, OR</td>
<td>994</td>
<td>19% (189)</td>
</tr>
<tr>
<td>N/A</td>
<td>Study Area</td>
<td>Combined Study Area Block Groups</td>
<td>13,796</td>
<td>26% (3,614)</td>
</tr>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>City of Longview</td>
<td>36,648</td>
<td>23% (8,510)</td>
</tr>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>City of Rainier</td>
<td>1,895</td>
<td>22% (413)</td>
</tr>
<tr>
<td>Map ID</td>
<td>Neighborhood</td>
<td>Geography (Block Groups)</td>
<td>Total Pop (Census)</td>
<td>Percent Racial Minority</td>
</tr>
<tr>
<td>-------</td>
<td>----------------------</td>
<td>--------------------------------------------------</td>
<td>--------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>A</td>
<td>Highlands</td>
<td>Block Group 1, Census Tract 5.02, Cowlitz County, WA</td>
<td>1,941</td>
<td>28% (535)</td>
</tr>
<tr>
<td>B</td>
<td>St. Helens</td>
<td>Block Group 2, Census Tract 5.01, Cowlitz County, WA</td>
<td>724</td>
<td>12% (89)</td>
</tr>
<tr>
<td>C</td>
<td>St. Helens</td>
<td>Block Group 3, Census Tract 5.01, Cowlitz County, WA</td>
<td>932</td>
<td>9% (83)</td>
</tr>
<tr>
<td>D</td>
<td>St. Helens</td>
<td>Block Group 1, Census Tract 5.01, Cowlitz County, WA</td>
<td>1,170</td>
<td>14% (165)</td>
</tr>
<tr>
<td>E</td>
<td>Highlands</td>
<td>Block Group 3, Census Tract 5.02, Cowlitz County, WA</td>
<td>1,323</td>
<td>21% (273)</td>
</tr>
<tr>
<td>F</td>
<td>Highlands</td>
<td>Block Group 2, Census Tract 5.02, Cowlitz County, WA</td>
<td>1,594</td>
<td>26% (410)</td>
</tr>
<tr>
<td>G</td>
<td>Indust. &amp; CA Way; Mint Farm</td>
<td>Block Group 1, Census Tract 3, Cowlitz County, WA</td>
<td>509</td>
<td>21% (108)</td>
</tr>
<tr>
<td>H</td>
<td>Barlow Point</td>
<td>Block Group 1, Census Tract 19, Cowlitz County, WA</td>
<td>956</td>
<td>5% (44)</td>
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<tr>
<td>I</td>
<td>Memorial Park</td>
<td>Block Group 1, Census Tract 7.03, Cowlitz County, WA</td>
<td>1,601</td>
<td>12% (193)</td>
</tr>
<tr>
<td>J</td>
<td>Memorial Park</td>
<td>Block Group 1, Census Tract 7.02, Cowlitz County, WA</td>
<td>2,052</td>
<td>9% (179)</td>
</tr>
<tr>
<td>K</td>
<td>Western Rainier</td>
<td>Block Group 1, Census Tract 9703, Columbia County, OR</td>
<td>994</td>
<td>6% (55)</td>
</tr>
<tr>
<td>N/A</td>
<td>Study Area</td>
<td>Combined Study Area Block Groups</td>
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<td>15% (2,134)</td>
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<tr>
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<td>N/A</td>
<td>City of Longview</td>
<td>36,648</td>
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<tr>
<td>N/A</td>
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<td>City of Rainier</td>
<td>1,895</td>
<td>7% (131)</td>
</tr>
<tr>
<td>Map ID</td>
<td>Neighborhood</td>
<td>Geography (Block Groups)</td>
<td>Total Pop (Census)</td>
<td>Percent Hispanic/Latino</td>
</tr>
<tr>
<td>-------</td>
<td>------------------------------</td>
<td>------------------------------------------------------</td>
<td>--------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>A</td>
<td>Highlands</td>
<td>Block Group 1, Census Tract 5.02, Cowlitz County, WA</td>
<td>1,941</td>
<td>27% (515)</td>
</tr>
<tr>
<td>B</td>
<td>St. Helens</td>
<td>Block Group 2, Census Tract 5.01, Cowlitz County, WA</td>
<td>724</td>
<td>10% (70)</td>
</tr>
<tr>
<td>C</td>
<td>St. Helens</td>
<td>Block Group 3, Census Tract 5.01, Cowlitz County, WA</td>
<td>932</td>
<td>7% (68)</td>
</tr>
<tr>
<td>D</td>
<td>St. Helens</td>
<td>Block Group 1, Census Tract 5.01, Cowlitz County, WA</td>
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<td>10% (119)</td>
</tr>
<tr>
<td>E</td>
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<td>Block Group 3, Census Tract 5.02, Cowlitz County, WA</td>
<td>1,323</td>
<td>17% (227)</td>
</tr>
<tr>
<td>F</td>
<td>Highlands</td>
<td>Block Group 2, Census Tract 5.02, Cowlitz County, WA</td>
<td>1,594</td>
<td>16% (255)</td>
</tr>
<tr>
<td>G</td>
<td>Indust. &amp; CA Way; Mint Farm</td>
<td>Block Group 1, Census Tract 3, Cowlitz County, WA</td>
<td>509</td>
<td>19% (99)</td>
</tr>
<tr>
<td>H</td>
<td>Barlow Point</td>
<td>Block Group 1, Census Tract 19, Cowlitz County, WA</td>
<td>956</td>
<td>2% (18)</td>
</tr>
<tr>
<td>I</td>
<td>Memorial Park</td>
<td>Block Group 1, Census Tract 7.03, Cowlitz County, WA</td>
<td>1,601</td>
<td>7% (119)</td>
</tr>
<tr>
<td>J</td>
<td>Memorial Park</td>
<td>Block Group 1, Census Tract 7.02, Cowlitz County, WA</td>
<td>2,052</td>
<td>4% (92)</td>
</tr>
<tr>
<td>K</td>
<td>Western Rainier</td>
<td>Block Group 1, Census Tract 9703, Columbia County, OR</td>
<td>994</td>
<td>2% (17)</td>
</tr>
<tr>
<td>N/A</td>
<td>Study Area</td>
<td>Combined Study Area Block Groups</td>
<td>13,796</td>
<td>12% (1,599)</td>
</tr>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>City of Longview</td>
<td>36,648</td>
<td>10% (3,571)</td>
</tr>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>City of Rainier</td>
<td>1,895</td>
<td>4% (75)</td>
</tr>
</tbody>
</table>
Table C-6. Low-Income Individuals

<table>
<thead>
<tr>
<th>Data</th>
<th>2011-2015 ACS 5-year Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table</td>
<td>B17021 - Poverty Status of Individuals in the Past 12 Months by Living Arrangement</td>
</tr>
</tbody>
</table>
| Notes | Individuals  
Census block groups |
<table>
<thead>
<tr>
<th>Map ID</th>
<th>Neighborhood</th>
<th>Geography (Block Groups)</th>
<th>Total Pop (ACS)</th>
<th>Percent Low-income</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Highlands</td>
<td>Block Group 1, Census Tract 5.02, Cowlitz County, WA</td>
<td>1,663</td>
<td>34% (562)</td>
</tr>
<tr>
<td>B</td>
<td>St. Helens</td>
<td>Block Group 2, Census Tract 5.01, Cowlitz County, WA</td>
<td>1,125</td>
<td>13% (150)</td>
</tr>
<tr>
<td>C</td>
<td>St. Helens</td>
<td>Block Group 3, Census Tract 5.01, Cowlitz County, WA</td>
<td>735</td>
<td>20% (145)</td>
</tr>
<tr>
<td>D</td>
<td>St. Helens</td>
<td>Block Group 1, Census Tract 5.01, Cowlitz County, WA</td>
<td>1,028</td>
<td>21% (212)</td>
</tr>
<tr>
<td>E</td>
<td>Highlands</td>
<td>Block Group 3, Census Tract 5.02, Cowlitz County, WA</td>
<td>1,483</td>
<td>41% (615)</td>
</tr>
<tr>
<td>F</td>
<td>Highlands</td>
<td>Block Group 2, Census Tract 5.02, Cowlitz County, WA</td>
<td>1,634</td>
<td>49% (806)</td>
</tr>
</tbody>
</table>
| G     | Indust. & CA  
Way; Mint Farm | Block Group 1, Census Tract 3, Cowlitz County, WA | 601 | 54% (323) |
| H     | Barlow Point  | Block Group 1, Census Tract 19, Cowlitz County, WA | 1,254 | 21% (258) |
| I     | Memorial Park | Block Group 1, Census Tract 7.03, Cowlitz County, WA | 1,429 | 20% (281) |
| J     | Memorial Park | Block Group 1, Census Tract 7.02, Cowlitz County, WA | 2,160 | 12% (250) |
| K     | Western Rainier | Block Group 1, Census Tract 9703, Columbia County, OR | 1,006 | 14% (137) |
| N/A   | Study Area    | Combined Study Area Block Groups | 14,118 | 26% (3,739) |
| N/A   | N/A           | City of Longview | 35,669 | 23% (8,090) |
| N/A   | N/A           | City of Rainier | 1,961 | 20% (388) |

*Low-income data reflect individuals living in households below the US Census Bureau poverty thresholds, which vary by family size and composition (i.e., presence of children under 18). If a household’s total income before taxes (not including capital gains or noncash benefits) is less than the applicable threshold, then that family and every individual in it is considered in poverty. The US Census Bureau updates the poverty thresholds each year for inflation using the Consumer Price Index. For example, the 2015 poverty threshold for a family of four (including two children under 18) was $24,036. The US Department of Health and Human Services (HHS) publishes annual poverty guidelines that are simplifications of the poverty thresholds for administrative purposes such as determining financial eligibility for certain federal programs. However, HHS notes that the best approximation for the number of people below the HHS poverty guidelines in a particular area would be the number of persons below the US Census Bureau poverty thresholds in that area.*
### Table C-7. Transit Dependency

<table>
<thead>
<tr>
<th>Map ID</th>
<th>Neighborhood</th>
<th>Geography (Census Tracts)</th>
<th>Total Households (ACS)</th>
<th>Transit Dependency (Households with no vehicle) (ACS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A,E,F</td>
<td>Highlands</td>
<td>Census Tract 5.02</td>
<td>1,612</td>
<td>15% (240)</td>
</tr>
<tr>
<td>B,C,D</td>
<td>St. Helens</td>
<td>Census Tract 5.01</td>
<td>1,119</td>
<td>6% (62)</td>
</tr>
<tr>
<td>G</td>
<td>Indust. &amp; CA Way; Mint Farm</td>
<td>Census Tract 3</td>
<td>277</td>
<td>32% (90)</td>
</tr>
<tr>
<td>H</td>
<td>Barlow Point</td>
<td>Census Tract 19</td>
<td>1,927</td>
<td>3% (59)</td>
</tr>
<tr>
<td>I</td>
<td>Memorial Park</td>
<td>Census Tract 7.03</td>
<td>685</td>
<td>2% (16)</td>
</tr>
<tr>
<td>J</td>
<td>Memorial Park</td>
<td>Census Tract 7.02</td>
<td>1,161</td>
<td>4% (50)</td>
</tr>
<tr>
<td>K</td>
<td>Western Rainier</td>
<td>Census Tract 9703</td>
<td>1,617</td>
<td>7% (119)</td>
</tr>
<tr>
<td>N/A</td>
<td>Study Area</td>
<td>Combined Study Area Block Groups</td>
<td>8,398</td>
<td>8% (636)</td>
</tr>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>City of Longview</td>
<td>15,203</td>
<td>12% (1,820)</td>
</tr>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>City of Rainier</td>
<td>777</td>
<td>8% (60)</td>
</tr>
</tbody>
</table>

*“Transit-dependency” is not asked on the census, so we used data on household with no vehicles. Of course, this isn’t a perfect approximation for transit-dependency as factors other than access to a car could come into play. FTA notes “groups often considered transit dependents include the elderly, the young, low income individuals, and households without vehicles available,” data for those additional populations (elderly, youth, low-income) could also be considered transit-dependent.*
## Table C-8. Limited English Proficiency

<table>
<thead>
<tr>
<th>Map ID</th>
<th>Neighborhood</th>
<th>Geography (Census Tracts)</th>
<th>Total Pop (ACS; 5+)</th>
<th>Percent LEP (5+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A,E,F</td>
<td>Highlands</td>
<td>Census Tract 5.02</td>
<td>4,347</td>
<td>6% (267)</td>
</tr>
<tr>
<td>B,C,D</td>
<td>St. Helens</td>
<td>Census Tract 5.01</td>
<td>2,625</td>
<td>1% (21)</td>
</tr>
<tr>
<td>G</td>
<td>Indust. &amp; CA Way; Mint Farm</td>
<td>Census Tract 3</td>
<td>581</td>
<td>22% (125)</td>
</tr>
<tr>
<td>H</td>
<td>Barlow Point</td>
<td>Census Tract 19</td>
<td>5,010</td>
<td>3% (131)</td>
</tr>
<tr>
<td>I</td>
<td>Memorial Park</td>
<td>Census Tract 7.03</td>
<td>1,366</td>
<td>3% (45)</td>
</tr>
<tr>
<td>J</td>
<td>Memorial Park</td>
<td>Census Tract 7.02</td>
<td>2,951</td>
<td>1% (38)</td>
</tr>
<tr>
<td>K</td>
<td>Western Rainier</td>
<td>Census Tract 9703</td>
<td>3,995</td>
<td>4% (159)</td>
</tr>
<tr>
<td>N/A</td>
<td>Study Area</td>
<td>Combined Study Area Block Groups</td>
<td>20,875</td>
<td>4% (786)</td>
</tr>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>City of Longview</td>
<td>34,362</td>
<td>3% (1,049)</td>
</tr>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>City of Rainier</td>
<td>1,857</td>
<td>4% (68)</td>
</tr>
</tbody>
</table>
Table C-9. Home Ownership

<table>
<thead>
<tr>
<th>Map ID</th>
<th>Neighborhood</th>
<th>Geography (Block Groups)</th>
<th>Total Pop* (Census)</th>
<th>Percent in Owned Home</th>
<th>Percent in Rental</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Highlands</td>
<td>Block Group 1, Census Tract 5.02, Cowlitz County, WA</td>
<td>1,941</td>
<td>39% (765)</td>
<td>61% (1,176)</td>
</tr>
<tr>
<td>B</td>
<td>St. Helens</td>
<td>Block Group 2, Census Tract 5.01, Cowlitz County, WA</td>
<td>724</td>
<td>76% (549)</td>
<td>24% (175)</td>
</tr>
<tr>
<td>C</td>
<td>St. Helens</td>
<td>Block Group 3, Census Tract 5.01, Cowlitz County, WA</td>
<td>932</td>
<td>65% (607)</td>
<td>35% (325)</td>
</tr>
<tr>
<td>D</td>
<td>St. Helens</td>
<td>Block Group 1, Census Tract 5.01, Cowlitz County, WA</td>
<td>1,170</td>
<td>53% (618)</td>
<td>47% (552)</td>
</tr>
<tr>
<td>E</td>
<td>Highlands</td>
<td>Block Group 3, Census Tract 5.02, Cowlitz County, WA</td>
<td>1,323</td>
<td>29% (380)</td>
<td>71% (943)</td>
</tr>
<tr>
<td>F</td>
<td>Highlands</td>
<td>Block Group 2, Census Tract 5.02, Cowlitz County, WA</td>
<td>1,594</td>
<td>22% (351)</td>
<td>78% (1,243)</td>
</tr>
<tr>
<td>G</td>
<td>Indus. &amp; CA Way; Mint Farm</td>
<td>Block Group 1, Census Tract 3, Cowlitz County, WA</td>
<td>509</td>
<td>45% (230)</td>
<td>55% (279)</td>
</tr>
<tr>
<td>H</td>
<td>Barlow Point</td>
<td>Block Group 1, Census Tract 19, Cowlitz County, WA</td>
<td>956</td>
<td>85% (808)</td>
<td>15% (148)</td>
</tr>
<tr>
<td>I</td>
<td>Memorial Park</td>
<td>Block Group 1, Census Tract 7.03, Cowlitz County, WA</td>
<td>1,595*</td>
<td>79% (1,255)</td>
<td>21% (340)</td>
</tr>
<tr>
<td>J</td>
<td>Memorial Park</td>
<td>Block Group 1, Census Tract 7.02, Cowlitz County, WA</td>
<td>2,044*</td>
<td>75% (1,542)</td>
<td>25% (502)</td>
</tr>
<tr>
<td>K</td>
<td>Western Rainier</td>
<td>Block Group 1, Census Tract 9703, Columbia County, OR</td>
<td>994</td>
<td>71% (708)</td>
<td>29% (286)</td>
</tr>
<tr>
<td>N/A</td>
<td>Study Area</td>
<td>Combined Study Area Block Groups</td>
<td>13,782*</td>
<td>57% (7,813)</td>
<td>43% (5,969)</td>
</tr>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>City of Longview</td>
<td>35,686*</td>
<td>55% (19,483)</td>
<td>45% (16,203)</td>
</tr>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>City of Rainier</td>
<td>1,895</td>
<td>66% (1,252)</td>
<td>34% (643)</td>
</tr>
</tbody>
</table>

*These data reflect *individuals* in *occupied housing units*. In most cases, the total population numbers for individuals in occupied housing units are the same as the numbers for total population reported in the 2010 Census. However, in a few locations (designated with an asterisk*), the number of individuals in occupied housing units is slightly lower than the numbers reported for total population.