

## Section 4.4 Socioeconomic Impact

### 4.4.1 Existing Conditions

The proposed Facility is located adjacent to the Columbia River in Vancouver, which is the largest city in the County. The County is also within the reach of the larger Portland, Oregon, metropolitan area. Most immediate services, such as police, fire, and ambulance, will be supplied by City of Vancouver providers, but the larger metropolitan area and other surrounding counties are likely to supply a portion of workers and construction material.

For this socioeconomic analysis, the study area is defined as those counties within a 1-hour commute of the ~~project site~~ Facility. These include Clark, Skamania, and Cowlitz counties in Washington, and Multnomah, Clackamas, Columbia, Hood River, Marion, Yamhill, and Washington counties in Oregon. Small portions three other counties (Wahkiakum County in Washington and Clatsop and Tillamook counties in Oregon) may fall within a 1-hour commute of the ~~project site~~ Facility (depending on traffic conditions), but these small areas are sparsely populated and workers associated with the ~~project~~ Facility are unlikely to live there .

The following analysis provides county-level detail for each county in the study area and city-level detail for municipalities in the County. The complete socioeconomic report is attached as Appendix K.

#### 4.4.1.1 Population Trends

According to data from the Washington Office of Financial Management (OFM) and the Oregon Office of Economic Analysis (OEA), the population of the study area grew by nearly 800,000 between 1992 and 2012, to approximately 2.8 million. This represents an increase of 38.8 percent over the period. Growth was faster between 1992 and 2002 (i.e., 450,000 new residents, or 22.4 percent than it was between 2002 and 2012 (i.e., 330,000 new residents, or 13.4 percent).

During the same periods, the County experienced faster growth than the study area as a whole. Between 1992 and 2012, the population of the County grew from approximately 257,000 to 431,000, or 68.1 percent. Between 1992 and 2002, the population grew by 98,000, or 38.2 percent, and between 2002 and 2012, by nearly 77,000, or 21.6 percent.

Neighboring counties within the study area experienced varying levels of growth between 1992 and 2012. The two Washington counties (i.e., Cowlitz and Skamania) are mostly rural and saw relatively limited population growth. ~~Together, they account for approximately 25 percent of the population of the County.~~ The combined population of these two counties is approximately one-quarter that of Clark County.

In contrast, the Oregon counties in the study area are in a fast-growing urban area, and experienced strong population growth between 1992 and 2012. Nearly 75 percent of the study area population growth over that period occurred in Oregon.

Construction of the ~~project~~ Facility is anticipated to be completed during 2016. Based on population projections from the Washington OFM and Oregon OEA, the population of the study area is projected to grow by 6.3 percent between 2012 and 2016, or by more than 176,000. Growth in the County is anticipated to be slightly faster, with the population rising by 28,000, or 6.5 percent.

The long-term forecast projects growth in the total study area population by an additional 789,000 between 2016 and 2036, or a total of 26.6 percent. In the County, the population is projected to grow by a total of nearly 113,500, or 24.7 percent.

**Table 4.4-1. Total Population and Forecast Growth by County in Project Vicinity**

County Name	(Thousands)					Growth Rate			
	1992	2002	2012	2016	2036	Actual		Forecast	
						1992-2002	2002-2012	2012-2016	2016-2036
<b>Washington</b>	5,072.1	6,022.9	6,817.8	7,175.6	8,619.1	1.7%	1.2%	1.3%	0.9%
Clark	256.5	354.5	431.3	459.2	572.7	3.3%	2.0%	1.6%	1.1%
Cowlitz	84.1	94.2	103.1	106.5	116.5	1.1%	0.9%	0.8%	0.4%
Skamania	8.6	10.0	11.3	11.4	13.0	1.5%	1.2%	0.2%	0.7%
<b>Oregon</b>	2,985.8	3,515.5	3,883.7	4,100.0	5,089.1	1.6%	1.0%	1.4%	1.1%
Clackamas	294.0	349.2	381.7	404.7	524.2	1.7%	0.9%	1.5%	1.3%
Columbia	38.9	44.8	49.7	52.6	65.3	1.4%	1.0%	1.4%	1.1%
Hood River	17.7	21.1	22.9	24.4	32.7	1.8%	0.8%	1.7%	1.5%
Marion	241.8	293.5	320.5	340.9	440.7	2.0%	0.9%	1.6%	1.3%
Multnomah	603.5	675.4	748.4	783.8	922.2	1.1%	1.0%	1.2%	0.8%
Polk	52.6	65.1	76.6	83.3	116.7	2.2%	1.6%	2.1%	1.7%
Washington	341.4	463.1	542.8	590.8	803.8	3.1%	1.6%	2.1%	1.6%
Yamhill	69.9	88.2	100.6	108.1	147.0	2.4%	1.3%	1.8%	1.5%
<b>Study Area</b>	2,008.9	2,459.0	2,788.8	2,965.7	3,754.8	2.0%	1.3%	1.5%	1.2%

Source: Washington OFM, Oregon OEA

According to data from OFM, most Clark County residents live in incorporated areas of the county, but a large minority lives in unincorporated areas. Even as the total County population grew between 2002 and 2012, the share living in incorporated areas remained near 48 percent.

Vancouver is the largest incorporated municipality in the County, and was home to 37.9 percent of all County residents in 2012. However, even though Vancouver added 13,000 new residents between 2002 and 2012, its population did not increase as fast as other parts of the County, such as Battle Ground, Camas, and Washougal, and its share of County population declined from 40.9 percent.

**Table 4.4-2. Total Population and Forecast Growth by City in Clark County**

City Name	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Change -2002- 2011
Clark County	364.9	374.1	385.4	394.6	404.7	412.7	419.1	423.8	425.4	425.4	428.0	66.4
Uninc.	176.0	181.7	186.9	192.5	197.8	199.5	202.3	203.4	203.3	203.3	204.6	29.8
Incorp	188.8	192.4	198.5	202.2	206.9	213.2	216.8	220.4	222.0	222.0	223.4	36.6
Battle Ground	11.2	12.4	14.0	14.7	15.6	16.0	16.7	17.2	17.6	17.6	17.8	6.7
Camas	13.9	14.7	16.4	16.4	17.0	17.7	18.4	18.8	19.4	19.4	19.6	6.1
La Center	1.8	1.9	2.0	2.2	2.4	2.6	2.7	2.7	2.8	2.8	2.8	1.1

City Name	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Change 2002- 2011
Ridgefield	2.2	2.2	2.3	2.7	3.4	3.8	4.2	4.6	4.8	4.8	5.0	3.0
Vancouver	149.3	150.1	152.1	153.5	154.9	158.6	159.8	161.6	161.8	161.8	162.3	13.9
Washougal	9.1	9.7	10.7	11.3	12.2	12.9	13.5	13.9	14.1	14.1	14.2	5.2
Woodland	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Yacolt	1.1	1.1	1.1	1.2	1.2	1.4	1.5	1.5	1.6	1.6	1.6	0.5

Source: Washington OFM

**Table 4.4-2. Total Population by County and City in Study Area**

City Name	2002	2003	2004	2005	2006	2007	2008	2009	2010 Census	2011	2012
<b>Clark County</b>	<u>363,400</u>	<u>372,300</u>	<u>383,300</u>	<u>391,500</u>	<u>403,500</u>	<u>415,000</u>	<u>424,200</u>	<u>431,200</u>	<u>425,363</u>	<u>428,000</u>	<u>431,250</u>
Unincorporated Clark County	<u>175,710</u>	<u>179,825</u>	<u>184,650</u>	<u>188,955</u>	<u>196,090</u>	<u>201,135</u>	<u>206,830</u>	<u>210,415</u>	<u>203,339</u>	<u>204,610</u>	<u>205,885</u>
Incorporated Clark County	<u>187,690</u>	<u>192,475</u>	<u>198,650</u>	<u>202,545</u>	<u>207,410</u>	<u>213,865</u>	<u>217,370</u>	<u>220,785</u>	<u>222,024</u>	<u>223,390</u>	<u>225,365</u>
Battle Ground	<u>11,110</u>	<u>12,560</u>	<u>14,220</u>	<u>14,960</u>	<u>15,810</u>	<u>16,240</u>	<u>16,710</u>	<u>17,150</u>	<u>17,571</u>	<u>17,780</u>	<u>17,920</u>
Camas	<u>13,540</u>	<u>14,200</u>	<u>15,360</u>	<u>15,460</u>	<u>15,880</u>	<u>16,280</u>	<u>16,700</u>	<u>16,950</u>	<u>19,355</u>	<u>19,620</u>	<u>20,020</u>
La Center	<u>1,805</u>	<u>1,855</u>	<u>1,990</u>	<u>2,095</u>	<u>2,315</u>	<u>2,440</u>	<u>2,510</u>	<u>2,545</u>	<u>2,800</u>	<u>2,835</u>	<u>2,985</u>
Ridgefield	<u>2,145</u>	<u>2,185</u>	<u>2,195</u>	<u>2,630</u>	<u>3,225</u>	<u>3,680</u>	<u>4,015</u>	<u>4,215</u>	<u>4,763</u>	<u>4,975</u>	<u>5,210</u>
Vancouver	<u>148,800</u>	<u>150,700</u>	<u>152,900</u>	<u>154,800</u>	<u>156,600</u>	<u>160,800</u>	<u>162,400</u>	<u>164,500</u>	<u>161,791</u>	<u>162,300</u>	<u>163,200</u>
Washougal	<u>9,100</u>	<u>9,775</u>	<u>10,770</u>	<u>11,350</u>	<u>12,270</u>	<u>12,980</u>	<u>13,480</u>	<u>13,870</u>	<u>14,095</u>	<u>14,210</u>	<u>14,340</u>
Woodland (part)	<u>85</u>	<u>85</u>	<u>80</u>	<u>90</u>	<u>90</u>	<u>75</u>	<u>85</u>	<u>85</u>	<u>83</u>	<u>85</u>	<u>85</u>
Yacolt	<u>1,105</u>	<u>1,115</u>	<u>1,135</u>	<u>1,160</u>	<u>1,220</u>	<u>1,370</u>	<u>1,470</u>	<u>1,470</u>	<u>1,566</u>	<u>1,585</u>	<u>1,605</u>
<b>Cowlitz County</b>	<u>94,400</u>	<u>94,900</u>	<u>95,300</u>	<u>95,900</u>	<u>96,800</u>	<u>97,800</u>	<u>99,000</u>	<u>99,600</u>	<u>102,410</u>	<u>102,700</u>	<u>103,050</u>
Unincorporated Cowlitz County	<u>39,485</u>	<u>39,745</u>	<u>40,000</u>	<u>40,290</u>	<u>40,590</u>	<u>41,125</u>	<u>41,550</u>	<u>41,990</u>	<u>44,085</u>	<u>44,225</u>	<u>44,180</u>
Incorporated Cowlitz County	<u>54,915</u>	<u>55,155</u>	<u>55,300</u>	<u>55,610</u>	<u>56,210</u>	<u>56,675</u>	<u>57,450</u>	<u>57,610</u>	<u>58,325</u>	<u>58,475</u>	<u>58,870</u>
Castle Rock	<u>2,120</u>	<u>2,140</u>	<u>2,150</u>	<u>2,140</u>	<u>2,135</u>	<u>2,135</u>	<u>2,145</u>	<u>2,145</u>	<u>1,982</u>	<u>1,995</u>	<u>2,135</u>
Kalama	<u>1,870</u>	<u>1,935</u>	<u>1,950</u>	<u>1,980</u>	<u>2,025</u>	<u>2,105</u>	<u>2,475</u>	<u>2,505</u>	<u>2,344</u>	<u>2,365</u>	<u>2,390</u>
Kelso	<u>11,770</u>	<u>11,830</u>	<u>11,800</u>	<u>11,820</u>	<u>11,840</u>	<u>11,840</u>	<u>11,900</u>	<u>11,840</u>	<u>11,925</u>	<u>11,920</u>	<u>11,930</u>
Longview	<u>35,310</u>	<u>35,290</u>	<u>35,340</u>	<u>35,430</u>	<u>35,570</u>	<u>35,710</u>	<u>35,880</u>	<u>36,010</u>	<u>36,648</u>	<u>36,730</u>	<u>36,910</u>
Woodland (part)	<u>3,845</u>	<u>3,960</u>	<u>4,060</u>	<u>4,240</u>	<u>4,640</u>	<u>4,885</u>	<u>5,050</u>	<u>5,110</u>	<u>5,426</u>	<u>5,465</u>	<u>5,505</u>
<b>Skamania County</b>	<u>9,900</u>	<u>9,900</u>	<u>10,100</u>	<u>10,300</u>	<u>10,600</u>	<u>10,700</u>	<u>10,700</u>	<u>10,800</u>	<u>11,066</u>	<u>11,150</u>	<u>11,275</u>
Unincorporated Skamania County	<u>8,063</u>	<u>8,075</u>	<u>8,205</u>	<u>8,299</u>	<u>8,457</u>	<u>8,448</u>	<u>8,383</u>	<u>8,465</u>	<u>8,645</u>	<u>8,685</u>	<u>8,755</u>
Incorporated Skamania County	<u>1,837</u>	<u>1,825</u>	<u>1,895</u>	<u>2,001</u>	<u>2,143</u>	<u>2,252</u>	<u>2,317</u>	<u>2,335</u>	<u>2,421</u>	<u>2,465</u>	<u>2,520</u>
North Bonneville	<u>627</u>	<u>615</u>	<u>685</u>	<u>741</u>	<u>828</u>	<u>882</u>	<u>877</u>	<u>880</u>	<u>956</u>	<u>965</u>	<u>1,000</u>
Stevenson	<u>1,210</u>	<u>1,210</u>	<u>1,210</u>	<u>1,260</u>	<u>1,315</u>	<u>1,370</u>	<u>1,440</u>	<u>1,455</u>	<u>1,465</u>	<u>1,500</u>	<u>1,520</u>
<b>Oregon Cities</b>											

<b>City Name</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010 Census</b>	<b>2011</b>	<b>2012</b>
<b>Clackamas County</b>	<u>381,775</u>	<u>379,845</u>	<u>376,660</u>	<u>372,270</u>	<u>367,040</u>	<u>361,300</u>	<u>356,250</u>	<u>353,450</u>	<u>345,150</u>	<u>340,000</u>	<u>338,391</u>
Barlow	<u>140</u>	<u>140</u>	<u>140</u>	<u>140</u>	<u>140</u>	<u>140</u>	<u>140</u>	<u>140</u>	<u>140</u>	<u>140</u>	<u>140</u>
Canby	<u>15,230</u>	<u>15,230</u>	<u>15,165</u>	<u>15,140</u>	<u>14,705</u>	<u>14,385</u>	<u>14,110</u>	<u>13,910</u>	<u>12,790</u>	<u>12,910</u>	<u>12,790</u>
Damascus	<u>9,990</u>	<u>9,985</u>	<u>9,975</u>	<u>9,775</u>	<u>9,670</u>	<u>9,670</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Estacada	<u>2,880</u>	<u>2,865</u>	<u>2,820</u>	<u>2,695</u>	<u>2,580</u>	<u>2,480</u>	<u>2,450</u>	<u>2,440</u>	<u>2,460</u>	<u>2,380</u>	<u>2,371</u>
Gladstone	<u>12,215</u>	<u>12,215</u>	<u>12,215</u>	<u>12,200</u>	<u>12,210</u>	<u>12,170</u>	<u>12,140</u>	<u>11,790</u>	<u>11,450</u>	<u>11,470</u>	<u>11,438</u>
Happy Valley	<u>11,865</u>	<u>11,465</u>	<u>11,455</u>	<u>10,380</u>	<u>9,210</u>	<u>7,275</u>	<u>6,640</u>	<u>6,370</u>	<u>4,930</u>	<u>4,650</u>	<u>4,519</u>
Johnson City	<u>680</u>	<u>680</u>	<u>675</u>	<u>675</u>	<u>675</u>	<u>630</u>	<u>630</u>	<u>630</u>	<u>630</u>	<u>635</u>	<u>634</u>
Lake Oswego (part)*	<u>34,496</u>	<u>34,412</u>	<u>34,255</u>	<u>34,010</u>	<u>34,015</u>	<u>33,740</u>	<u>33,595</u>	<u>33,530</u>	<u>33,270</u>	<u>33,115</u>	<u>32,989</u>
Milwaukie	<u>20,930</u>	<u>20,920</u>	<u>20,915</u>	<u>20,920</u>	<u>20,835</u>	<u>20,655</u>	<u>20,590</u>	<u>20,580</u>	<u>20,550</u>	<u>20,540</u>	<u>20,490</u>
Molalla	<u>7,935</u>	<u>7,800</u>	<u>7,590</u>	<u>7,195</u>	<u>6,830</u>	<u>6,395</u>	<u>5,930</u>	<u>5,800</u>	<u>5,690</u>	<u>5,710</u>	<u>5,647</u>
Oregon City	<u>30,995</u>	<u>30,710</u>	<u>30,405</u>	<u>30,060</u>	<u>29,540</u>	<u>28,965</u>	<u>28,370</u>	<u>28,100</u>	<u>26,680</u>	<u>26,200</u>	<u>25,754</u>
Portland (part)*	<u>822</u>	<u>820</u>	<u>804</u>	<u>793</u>	<u>785</u>	<u>785</u>	<u>780</u>	<u>770</u>	<u>760</u>	<u>750</u>	<u>747</u>
Rivergrove (part)*	<u>315</u>	<u>315</u>	<u>315</u>	<u>315</u>	<u>315</u>	<u>315</u>	<u>310</u>	<u>290</u>	<u>290</u>	<u>290</u>	<u>287</u>
Sandy	<u>8,420</u>	<u>8,205</u>	<u>8,005</u>	<u>7,595</u>	<u>7,070</u>	<u>6,680</u>	<u>6,360</u>	<u>6,200</u>	<u>5,380</u>	<u>5,425</u>	<u>5,385</u>
Tualatin (part)*	<u>3,061</u>	<u>3,065</u>	<u>3,065</u>	<u>3,065</u>	<u>3,065</u>	<u>3,065</u>	<u>2,895</u>	<u>2,820</u>	<u>2,725</u>	<u>2,695</u>	<u>2,664</u>
West Linn	<u>24,455</u>	<u>24,400</u>	<u>24,400</u>	<u>24,180</u>	<u>24,180</u>	<u>24,075</u>	<u>23,970</u>	<u>23,820</u>	<u>23,090</u>	<u>22,440</u>	<u>22,261</u>
Wilsonville (part)*	<u>16,433</u>	<u>16,365</u>	<u>16,285</u>	<u>15,750</u>	<u>15,230</u>	<u>14,855</u>	<u>14,595</u>	<u>14,225</u>	<u>14,165</u>	<u>14,360</u>	<u>13,987</u>
Unincorporated	<u>180,912</u>	<u>180,253</u>	<u>178,176</u>	<u>177,382</u>	<u>175,985</u>	<u>175,020</u>	<u>182,745</u>	<u>182,035</u>	<u>180,150</u>	<u>176,290</u>	<u>176,288</u>
<b>Columbia County</b>	<u>44,600</u>	<u>45,000</u>	<u>45,650</u>	<u>46,220</u>	<u>46,965</u>	<u>47,565</u>	<u>48,095</u>	<u>48,410</u>	<u>49,351</u>	<u>49,625</u>	<u>49,680</u>
Clatskanie	<u>1,610</u>	<u>1,650</u>	<u>1,650</u>	<u>1,660</u>	<u>1,675</u>	<u>1,710</u>	<u>1,740</u>	<u>1,735</u>	<u>1,737</u>	<u>1,740</u>	<u>1,740</u>
Columbia City	<u>1,650</u>	<u>1,720</u>	<u>1,760</u>	<u>1,785</u>	<u>1,890</u>	<u>1,955</u>	<u>1,975</u>	<u>1,990</u>	<u>1,946</u>	<u>1,950</u>	<u>1,950</u>
Prescott	<u>60</u>	<u>60</u>	<u>60</u>	<u>60</u>	<u>60</u>	<u>60</u>	<u>60</u>	<u>60</u>	<u>55</u>	<u>55</u>	<u>55</u>
Rainier	<u>1,690</u>	<u>1,750</u>	<u>1,750</u>	<u>1,760</u>	<u>1,705</u>	<u>1,775</u>	<u>1,810</u>	<u>1,825</u>	<u>1,895</u>	<u>1,895</u>	<u>1,895</u>
St. Helens	<u>10,780</u>	<u>11,250</u>	<u>11,370</u>	<u>11,795</u>	<u>11,940</u>	<u>12,075</u>	<u>12,325</u>	<u>12,380</u>	<u>12,883</u>	<u>12,890</u>	<u>12,920</u>
Scappoose	<u>5,260</u>	<u>5,480</u>	<u>5,590</u>	<u>5,700</u>	<u>5,840</u>	<u>6,090</u>	<u>6,580</u>	<u>6,605</u>	<u>6,592</u>	<u>6,665</u>	<u>6,685</u>
Vernonia	<u>2,260</u>	<u>2,260</u>	<u>2,260</u>	<u>2,275</u>	<u>2,340</u>	<u>2,365</u>	<u>2,365</u>	<u>2,370</u>	<u>2,151</u>	<u>2,110</u>	<u>2,080</u>
Unincorporated	<u>21,290</u>	<u>20,830</u>	<u>21,210</u>	<u>21,185</u>	<u>21,515</u>	<u>21,535</u>	<u>21,240</u>	<u>21,445</u>	<u>22,092</u>	<u>22,320</u>	<u>22,355</u>
<b>Hood River County</b>	<u>20,450</u>	<u>20,500</u>	<u>21,050</u>	<u>21,180</u>	<u>21,335</u>	<u>21,470</u>	<u>21,625</u>	<u>21,725</u>	<u>22,346</u>	<u>22,625</u>	<u>22,875</u>
Cascade Locks	<u>1,140</u>	<u>1,140</u>	<u>1,150</u>	<u>1,155</u>	<u>1,155</u>	<u>1,075</u>	<u>1,050</u>	<u>1,055</u>	<u>1,144</u>	<u>1,165</u>	<u>1,190</u>
Hood River	<u>6,210</u>	<u>6,230</u>	<u>6,230</u>	<u>6,450</u>	<u>6,580</u>	<u>6,710</u>	<u>6,850</u>	<u>6,925</u>	<u>7,167</u>	<u>7,320</u>	<u>7,375</u>
Unincorporated	<u>13,100</u>	<u>13,130</u>	<u>13,670</u>	<u>13,575</u>	<u>13,600</u>	<u>13,685</u>	<u>13,725</u>	<u>13,745</u>	<u>14,035</u>	<u>14,140</u>	<u>14,310</u>
<b>Marion County</b>	<u>291,000</u>	<u>295,900</u>	<u>298,450</u>	<u>302,135</u>	<u>306,665</u>	<u>311,070</u>	<u>314,865</u>	<u>318,170</u>	<u>315,335</u>	<u>318,150</u>	<u>320,495</u>
Aumsville	<u>2,980</u>	<u>3,050</u>	<u>3,080</u>	<u>3,130</u>	<u>3,205</u>	<u>3,300</u>	<u>3,535</u>	<u>3,560</u>	<u>3,584</u>	<u>3,680</u>	<u>3,700</u>
Aurora	<u>660</u>	<u>660</u>	<u>660</u>	<u>785</u>	<u>920</u>	<u>955</u>	<u>970</u>	<u>980</u>	<u>918</u>	<u>920</u>	<u>930</u>
Detroit	<u>250</u>	<u>250</u>	<u>250</u>	<u>255</u>	<u>260</u>	<u>265</u>	<u>265</u>	<u>275</u>	<u>202</u>	<u>205</u>	<u>205</u>

<b>City Name</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010 Census</b>	<b>2011</b>	<b>2012</b>
Donald	630	640	660	750	895	995	1,025	1,030	979	980	980
Gates (part)*	435	445	445	450	455	460	455	455	431	433	442
Gervais	2,070	2,110	2,130	2,240	2,250	2,250	2,260	2,260	2,464	2,520	2,520
Hubbard	2,560	2,700	2,750	2,855	2,960	3,095	3,125	3,140	3,173	3,180	3,185
Idanha (part)*	145	145	145	145	145	145	145	145	77	78	78
Jefferson	2,470	2,480	2,490	2,515	2,590	2,590	2,655	2,655	3,098	3,135	3,140
Keizer	33,100	34,010	34,380	34,735	34,880	35,435	36,150	36,220	36,478	36,715	36,735
Mill City (part)*	295	310	310	315	325	328	329	330	324	326	327
Mt. Angel	3,660	3,700	3,600	3,630	3,665	3,755	3,785	3,790	3,286	3,285	3,285
St. Paul	380	390	400	415	420	410	415	415	421	420	420
Salem (part)*	122,290	123,410	123,890	126,525	127,720	129,830	132,033	133,477	130,398	131,306	131,989
Scotts Mills	300	300	300	300	300	300	300	300	357	360	365
Silverton	7,680	7,980	8,060	8,230	8,915	9,205	9,540	9,585	9,222	9,265	9,290
Stayton	7,200	7,300	7,360	7,505	7,700	7,765	7,815	7,820	7,644	7,660	7,660
Sublimity	2,120	2,160	2,160	2,225	2,225	2,255	2,285	2,255	2,681	2,680	2,680
Turner	1,400	1,480	1,480	1,570	1,645	1,690	1,730	1,750	1,854	1,860	1,865
Woodburn	20,860	21,560	21,790	22,110	22,615	22,875	23,355	23,350	24,080	24,090	24,090
Unincorporated	79,515	80,820	82,110	81,450	82,575	83,168	82,693	84,378	83,664	85,053	86,609
Multnomah County	670,250	677,850	685,950	692,825	701,545	710,025	717,880	724,680	735,334	741,925	748,445
Fairview	8,400	8,590	9,250	9,425	9,585	9,695	9,735	9,740	8,920	8,920	8,920
Gresham	92,620	93,660	94,250	95,900	97,745	99,225	100,655	101,015	105,594	105,795	105,970
Lake Oswego (part)*	2,305	2,310	2,315	2,315	2,315	2,315	2,315	2,323	2,544	2,551	2,554
Maywood Park	750	750	750	750	750	750	750	750	752	750	750
Portland (part)*	536,010	542,940	548,340	554,130	560,405	566,072	573,592	579,745	581,485	583,546	585,558
Troutdale	14,240	14,300	14,380	14,880	15,110	15,430	15,465	15,535	15,962	16,000	16,005
Wood Village	2,850	2,870	2,870	2,880	2,965	3,100	3,100	3,130	3,878	3,885	3,890
Unincorporated	13,075	12,430	13,795	12,545	12,670	13,438	12,268	12,442	16,199	20,478	24,798
Polk County	63,450	64,000	64,950	65,670	66,670	67,505	68,235	68,785	75,403	75,965	76,625
Dallas	12,850	13,270	13,500	14,040	14,585	15,065	15,360	15,445	14,583	14,620	14,670
Falls City	960	960	960	980	965	965	965	965	947	945	945
Independence	6,580	6,850	7,170	7,515	7,715	7,905	8,030	8,240	8,590	8,600	8,585
Monmouth	8,110	8,080	8,590	8,795	9,125	9,335	9,565	9,630	9,534	9,720	9,755
Salem (part)*	18,860	19,530	19,810	20,725	21,585	22,460	22,477	23,478	24,239	24,404	24,466
Willamina (part)*	710	710	710	710	720	720	720	720	845	845	845
Unincorporated	16,090	15,310	14,920	12,905	11,975	11,055	11,118	10,307	16,665	16,831	17,359
Washington County	463,050	472,600	480,200	489,785	500,585	511,075	519,925	527,140	529,710	536,370	542,845

City Name	2002	2003	2004	2005	2006	2007	2008	2009	2010 Census	2011	2012
Banks	1,420	1,430	1,430	1,430	1,435	1,435	1,435	1,435	1,777	1,775	1,775
Beaverton	77,990	79,010	79,350	83,095	84,270	85,560	86,205	86,860	89,803	90,835	91,205
Cornelius	9,930	10,150	10,150	10,585	10,785	10,895	10,955	10,985	11,869	11,915	11,915
Durham	1,390	1,400	1,400	1,390	1,400	1,395	1,395	1,400	1,351	1,360	1,365
Forest Grove	18,750	19,130	19,200	19,565	20,380	20,775	21,465	21,500	21,083	21,275	21,460
Gaston	610	620	620	630	630	650	660	665	637	640	640
Hillsboro	74,840	79,340	79,940	82,025	84,445	88,300	89,285	90,380	91,611	92,350	92,550
King City	2,110	2,100	2,100	2,130	2,350	2,700	2,775	2,785	3,111	3,135	3,225
Lake Oswego (part)*	17	20	20	20	20	20	20	20	9	9	9
North Plains	1,660	1,640	1,650	1,700	1,755	1,890	1,905	1,910	1,947	1,990	1,990
Portland (part)*	1,411	1,430	1,440	1,455	1,500	1,515	1,535	1,565	1,547	1,552	1,558
Rivergrove (part)*	30	30	30	35	35	35	35	35	32	31	34
Sherwood	13,680	14,050	14,190	14,940	16,115	16,365	16,420	16,640	18,194	18,255	18,265
Tigard	44,070	45,130	44,650	45,500	46,300	46,715	47,150	47,460	48,035	48,415	48,695
Tualatin (part)*	21,360	21,970	22,045	22,400	22,585	22,960	22,975	23,065	23,192	23,251	23,215
Wilsonville (part)*	5	1,655	1,655	1,655	1,655	1,655	1,655	1,655	2,138	2,144	2,248
Unincorporated	193,778	193,495	200,330	201,230	204,925	208,210	214,055	218,780	213,374	217,437	222,696
Yamhill County	87,500	88,150	89,200	90,310	91,675	93,085	94,325	95,250	99,193	99,850	100,550
Amity	1,480	1,480	1,480	1,480	1,480	1,480	1,480	1,670	1,614	1,615	1,610
Carlton	1,520	1,550	1,560	1,585	1,670	1,755	1,755	1,790	2,007	2,035	2,035
Dayton	2,210	2,230	2,230	2,280	2,305	2,495	2,500	2,495	2,534	2,530	2,535
Dundee	2,770	2,860	2,900	2,965	3,010	3,040	3,050	3,060	3,162	3,175	3,175
Lafayette	2,820	3,010	3,060	3,105	3,440	3,730	3,925	3,925	3,742	3,740	3,735
McMinnville	28,200	28,890	29,200	30,020	30,950	31,665	32,400	32,760	32,187	32,270	32,435
Newberg	18,750	19,530	19,910	20,565	20,570	21,675	22,645	23,150	22,068	22,230	22,300
Sheridan	5,580	5,620	5,620	5,785	5,785	5,865	6,020	6,020	6,127	6,125	6,180
Willamina (part)*	1,130	1,130	1,140	1,150	1,165	1,165	1,165	1,165	1,180	1,180	1,180
Yamhill	820	820	820	820	820	820	855	860	1,024	1,020	1,020
Unincorporated	22,220	21,030	21,280	20,555	20,480	19,395	18,530	18,355	23,548	23,930	24,345

Source: Washington Office of Financial Management, Portland State University Population Research Center

Nearly one-quarter of the study area population is under 18 years of age, and 15 percent are 62 years old or older. The remaining 61 percent are working age adults, a total of 1.66 million people. The population of Clark County is somewhat younger than that of the study area, with nearly 27 percent under 18 years of age and less than 15 percent aged 62 years or more. The working-age adult population in the County is approximately 248,000.

Females outnumber males in the study area, with 0.978 males for each female. The male-female ratio in the County is nearly identical, with 0.976 males for each female.

**Table 4.4-3. Population Age Distribution in Project Vicinity**

County Name	Total		Under 18 Years		18 Years to 61 Years		62 Years and Older	
	Pop.	M/F Ratio	Pop.	% of Total	Pop.	% of Total	Pop.	% of Total
<b>Washington</b>	6,652,845	0.993	1,563,419	23.5	4,071,541	61.2	1,017,885	15.3
Clark	421,154	0.976	112,448	26.7	248,060	58.9	60,646	14.4
Cowlitz	101,901	0.980	24,966	24.5	57,676	56.6	19,259	18.9
Skamania	10,979	0.996	2,459	22.4	6,609	60.2	1,910	17.4
<b>Oregon</b>	3,801,991	0.980	866,854	22.8	2,284,997	60.1	650,140	17.1
Clackamas	373,832	0.969	89,346	23.9	220,935	59.1	63,551	17.0
Columbia	49,247	1.002	11,918	24.2	28,711	58.3	8,618	17.5
Hood River	21,962	0.991	5,710	26.0	12,980	59.1	3,272	14.9
Marion	313,020	0.996	82,950	26.5	180,613	57.7	49,457	15.8
Multnomah	724,803	0.977	149,309	20.6	479,820	66.2	95,674	13.2
Polk	74,734	0.940	18,086	24.2	42,897	57.4	13,751	18.4
Washington	524,275	0.970	134,739	25.7	323,478	61.7	66,059	12.6
Yamhill	98,293	1.009	24,770	25.2	57,796	58.8	15,727	16.0
<b>Study Area</b>	2,714,200	0.978	656,701	24.2	1,659,574	61.1	397,926	14.7

Source: U.S. Census Bureau, 2007-2011 American Community Survey

According to ~~2012~~ estimates from the U.S. Census Bureau, the 2007-2011 American Community Survey, the ethnic mix of the study area population is primarily white, with white residents accounting for 86.36 percent of the total. Residents of Asian ethnicity accounted for 5.31 percent of the population, African-American accounted for 2.76 percent, American Indian and Alaska Natives accounted for 1.53 percent, Hawaiian and other Pacific Islanders accounted for 0.5 percent, and two or more races accounted for 3.79 percent of the population. Residents of Hispanic origin (of all races) accounted for 12.98 percent of the study area population.

In the Clark County, non-white residents account for a smaller share of the population, although the shares of Native Hawaiian/Pacific Islander and two or more races is are slightly higher than in the study area as a whole. Hispanic residents (of all races) account for 8.17.5 percent of the Clark County's population.

**Table 4.4-4. Race Composition by County in Project Vicinity**

	White	Black or African American	American Indian and Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Two or More Races	Total	Hispanic (all races)
<b>Washington</b>	5,625.34	268.66	126.53	531.40	46.14	298.95	6,897.01	807.6
Clark	385.13	9.24	4.58	19.42	3.20	16.72	438.29	35.4
Cowlitz	93.92	0.83	1.94	1.69	0.29	3.33	102.00	8.2
Skamania	10.46	0.06	0.20	0.11	0.01	0.34	11.19	0.6
<b>Oregon</b>	3,444.77	77.56	68.96	156.08	15.85	136.14	3,899.35	474.2
Clackamas	348.69	3.78	4.10	14.89	1.03	11.38	383.86	31.0
Columbia	46.08	0.25	0.72	0.48	0.11	1.66	49.29	2.2

	White	Black or African American	American Indian and Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Two or More Races	Total	Hispanic (all races)
Hood River	21.24	0.16	0.25	0.34	0.05	0.54	22.58	6.8
Marion	287.97	4.33	7.97	6.90	2.61	10.21	319.99	80.3
Multnomah	614.11	43.75	11.40	52.23	4.73	33.05	759.26	84.3
Polk	69.53	0.55	1.86	1.54	0.27	2.60	76.35	9.7
Washington	454.77	11.49	6.44	50.85	2.90	21.23	547.67	87.8
Yamhill	92.41	1.03	2.02	1.65	0.23	2.92	100.26	15.4
	2,424.31	75.45	41.47	150.09	15.44	103.97	2,810.72	361.44
<b>Share of Total</b>								
<b>Washington</b>	81.6%	3.9%	1.8%	7.7%	0.7%	4.3%	100.0%	11.7%
Clark	87.9%	2.1%	1.0%	4.4%	0.7%	3.8%	100.0%	8.1%
Cowlitz	92.1%	0.8%	1.9%	1.7%	0.3%	3.3%	100.0%	8.0%
Skamania	93.5%	0.5%	1.8%	1.0%	0.1%	3.0%	100.0%	5.5%
<b>Oregon</b>	88.3%	2.0%	1.8%	4.0%	0.4%	3.5%	100.0%	12.2%
Clackamas	90.8%	1.0%	1.1%	3.9%	0.3%	3.0%	100.0%	8.1%
Columbia	93.5%	0.5%	1.5%	1.0%	0.2%	3.4%	100.0%	4.4%
Hood River	94.1%	0.7%	1.1%	1.5%	0.2%	2.4%	100.0%	30.2%
Marion	90.0%	1.4%	2.5%	2.2%	0.8%	3.2%	100.0%	25.1%
Multnomah	80.9%	5.8%	1.5%	6.9%	0.6%	4.4%	100.0%	11.1%
Polk	91.1%	0.7%	2.4%	2.0%	0.4%	3.4%	100.0%	12.6%
Washington	83.0%	2.1%	1.2%	9.3%	0.5%	3.9%	100.0%	16.0%
Yamhill	92.2%	1.0%	2.0%	1.6%	0.2%	2.9%	100.0%	15.3%
<b>Study Area</b>	86.3%	2.7%	1.5%	5.3%	0.5%	3.7%	100.0%	12.9%

Note: Population figures are Census estimates for 2012

Source: U.S. Census Bureau

**Table 4.4-4. Race Composition by County and City in Study Area**

County / City	White	Black or African American	American Indian and Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Two or More Races	Total	Hispanic (all races)
<b>Washington</b>								
Clark County	88.6%	2.0%	0.7%	4.0%	0.6%	4.2%	100.0%	7.5%
Battle Ground	92.7%	1.9%	0.3%	3.3%	0.3%	1.6%	100.0%	6.5%
Camas	89.5%	1.3%	0.3%	6.0%	0.1%	2.8%	100.0%	3.9%
La Center	90.0%	0.0%	6.7%	0.0%	1.3%	2.0%	100.0%	9.2%
Ridgefield	92.8%	0.0%	0.2%	2.6%	0.0%	4.4%	100.0%	4.1%
Vancouver	84.9%	3.3%	1.0%	5.1%	0.6%	5.1%	100.0%	9.9%
Washougal	93.6%	0.5%	0.5%	2.8%	0.4%	2.3%	100.0%	5.0%
Yacolt	97.8%	0.0%	0.3%	0.0%	0.0%	1.9%	100.0%	4.0%
-								



<b>County / City</b>	<b>White</b>	<b>Black or African American</b>	<b>American Indian and Alaska Native</b>	<b>Asian</b>	<b>Native Hawaiian and Other Pacific Islander</b>	<b>Two or More Races</b>	<b>Total</b>	<b>Hispanic (all races)</b>
Cowlitz County	92.4%	0.5%	1.6%	1.4%	0.2%	4.0%	100.0%	7.7%
Castle Rock	86.2%	1.5%	2.8%	1.4%	0.0%	8.0%	100.0%	3.5%
Kalama	94.4%	0.3%	0.1%	2.3%	0.4%	2.5%	100.0%	3.2%
Kelso	91.9%	0.7%	1.4%	1.4%	0.1%	4.5%	100.0%	11.8%
Longview	90.4%	0.7%	1.4%	2.0%	0.0%	5.5%	100.0%	9.6%
Woodland (part)	94.9%	0.2%	0.0%	1.4%	1.0%	2.6%	100.0%	13.4%
-								
Skamania County	94.7%	0.1%	2.3%	1.0%	0.3%	1.6%	100.0%	5.5%
North Bonneville	94.0%	0.0%	0.0%	1.2%	2.5%	2.3%	100.0%	5.9%
Stevenson	93.2%	0.4%	1.1%	1.9%	0.0%	3.4%	100.0%	12.4%
-								
<b>Oregon</b>								
Clackamas County	91.3%	0.9%	0.5%	3.5%	0.2%	3.6%	100.0%	7.6%
Barlow	91.6%	0.0%	0.0%	0.0%	8.4%	0.0%	100.0%	29.5%
Canby	93.0%	0.1%	0.3%	2.4%	0.2%	4.0%	100.0%	24.7%
Damascus	91.7%	0.4%	0.5%	5.1%	0.0%	2.3%	100.0%	3.8%
Estacada	89.7%	1.9%	0.7%	1.6%	0.0%	6.0%	100.0%	9.6%
Gladstone	91.3%	1.5%	1.5%	2.6%	0.0%	3.1%	100.0%	9.8%
Happy Valley	79.0%	2.0%	0.3%	13.2%	0.0%	5.5%	100.0%	3.7%
Johnson City	93.3%	0.4%	0.0%	4.2%	0.0%	2.0%	100.0%	35.4%
Milwaukie	89.9%	2.6%	0.3%	2.8%	0.6%	3.8%	100.0%	3.7%
Molalla	94.3%	3.0%	0.9%	0.0%	0.0%	1.8%	100.0%	11.8%
Oregon City	91.5%	0.7%	0.7%	2.4%	0.1%	4.6%	100.0%	6.5%
Rivergrove (part)*	92.8%	0.0%	0.0%	6.0%	0.0%	1.2%	100.0%	0.0%
Sandy	94.6%	0.1%	0.0%	1.6%	0.3%	3.4%	100.0%	5.8%
West Linn	92.7%	0.4%	0.1%	3.6%	0.2%	3.0%	100.0%	3.7%
Wilsonville (part)*	90.5%	1.1%	1.1%	2.5%	0.6%	4.1%	100.0%	12.1%
-								
Columbia County	94.3%	0.3%	1.7%	1.0%	0.1%	2.6%	100.0%	4.1%
Clatskanie	95.9%	0.0%	3.3%	0.0%	0.0%	0.9%	100.0%	4.3%
Columbia City	97.3%	0.3%	0.1%	1.4%	0.0%	0.9%	100.0%	1.9%
Prescott	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	15.6%
Rainier	88.8%	1.8%	5.7%	0.0%	0.0%	3.7%	100.0%	1.9%
St. Helens	92.7%	0.8%	2.2%	0.4%	0.1%	3.9%	100.0%	7.1%
Scappoose	90.5%	0.0%	3.1%	2.8%	0.0%	3.6%	100.0%	5.9%
Vernonia	98.8%	0.0%	0.0%	0.0%	0.2%	0.9%	100.0%	3.0%
-								
Hood River County	93.5%	0.6%	2.1%	1.4%	0.7%	1.8%	100.0%	29.8%
Cascade Locks	86.8%	6.0%	3.5%	0.4%	0.0%	3.2%	100.0%	3.4%

<b>County / City</b>	<b>White</b>	<b>Black or African American</b>	<b>American Indian and Alaska Native</b>	<b>Asian</b>	<b>Native Hawaiian and Other Pacific Islander</b>	<b>Two or More Races</b>	<b>Total</b>	<b>Hispanic (all races)</b>
Hood River	93.5%	0.6%	2.1%	1.4%	0.7%	1.8%	100.0%	29.8%
-								
Marion County	89.9%	1.1%	2.2%	2.0%	0.6%	4.2%	100.0%	26.4%
Aumsville	93.4%	0.0%	2.0%	0.2%	0.0%	4.4%	100.0%	12.9%
Aurora	93.4%	3.5%	0.9%	0.0%	0.0%	2.3%	100.0%	6.9%
Detroit	96.1%	0.0%	3.9%	0.0%	0.0%	0.0%	100.0%	16.3%
Donald	95.1%	0.0%	0.0%	0.0%	0.0%	4.9%	100.0%	14.3%
Gates (part)*	93.1%	0.0%	3.1%	0.3%	2.7%	0.8%	100.0%	9.3%
Gervais	92.4%	0.0%	6.0%	0.3%	0.0%	1.3%	100.0%	99.6%
Hubbard	88.9%	0.0%	5.3%	0.2%	0.0%	5.6%	100.0%	70.2%
Idanha (part)*	91.4%	0.0%	0.0%	0.0%	0.0%	8.6%	100.0%	7.7%
Jefferson	88.3%	0.0%	6.2%	1.0%	0.0%	4.5%	100.0%	14.3%
Keizer	91.5%	1.0%	1.3%	1.6%	0.3%	4.4%	100.0%	20.2%
Mill City (part)*	89.0%	0.0%	7.8%	0.7%	0.5%	1.9%	100.0%	16.2%
Mt. Angel	94.5%	0.4%	1.1%	0.5%	0.0%	3.4%	100.0%	31.2%
St. Paul	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	15.2%
Salem (part)*	88.9%	1.4%	1.9%	2.8%	0.9%	4.1%	100.0%	21.1%
Scotts Mills	96.4%	0.0%	0.0%	0.0%	0.0%	3.6%	100.0%	13.2%
Silverton	95.5%	0.1%	0.9%	1.1%	0.0%	2.4%	100.0%	10.8%
Stayton	93.8%	0.7%	0.9%	0.7%	0.0%	3.8%	100.0%	18.4%
Sublimity	98.3%	0.0%	0.3%	0.3%	0.0%	1.1%	100.0%	2.4%
Turner	94.0%	0.0%	1.3%	0.2%	2.0%	2.5%	100.0%	7.2%
Woodburn	88.4%	0.7%	4.8%	1.8%	0.0%	4.3%	100.0%	83.3%
-								
Multnomah County	81.3%	5.9%	1.2%	6.8%	0.6%	4.2%	100.0%	11.1%
Fairview	77.1%	6.9%	1.3%	6.9%	1.7%	6.0%	100.0%	14.7%
Gresham	85.3%	3.4%	2.4%	4.8%	1.1%	3.0%	100.0%	20.0%
Lake Oswego (part)*	90.6%	0.6%	0.1%	6.3%	0.1%	2.3%	100.0%	4.0%
Maywood Park	83.0%	7.2%	0.0%	8.0%	0.5%	1.3%	100.0%	2.8%
Portland (part)*	80.0%	6.6%	1.1%	7.4%	0.5%	4.5%	100.0%	9.5%
Troutdale	88.2%	3.6%	0.2%	5.2%	0.0%	2.7%	100.0%	10.7%
Wood Village	86.5%	0.6%	0.5%	4.0%	1.2%	7.3%	100.0%	27.6%
-								
Polk County	91.2%	0.5%	2.2%	2.2%	0.3%	3.4%	100.0%	12.3%
Dallas	93.3%	0.2%	1.6%	1.1%	0.2%	3.6%	100.0%	4.2%
Falls City	95.1%	0.3%	1.3%	0.0%	0.0%	3.4%	100.0%	0.8%
Independence	90.1%	0.4%	2.2%	2.4%	0.7%	4.1%	100.0%	42.6%
Monmouth	90.2%	0.9%	0.8%	2.1%	1.6%	4.3%	100.0%	13.4%
-								

County / City	White	Black or African American	American Indian and Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Two or More Races	Total	Hispanic (all races)
Washington County	82.7%	1.9%	1.7%	9.3%	0.5%	3.9%	100.0%	16.5%
Banks	94.8%	0.0%	1.6%	0.3%	0.0%	3.3%	100.0%	6.1%
Beaverton	79.1%	2.1%	1.6%	13.3%	0.4%	3.6%	100.0%	17.2%
Cornelius	84.4%	0.6%	8.7%	1.6%	0.0%	4.6%	100.0%	63.1%
Durham	92.9%	2.5%	0.9%	0.8%	0.0%	2.7%	100.0%	8.8%
Forest Grove	91.4%	0.0%	2.9%	1.2%	0.2%	4.2%	100.0%	29.6%
Gaston	97.7%	0.0%	0.0%	0.0%	0.0%	2.3%	100.0%	1.0%
Hillsboro	80.2%	2.3%	3.1%	8.9%	1.0%	4.6%	100.0%	26.6%
King City	95.7%	0.0%	0.0%	4.2%	0.0%	0.0%	100.0%	0.8%
North Plains	89.5%	0.0%	5.6%	1.5%	0.0%	3.4%	100.0%	8.9%
Sherwood	89.9%	1.2%	0.3%	4.8%	1.1%	2.7%	100.0%	7.9%
Tigard	87.8%	1.4%	0.4%	6.1%	0.9%	3.4%	100.0%	13.1%
Tualatin (part)*	90.1%	2.3%	0.8%	3.3%	0.4%	3.2%	100.0%	18.8%
-								
Yamhill County	92.2%	0.9%	1.6%	1.3%	0.2%	3.9%	100.0%	15.5%
Amity	91.6%	0.7%	0.1%	0.3%	0.0%	7.3%	100.0%	9.8%
Carlton	94.1%	0.2%	0.5%	0.8%	0.0%	4.4%	100.0%	3.4%
Dayton	88.3%	2.7%	0.7%	0.6%	0.0%	7.8%	100.0%	51.7%
Dundee	93.7%	0.0%	1.8%	1.8%	0.0%	2.6%	100.0%	5.2%
Lafayette	95.4%	0.0%	0.4%	0.0%	0.0%	4.2%	100.0%	26.6%
McMinnville	91.2%	1.0%	1.8%	1.9%	0.5%	3.6%	100.0%	24.1%
Newberg	91.9%	0.7%	1.1%	1.4%	0.0%	4.8%	100.0%	12.7%
Sheridan	83.1%	5.3%	4.7%	0.9%	0.4%	5.7%	100.0%	15.7%
Willamina (part)*	84.4%	0.0%	5.8%	0.0%	0.3%	9.5%	100.0%	3.7%
Yamhill	92.2%	0.9%	1.6%	1.3%	0.2%	3.9%	100.0%	15.5%
Study Area	86.6%	2.6%	1.3%	5.1%	0.5%	3.9%	100.0%	12.8%

2007-2011 American Community Survey 5-Year Estimates

#### 4.4.1.2 Income and Poverty

The number of people living in poverty in the study area climbed 70.0 percent between 2002 and 2011, according to the U.S. Census Bureau. During that period, the number of residents living in poverty increased in both years, growing from approximately 252,000 in 2002 to 428,000 in 2011.

In Clark County, the growth in poverty was slightly lower than in the larger study area, but the share of residents living in poverty still grew by 61.2 percent, climbing from approximately 36,000 in 2002 to nearly 59,000 in 2011. Only one county in the study area (Skamania County) saw poverty levels grow by less than 50 percent, and in several counties, the growth was greater than 80 percent. According to data from the U.S. Census Bureau, per capita income averages

\$29,447 across the entire study area, but varies substantially by county. In three counties (Cowlitz, Marion, and Polk) per capita income is less than \$25,000 per year. In contrast per capita income in Yamhill County is \$43,543, and in Hood River County it is \$50,761. In Clark County, the per capita income of \$27,916 is lower than the average for the study area.

Approximately one out of eight residents in the study area has income that puts them below the poverty level. For the study area, the share of residents below the poverty level is 13.1%. As with per capita income, the poverty rate varies substantially from county to county. The counties in the study area with the highest poverty rates are: Cowlitz County (17.3%), Marion County (16.8%), and Multnomah County (16.2%). The counties with the lowest poverty rates are: Hood River County (9.3%), and Clackamas County (9.4%). Clark County has a poverty rate that is lower than the study area average, with a rate of 11.6%.

**Table 4.4-5. Population Living Below the Poverty Level – All Ages**

County	Thousands										Change 2002-2011	% Change
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011		
Washington	623.0	671.2	715.3	732.0	736.9	722.6	727.2	803.3	890.3	931.6	308.6	49.5
Clark	36.4	41.0	44.8	45.9	41.6	39.2	41.6	50.6	53.7	58.7	22.3	61.2
Cowlitz	11.8	13.0	13.8	14.3	15.4	15.2	14.7	16.0	20.8	19.6	7.8	66.5
Skamania	1.2	1.4	1.2	1.2	1.3	1.3	1.3	1.3	1.5	1.6	0.5	38.7
<b>Oregon</b>	<b>396.2</b>	<b>423.3</b>	<b>462.2</b>	<b>497.3</b>	<b>487.4</b>	<b>476.6</b>	<b>501.5</b>	<b>536.8</b>	<b>596.6</b>	<b>655.2</b>	<b>259.1</b>	<b>65.4</b>
Clackamas	27.3	30.4	33.1	32.5	29.7	34.2	34.7	35.9	38.8	41.5	14.2	52.1
Columbia	3.7	4.0	4.5	5.0	4.3	4.3	5.5	5.8	6.6	6.0	2.3	62.4
Hood River	2.4	2.6	2.7	3.1	3.1	2.6	2.8	2.7	2.9	3.3	0.9	36.8
Marion	38.3	41.1	44.5	44.7	44.0	45.8	48.0	50.5	55.0	63.4	25.2	65.8
Multnomah	78.7	85.3	93.9	112.8	103.7	103.2	99.0	107.6	130.6	142.3	63.6	80.8
Polk	6.3	6.8	7.7	10.4	9.4	7.9	9.0	10.0	11.6	10.5	4.2	67.0
Washington	36.9	42.2	46.5	48.0	49.1	44.7	50.1	53.3	50.9	67.5	30.7	83.2
Yamhill	8.9	9.3	9.8	11.2	11.9	10.7	11.7	11.5	13.8	13.4	4.5	50.2
<b>Study Area</b>	<b>251.7</b>	<b>276.8</b>	<b>302.6</b>	<b>329.1</b>	<b>313.6</b>	<b>309.1</b>	<b>318.4</b>	<b>345.3</b>	<b>386.2</b>	<b>427.7</b>	<b>176.1</b>	<b>70.0</b>

Source: U.S. Census Bureau

**Table 4.4-5. Income and Poverty by City and County**

Areas	Median household income (dollars)	Mean household income (dollars)	Median family income (dollars)	Mean family income (dollars)	Per capita income (dollars)	Population below poverty level	Share below poverty level	Population
Clark County	59,051	73,656	68,447	82,447	27,916	48,751	11.6%	421,154
Battle Ground	59,723	66,941	63,324	71,292	21,073	1,859	11.0%	16,925
Camas	77,967	102,549	86,386	112,340	34,808	1,358	7.2%	18,845
La Center	38,984	46,813	71,250	66,455	24,082	127	13.6%	935
Ridgefield	82,528	86,744	85,221	88,850	27,849	677	14.9%	4,551
Vancouver	50,387	61,863	57,867	69,842	25,821	24,668	15.3%	161,606
Washougal	63,537	80,739	74,184	89,996	30,613	1,751	12.8%	13,674
Yacolt	59,271	58,933	58,958	58,784	18,791	110	7.5%	1,459

<b>Areas</b>	<b>Median household income (dollars)</b>	<b>Mean household income (dollars)</b>	<b>Median family income (dollars)</b>	<b>Mean family income (dollars)</b>	<b>Per capita income (dollars)</b>	<b>Population below poverty level</b>	<b>Share below poverty level</b>	<b>Population</b>
Cowlitz County	46,461	59,111	57,133	68,294	23,575	17,620	17.3%	101,901
Castle Rock	33,424	43,648	43,036	48,903	19,286	410	20.2%	2,025
Kalama	39,856	51,495	48,359	55,249	21,497	194	8.1%	2,385
Kelso	34,391	43,112	35,850	45,995	18,411	3,231	27.0%	11,974
Longview	40,226	54,599	50,219	66,431	23,159	8,007	21.8%	36,695
Woodland	58,413	62,916	60,684	66,997	20,288	891	16.7%	5,347
Skamania County	52,884	65,770	68,229	77,538	26,624	1,202	10.9%	10,979
North Bonneville	39,958	57,422	44,545	62,947	21,137	69	7.1%	966
Stevenson	48,021	57,927	68,750	72,109	24,620	285	17.4%	1,640
Oregon Cities								
Clackamas County	63,790	82,892	75,850	95,110	32,382	35,312	9.4%	373,832
Barlow	55,972	61,051	56,528	60,314	16,671	-	0.0%	227
Canby	59,873	71,823	64,804	80,995	24,774	1,539	9.9%	15,613
Damascus	83,772	96,206	87,978	101,523	32,969	524	5.0%	10,412
Estacada	37,560	46,287	57,692	59,155	19,513	588	22.0%	2,676
Gladstone	48,876	63,910	58,393	65,568	26,121	2,063	17.9%	11,542
Happy Valley	100,647	122,923	107,069	128,136	36,164	394	3.0%	13,170
Johnson City	35,313	39,137	45,000	48,505	16,787	179	25.8%	693
Milwaukie	52,625	61,152	64,099	72,392	26,844	2,578	12.6%	20,414
Molalla	50,942	56,701	52,741	56,225	21,134	999	12.7%	7,887
Oregon City	57,618	66,948	66,848	74,409	25,905	3,944	12.5%	31,430
Rivergrove	106,250	130,883	125,833	158,171	58,862	4	1.6%	249
Sandy	56,182	60,899	60,898	65,375	25,320	832	9.1%	9,188
West Linn	92,342	110,869	111,534	129,662	43,350	1,007	4.0%	24,917
Wilsonville	55,316	73,965	76,597	92,602	30,187	2,011	10.7%	18,845
Columbia County	56,270	64,488	63,415	72,351	25,440	5,783	11.7%	49,247
Clatskanie	40,000	51,932	55,852	67,882	22,279	311	17.6%	1,765
Columbia City	63,359	68,427	68,654	74,573	27,263	130	6.7%	1,947
Prescott	32,500	31,894	42,500	39,717	16,413	5	15.6%	32
Rainier	58,500	66,194	66,863	71,222	29,610	217	11.3%	1,919
St. Helens	52,923	55,933	58,440	61,650	21,307	1,687	13.3%	12,706
Scappoose	61,094	70,221	71,125	78,240	27,668	711	11.0%	6,492
Vernonia	50,568	59,723	57,292	66,981	23,371	189	8.5%	2,220
Hood River County	107,101	130,360	125,248	152,450	50,761	2,689	9.3%	28,947
Cascade Locks	40,893	45,398	45,250	47,150	18,355	141	14.2%	990

<b>Areas</b>	<b>Median household income (dollars)</b>	<b>Mean household income (dollars)</b>	<b>Median family income (dollars)</b>	<b>Mean family income (dollars)</b>	<b>Per capita income (dollars)</b>	<b>Population below poverty level</b>	<b>Share below poverty level</b>	<b>Population</b>
Hood River	107,101	130,360	125,248	152,450	50,761	2,689	9.3%	28,947
Marion County	46,191	59,672	54,618	67,788	22,192	52,506	16.8%	313,020
Aumsville	43,819	54,165	44,383	55,001	17,381	472	13.3%	3,546
Aurora	77,768	83,457	82,059	92,914	32,805	75	9.5%	793
Detroit	40,714	43,969	41,250	47,014	19,469	38	21.3%	178
Donald	54,402	62,944	56,250	65,293	23,539	87	8.6%	1,010
Gates	40,109	46,775	52,813	57,584	20,100	158	25.4%	621
Gervais	41,406	47,616	37,632	42,423	11,835	465	23.9%	1,945
Hubbard	44,730	53,262	46,830	56,038	15,567	483	15.6%	3,105
Idanha	47,500	47,839	51,806	53,392	14,346	21	9.5%	221
Jefferson	40,288	52,125	43,125	56,113	16,747	481	15.9%	3,028
Keizer	50,902	62,225	56,126	66,031	23,857	5,251	14.5%	36,119
Mill City	36,667	47,176	56,458	55,028	17,780	165	10.9%	1,513
Mt. Angel	37,990	47,435	54,063	60,365	19,129	478	14.6%	3,266
St. Paul	60,250	64,544	62,500	69,588	26,945	9	2.8%	319
Salem	44,226	59,100	56,833	70,346	23,162	25,477	16.6%	153,481
Scotts Mills	48,636	52,318	62,625	61,219	17,226	45	13.6%	331
Silverton	50,302	58,765	57,355	69,626	23,599	1,556	17.1%	9,091
Stayton	48,036	67,561	57,630	79,492	25,129	941	12.4%	7,570
Sublimity	62,500	68,098	70,083	81,848	28,130	132	5.0%	2,633
Turner	43,317	51,223	50,991	56,146	18,981	371	16.4%	2,256
Woodburn	42,717	50,909	46,489	56,250	16,864	4,699	19.9%	23,665
Multnomah County	50,726	68,930	64,071	84,189	29,544	117,466	16.2%	724,803
Fairview	51,579	65,936	55,897	70,579	26,779	1,186	13.6%	8,716
Gresham	47,852	57,895	56,844	66,021	21,748	17,440	16.8%	103,637
Lake Oswego	81,669	117,847	108,924	143,808	50,572	2,327	6.3%	36,704
Maywood Park	63,462	72,849	73,750	84,803	30,839	77	9.1%	849
Portland	50,177	69,269	64,617	86,462	30,631	94,763	16.4%	576,543
Troutdale	62,429	69,681	69,466	75,952	24,861	1,984	12.7%	15,674
Wood Village	47,617	60,412	50,185	57,557	20,898	1,018	26.9%	3,780
Polk County	52,865	64,864	63,907	75,908	24,794	9,250	12.4%	74,734
Dallas	49,209	54,756	55,909	62,516	21,604	1,838	12.7%	14,496
Falls City	41,528	44,054	47,292	47,840	15,203	239	22.3%	1,073
Independence	48,816	57,388	52,500	61,519	18,780	1,625	19.3%	8,405
Monmouth	40,154	49,479	64,911	72,594	17,899	1,843	19.5%	9,430

<b>Areas</b>	<b>Median household income (dollars)</b>	<b>Mean household income (dollars)</b>	<b>Median family income (dollars)</b>	<b>Mean family income (dollars)</b>	<b>Per capita income (dollars)</b>	<b>Population below poverty level</b>	<b>Share below poverty level</b>	<b>Population</b>
Washington County	63,814	80,980	77,028	93,375	31,165	53,851	10.3%	524,275
Banks	65,417	72,851	73,043	76,727	22,363	127	6.4%	1,971
Beaverton	55,115	72,534	70,361	86,552	30,225	10,672	12.0%	89,160
Cornelius	48,778	57,816	50,475	58,491	16,473	2,030	17.3%	11,706
Durham	66,563	92,584	107,917	122,172	44,974	111	10.0%	1,105
Forest Grove	49,034	59,408	58,519	68,393	21,118	4,203	20.1%	20,908
Gaston	58,958	74,532	69,583	77,271	31,775	72	10.1%	710
Hillsboro	64,197	74,139	72,206	82,837	27,034	10,520	11.7%	89,946
King City	37,833	49,881	58,438	65,144	31,943	267	8.7%	3,070
North Plains	71,346	74,187	74,107	82,972	31,597	103	5.6%	1,854
Sherwood	79,209	91,683	91,396	100,060	31,375	778	4.4%	17,636
Tigard	62,521	83,000	79,219	95,247	33,749	4,091	8.6%	47,759
Tualatin	60,818	77,744	75,122	85,362	29,987	3,124	12.1%	25,893
Yamhill County	123,304	134,381	139,819	148,112	43,543	12,080	12.1%	99,584
Amity	47,440	52,406	52,500	55,320	18,561	271	17.8%	1,520
Carlton	54,044	57,094	62,900	63,139	20,656	157	8.6%	1,829
Dayton	49,934	52,673	56,726	57,544	16,840	361	14.4%	2,510
Dundee	69,142	83,770	73,438	89,933	31,077	89	2.8%	3,128
Lafayette	53,750	60,925	52,870	63,564	17,510	532	14.6%	3,644
McMinnville	41,782	58,792	55,194	71,435	22,505	5,332	16.8%	31,769
Newberg	53,057	60,706	63,784	68,141	22,254	2,519	11.6%	21,786
Sheridan	46,867	54,843	46,800	57,378	14,556	588	9.8%	6,023
Willamina	37,379	43,806	42,935	49,564	15,916	292	15.6%	1,874
Yamhill	123,304	134,381	139,819	148,112	43,543	12,080	12.1%	99,584
Study Area					\$29,447	356,510	13.1%	2,722,476

2007-2011 American Community Survey 5-Year Estimates

As illustrated in Table 4.4-6, B between 2002 and 2011, the share of the population living below the poverty level grew from 10.1 to 15.6 percent in the study area. County residents fared somewhat better during this time, but the share of residents living below the poverty level grew from 9.6 percent in 2002 to 13.7 percent in 2011. Directly north of Clark County, the poverty rate in Cowlitz County grew from 12.5 to 19.5 percent, and directly to the south, the poverty rate in Multnomah County grew from 11.8 to 19.4 percent.

**Table 4.4-6. Poverty Rates (%) in Study Area – All Ages**

County	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Change 2002-2011
<b>Washington</b>	10.3	11.0	11.6	12.0	11.8	11.4	11.3	12.3	13.5	13.9	3.6
Clark	9.6	10.5	11.2	11.5	10.2	9.5	9.9	11.8	12.7	13.7	4.1
Cowlitz	12.5	13.6	14.3	15.0	15.7	15.4	14.8	16.0	20.6	19.5	7.0
Skamania	11.6	10.9	11.5	11.1	12.5	11.9	12.2	12.4	13.8	14.9	3.3
<b>Oregon</b>	11.3	12.0	12.9	14.1	13.4	13.0	13.5	14.3	15.8	17.3	6.0
Clackamas	7.6	8.4	9.0	8.9	8.0	9.2	9.2	9.4	10.4	11.0	3.4
Columbia	8.0	8.6	9.5	10.5	8.8	8.8	11.3	11.9	13.4	12.3	4.3
Hood River	11.7	12.5	13.0	15.3	14.7	12.7	13.2	12.9	13.0	14.7	3.0
Marion	13.2	14.1	15.1	15.4	14.7	15.2	15.8	16.4	17.9	20.5	7.3
Multnomah	11.8	12.9	14.2	17.3	15.5	15.0	14.1	15.1	18.0	19.4	7.6
Polk	9.7	10.3	11.3	15.4	13.2	10.8	11.9	13.2	15.7	14.1	4.4
Washington	7.7	8.7	9.3	9.7	9.6	8.6	9.5	10.0	9.7	12.6	4.9
Yamhill	10.5	10.8	11.2	13.0	13.3	11.7	12.5	12.3	14.7	14.1	3.6
<b>Study Area</b>	10.1	11.0	11.8	13.0	12.1	11.7	11.9	12.7	14.3	15.6	5.5

#### 4.4.1.3 Housing

According to data from the U.S. Census Bureau, the study area has more than 1.1 million housing units, with more than 166,000 in Clark County. Results from the most recent American Community Survey indicate that there are more than 9,000 vacant housing units in the County, and that the vacancy rate for rental housing in the County is 5.2 percent. Within the larger study area, there are an estimated 73,000 vacant housing units, and vacancy rates for rental housing range between 4.1 and 8.1 percent.

**Table 4.4-7. Housing Units and Vacancy by County in Study Area**

County	Housing Units			% Vacancy	
	Total	Occupied	Vacant	Homeowner	Rental
<b>Washington</b>					
Clark	166,270	157,179	9,091	1.9	5.2
Cowlitz	43,227	39,793	3,434	1.9	5.3
Skamania	5,577	4,435	1,142	3.3	5.1
<b>Oregon</b>					
Clackamas	156,150	144,588	11,562	1.6	6.3
Columbia	20,600	19,173	1,427	1.7	4.3
Hood River	9,193	8,204	989	1.9	5.8
Marion	120,482	112,841	7,641	1.9	5.5
Multnomah	322,567	302,224	20,343	2.5	4.1
Polk	30,044	28,111	1,933	2.6	4.2
Washington	211,045	198,593	12,452	2.2	5.3
Yamhill	36,831	33,804	3,027	2.2	8.1
<b>Study Area</b>	1,121,986	1,048,945	73,041		

Source: U.S. Census Bureau, 2007-2011 American Community Survey



County-wide median house values in the study area range between \$193,800 and \$326,300, according to data from the U.S. Census Bureau 2007–2011 American Community Survey. In Clark County, the median house value is \$254,200. The largest number of housing units in both the study area and in the County is valued between \$200,000 and \$299,999, but there is also a large number of housing units valued at less than \$200,000. In the study area, one out of four housing units is valued at less than \$200,000, and in Clark County, nearly one-third of housing units are valued at less than \$200,000.

**Table 4.4-8. Housing Values by County in Study Area**

County	Less than \$50,000	\$50,000 to \$99,999	\$100,000 to \$149,999	\$150,000 to \$199,999	\$200,000 to \$299,999	\$300,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 or more	Median (dollars)
<b>Washington</b>									
Clark	4,124	2,157	5,739	16,597	39,112	27,929	8,730	1,132	\$254,200
Cowlitz	1,638	1,955	3,996	6,451	6,951	4,534	999	258	\$193,800
Skamania	151	179	291	416	1,053	910	200	123	\$257,600
<b>Oregon</b>									
Clackamas	5,848	1,471	2,542	7,227	27,631	36,422	16,622	3,893	\$326,300
Columbia	1,072	668	1,604	2,831	4,702	2,854	873	117	\$221,200
Hood River	197	257	298	414	1,333	1,789	1,045	212	\$326,900
Marion	5,053	2,632	8,270	16,710	19,766	11,801	3,971	586	\$206,700
Multnomah	5,415	2,201	6,915	19,664	58,394	51,365	20,105	2,857	\$281,900
Polk	877	605	1,742	4,038	6,055	4,344	1,070	163	\$231,900
Washington	4,247	1,449	3,638	10,253	42,238	44,612	15,393	1,944	\$300,200
Yamhill	1,909	991	1,888	3,911	6,951	5,238	2,363	384	\$237,700
<b>Study Area</b>	30,531	14,565	36,923	88,512	214,186	191,798	71,371	11,669	

Source: U.S. Census Bureau, 2007-2011 American Community Survey

A second source of housing information is the Washington OFM, which provides detail at the municipality level. As shown in the tables on the following two pages, approximately 55 percent of the housing in the County is located in incorporated parts of the County and 45 percent is in unincorporated areas. Vancouver accounts for most of the housing in the incorporated areas, with an estimated 70,249 out of 93,319 housing units in 2012, or 75.7 percent. Battle Ground, Camas, and Washougal account for most of the other housing in incorporated areas

Between 2002 and 2012, the number of housing units in Clark County grew by more than 27,600. Vancouver accounted for more than 28.4 percent of this total, adding more than 7,800 new housing units. Battle Ground, Camas, and Washougal each added more than 2,000 new housing units, while unincorporated parts of the County added nearly 11,800 new units.

Housing vacancy rates have remained steady over the past 10 years in the County, ranging between 5.2 and 5.8 percent. In Vancouver, the vacancy rate has generally ranged between 6.2 and 6.7 percent and, in 2012, it was estimated that there were 45,316 unoccupied housing units in Vancouver.

**Table 4.4-9. Housing Characteristics by City in Clark County**

City Name	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011 <sup>1</sup>	2012 <sup>2</sup>
<b>Housing Units</b>											
Clark County	142,050	146,196	150,712	154,819	158,999	162,191	164,926	166,721	167,413	168,416	169,667
Unincorporated	64,562	66,722	68,725	70,868	72,951	73,672	74,784	75,302	75,498	75,908	76,348
Incorporated	77,488	79,474	81,987	83,951	86,048	88,519	90,142	91,419	91,915	92,508	93,319
Battle Ground	3,857	4,311	4,809	5,119	5,375	5,465	5,706	5,857	5,952	6,042	6,084
Camas	5,251	5,533	6,026	6,122	6,382	6,574	6,796	6,925	7,072	7,182	7,341
La Center	652	671	723	765	884	903	941	965	981	996	1,061
Ridgefield	797	815	827	1,022	1,273	1,431	1,544	1,641	1,695	1,779	1,857
Vancouver	62,816	63,785	64,845	65,865	66,655	68,375	69,159	69,875	70,005	70,249	70,663
Washougal	3,695	3,942	4,337	4,627	5,021	5,276	5,468	5,628	5,673	5,717	5,764
Woodland	57	55	53	56	59	47	52	53	53	53	53
Yacolt	363	362	367	375	399	448	476	475	484	490	496
<b>Occupied Housing Units</b>											
Clark County	134,671	138,146	142,394	145,885	149,723	152,780	155,350	157,242	158,099	158,841	160,021
Unincorporated	61,600	63,640	65,529	67,551	69,512	70,176	71,212	71,680	71,843	72,257	72,676
Incorporated	73,071	74,506	76,865	78,334	80,211	82,604	84,138	85,562	86,256	86,580	87,339
Battle Ground	3,687	4,086	4,596	4,807	5,071	5,207	5,402	5,554	5,652	5,729	5,769
Camas	4,938	5,200	5,650	5,731	5,935	6,125	6,333	6,472	6,619	6,709	6,857
La Center	614	635	685	726	809	859	894	920	942	951	1,013
Ridgefield	753	770	781	935	1,156	1,302	1,429	1,529	1,591	1,658	1,731
Vancouver	59,207	59,730	60,698	61,462	62,210	63,795	64,542	65,404	65,691	65,744	66,132
Washougal	3,483	3,705	4,070	4,275	4,610	4,864	5,046	5,191	5,256	5,282	5,325
Woodland	54	45	45	51	55	43	49	49	51	50	50
Yacolt	335	335	340	347	365	409	443	443	454	458	463
<b>Occupancy Rate</b>											
Clark County	94.8%	94.5%	94.5%	94.2%	94.2%	94.2%	94.2%	94.3%	94.4%	94.3%	94.3%
Unincorporated	95.4%	95.4%	95.3%	95.3%	95.3%	95.3%	95.2%	95.2%	95.2%	95.2%	95.2%
Incorporated	94.3%	93.7%	93.8%	93.3%	93.2%	93.3%	93.3%	93.6%	93.8%	93.6%	93.6%
Battle Ground	95.6%	94.8%	95.6%	93.9%	94.3%	95.3%	94.7%	94.8%	95.0%	94.8%	94.8%
Camas	94.0%	94.0%	93.8%	93.6%	93.0%	93.2%	93.2%	93.5%	93.6%	93.4%	93.4%
La Center	94.2%	94.6%	94.7%	94.9%	91.5%	95.1%	95.0%	95.3%	96.0%	95.5%	95.5%
Ridgefield	94.5%	94.5%	94.4%	91.5%	90.8%	91.0%	92.6%	93.2%	93.9%	93.2%	93.2%
Vancouver	94.3%	93.6%	93.6%	93.3%	93.3%	93.3%	93.3%	93.6%	93.8%	93.6%	93.6%
Washougal	94.3%	94.0%	93.8%	92.4%	91.8%	92.2%	92.3%	92.2%	92.6%	92.4%	92.4%
Woodland	94.7%	81.8%	84.9%	91.1%	93.2%	91.5%	94.2%	92.5%	96.2%	94.3%	94.3%
Yacolt	92.3%	92.5%	92.6%	92.5%	91.5%	91.3%	93.1%	93.3%	93.8%	93.4%	93.4%
<b>Unoccupied Housing Units</b>											
Clark County	7,379	8,050	8,318	8,934	9,276	9,411	9,576	9,479	9,314	9,575	9,646
Unincorporated	2,962	3,082	3,196	3,317	3,439	3,496	3,572	3,622	3,655	3,651	3,672
Incorporated	4,417	4,968	5,122	5,617	5,837	5,915	6,004	5,857	5,659	5,928	5,980
Battle Ground	170	225	213	312	304	258	304	303	300	313	315
Camas	313	333	376	391	447	449	463	453	453	473	484

City Name	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011*	2012*
La Center	38	36	38	39	75	44	47	45	39	45	48
Ridgefield	44	45	46	87	117	129	115	112	104	121	126
Vancouver	3,609	4,055	4,147	4,403	4,445	4,580	4,617	4,471	4,314	4,505	4,531
Washougal	212	237	267	352	411	412	422	437	417	435	439
Woodland	3	10	8	5	4	4	3	4	2	3	3
Yacolt	28	27	27	28	34	39	33	32	30	32	33

\*For 2011 and 2012, the number of occupied housing units, occupancy rate, and unoccupied housing units were estimated on based on occupancy rates for 2008 through 2010.

Source: Washington Office of Financial Management

Median gross rent varies by county in the study area. In Clark County, median gross rent is \$895 per month. Within the study area, median gross rent ranges between \$684 per month (in Skamania County) to \$1,822 per month (in Yamhill County).

In Clark County, nearly one-third of the 50,000 rental units have gross rent of less than \$750 per month, one third have gross rent ranging between \$750 and \$999 per month, and the remainder rent for \$1,000 or more. Clark County has approximately 14,100 housing units that rent for less than \$750 per month.

In the study area, approximately 30 percent of rental units have monthly rent of \$750 or less, and there are approximately 361,500 of these units. The study area contains a total of nearly 1.2 million rental housing units.

**Table 4.4-9i. Gross Rent by County**

Areas	Less than \$200	\$200 to \$299	\$300 to \$499	\$500 to \$749	\$750 to \$999	\$1,000 to \$1,499	\$1,500 or more	Total	Median (dollars)
Clark County	649	823	1,774	11,488	16,314	14,936	4,183	50,167	\$895
Cowlitz County	353	309	1,512	4,946	2,821	2,068	448	12,457	\$705
Skamania County	117	28	48	373	191	135	44	936	\$684
Clackamas County	506	753	1,327	7,174	15,703	10,402	5,238	41,103	\$913
Columbia County	124	179	457	1,428	1,021	820	214	4,243	\$739
Hood River County	48	101	505	1,387	515	788	191	3,535	\$1,408
Marion County	649	690	3,301	15,847	11,908	7,723	2,497	42,615	\$761
Multnomah County	2,707	3,244	5,954	32,205	42,450	31,570	13,250	131,380	\$858
Polk County	178	339	876	3,050	2,101	1,800	497	8,841	\$749
Washington County	16,442	21,459	55,997	180,116	240,027	253,959	122,108	890,108	\$923
Yamhill County	104	207	557	3,071	2,669	2,271	763	9,642	\$1,822
Study Area	21,877	28,132	72,308	261,085	335,720	326,472	149,433	1,195,027	

2007-2011 American Community Survey 5-Year Estimates

#### 4.4.1.4 Workforce

According to data from the Bureau of Labor Statistics, between 2002 and 2012, the workforce in the study area grew from 1.33 million to 1.43 million, an increase of more than 108,000 workers

or 8.1 percent. In the County, the number of workers increased from approximately 187,000 to 211,000, an increase of approximately 24,000 workers or 12.9 percent.

During the same period, the number of workers employed grew by 7.4 percent in the study area. The number of workers employed grew from 1.22 million to 1.32 million, an increase of more than 91,000 workers. In the County, the number of workers with jobs grew by more than 19,000 (from approximately 170,000 to 189,000), an increase of 11.4 percent.

Because the size of the workforce grew faster than the number of workers employed, the number of unemployed workers in the study area grew by nearly 17,000 between 2002 and 2012. However, this is a significant improvement over the situation of the period between 2010 and 2012, which saw the number of unemployed jump to nearly 155,000 before slowly declining in subsequent years.

In the County, the number of unemployed workers was 4,800 higher in 2012 than in 2002, with approximately 22,000 workers not employed. The number of unemployed workers in the County had dropped to less than 12,000 in 2006 and 2007, but grew to nearly 29,000 in 2009 and to more than 30,000 in 2010 during what is referred to as the Great Recession.

The unemployment rate in the study area declined from 7.8 percent in 2002 to 5.0 percent in 2007, but the impact of the recent recession was a doubling of that rate, to 10.8 percent in 2009 and 10.6 percent in 2010. By 2012, the unemployment rate had dropped to 8.4 percent, an improvement over the situation during the height of the recession but substantially higher than in 2007.

In the County the unemployment rate fell from 9.2 percent in 2002 to a low of 5.6 percent in 2007, before the recession. During the recession, the County unemployment rate grew for three consecutive years, to a high of 14.0 percent in 2010. The rate dropped in both of the most recent two years, but was still 10.2 percent in 2012.

**Table 4.4-10. Size of Workforce by County in Project Vicinity**

County Name	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Change 2002-2012	% Change
Washington	3,484,463	2,913,230	2,999,526	3,075,972	3,155,384	3,232,652	3,284,836	3,194,251	3,166,880	3,161,818	3,197,293	376,765	12.1%
Clark	211,442	170,968	180,700	188,730	192,679	196,119	198,829	188,747	186,527	187,179	189,421	24,123	12.9%
Cowlitz	43,967	38,553	39,051	39,637	39,843	40,581	40,493	38,659	37,912	38,380	38,380	284	0.7%
Skamania	5,060	4,295	4,510	4,624	4,688	4,666	4,687	4,415	4,501	4,461	4,515	292	6.1%
Oregon	1,962,908	1,699,679	1,714,447	1,740,990	1,792,039	1,821,827	1,827,032	1,753,853	1,761,867	1,785,400	1,791,730	110,168	6.5%
Clackamas	199,576	175,118	177,506	180,656	185,938	187,337	188,717	181,268	178,777	181,905	183,824	9,838	5.2%
Columbia	24,221	20,823	21,102	21,619	22,409	22,380	22,476	21,357	21,526	21,683	21,912	1,143	6.0%
Hood River	14,497	11,155	11,441	11,538	11,922	12,296	12,632	12,815	13,106	13,304	13,487	2,406	19.9%
Marion	154,899	136,976	137,804	138,962	142,018	143,510	145,044	140,510	141,920	140,720	140,106	7,600	5.2%
Multnomah	404,367	342,767	338,901	340,275	349,215	360,496	365,458	351,922	360,613	369,421	373,016	24,841	6.5%
Polk	38,442	31,996	32,680	33,733	35,249	36,560	37,458	36,391	35,548	35,352	35,198	4,660	13.8%
Washington	293,472	245,736	249,121	255,825	266,761	271,610	273,974	263,334	262,950	269,929	272,777	28,109	10.6%
Yamhill	48,614	40,330	40,790	41,584	43,273	44,232	44,778	42,767	43,386	44,010	44,476	4,866	11.1%
Study Area	1,437,644	1,218,717	1,233,606	1,257,180	1,293,995	1,319,786	1,334,543	1,282,185	1,286,634	1,305,576	1,317,110	108,162	8.1%

Source: Bureau of Labor Statistics

**Table 4.4-10. Employment by County in Study Area**

Change	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Change 2002-2012	% Change
Washington	2,877,022	2,913,230	2,999,526	3,075,972	3,155,384	3,232,652	3,284,836	3,194,251	3,166,880	3,161,818	3,197,293	376,765	12.10%
Clark	170,096	170,968	180,700	188,730	192,679	196,119	198,829	188,747	186,527	187,179	189,421	24,123	12.90%
Cowlitz	38,218	38,553	39,051	39,637	39,843	40,581	40,493	38,659	37,912	38,380	38,380	284	0.70%
Skamania	4,293	4,295	4,510	4,624	4,688	4,666	4,687	4,415	4,501	4,461	4,515	292	6.10%
Oregon	1,704,131	1,699,679	1,714,447	1,740,990	1,792,039	1,821,827	1,827,032	1,753,853	1,761,867	1,785,400	1,791,730	119,168	6.50%
Clackamas	176,583	175,118	177,506	180,656	185,938	187,337	188,717	181,268	178,777	181,905	183,824	9,838	5.20%
Columbia	20,899	20,823	21,102	21,619	22,409	22,380	22,476	21,357	21,526	21,683	21,912	1,143	5.00%

Hood River	11,095	11,155	11,441	11,538	11,922	12,296	12,632	12,815	13,196	13,304	13,487	2,406	19.90%
Marion	136,577	136,976	137,804	138,962	142,018	143,510	145,044	140,510	141,020	140,720	140,106	7,600	5.20%
Multnomah	348,945	342,767	338,901	340,275	349,215	360,495	365,458	351,922	360,613	369,121	373,015	24,841	6.50%
Polk	31,647	31,996	32,680	33,733	35,249	36,560	37,458	36,391	35,548	35,352	35,198	4,660	13.80%
Washington	247,008	245,736	249,121	255,825	266,761	271,610	273,971	263,334	262,950	269,929	272,777	28,109	10.60%
Yamhill	40,511	40,330	40,790	41,581	43,273	44,232	44,778	42,767	43,386	44,010	44,475	4,866	11.10%
Study Area	1,225,872	1,218,717	1,233,606	1,257,180	1,293,995	1,319,786	1,334,543	1,282,185	1,286,634	1,305,576	1,317,110	108,162	8.10%

Source: Bureau of Labor Statistics

**Table 4.4-11. Employment by County in Project Vicinity**

County Name	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Change 2002- 2012	% Change
<b>Washington</b>	2,877,022	3,146,154	3,199,234	3,255,527	3,319,252	3,386,775	3,473,010	3,523,739	3,516,008	3,482,239	3,481,463	376,765	12.1%
<b>Clark</b>	170,096	189,109	195,202	201,564	204,406	207,853	214,101	217,536	216,991	213,635	211,442	24,123	12.9%
<b>Cowhit</b>	38,218	42,820	42,663	42,724	42,607	43,327	44,119	44,627	44,376	43,072	43,067	284	0.7%
<b>Skamania</b>	4,293	4,779	4,928	5,002	5,042	5,001	5,126	5,075	5,188	5,103	5,060	292	6.1%
<b>Oregon</b>	1,704,131	1,850,024	1,849,720	1,856,062	1,893,267	1,921,081	1,954,125	1,972,962	1,973,793	1,975,393	1,962,908	87,599	5.1
<b>Clackamas</b>	176,583	189,349	190,199	191,292	195,283	196,328	200,108	201,930	198,863	199,654	199,576	7,241	4.1
<b>Columbia</b>	20,899	23,233	23,207	23,340	23,771	23,737	24,188	24,586	24,484	24,266	24,221	1,013	4.8
<b>Heed River</b>	11,095	12,200	12,363	12,321	12,642	12,878	13,346	13,936	14,384	14,438	14,497	2,392	21.6
<b>Marion</b>	136,577	148,851	149,066	148,651	150,558	151,714	155,295	157,808	158,598	156,976	154,899	3,529	2.6
<b>Multnomah</b>	348,945	374,435	366,118	362,362	368,171	379,046	388,198	392,741	400,065	404,114	404,357	24,070	6.9
<b>Polk</b>	31,647	34,348	34,993	35,752	37,090	38,455	39,688	40,136	39,198	38,834	38,442	3,561	11.2
<b>Washington</b>	247,008	265,300	266,583	269,897	279,060	283,871	289,269	290,455	288,873	292,843	293,472	25,769	10.4
<b>Yamhill</b>	40,511	43,915	43,969	44,285	45,617	46,566	47,868	48,294	48,538	48,604	48,611	3,984	9.8
<b>Study Area</b>	1,225,872	1,328,339	1,328,284	1,337,040	1,364,217	1,388,746	1,421,296	1,437,124	1,439,568	1,441,538	1,437,644	91,238	7.4

Source: Bureau of Labor Statistics

**Table 4.4-11. Labor Force by County in Study Area**

Change	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Change 2002- 2012	% Change
<b>Washington</b>	3,104,698	3,146,154	3,199,234	3,255,527	3,319,252	3,386,775	3,473,010	3,523,739	3,516,008	3,482,239	3,481,463	376,765	12.1%
<b>Clark</b>	187,319	189,109	195,202	201,564	204,406	207,853	214,101	217,536	216,991	213,635	211,442	24,123	12.9%
<b>Cowlitz</b>	42,783	42,820	42,663	42,724	42,607	43,327	44,119	44,627	44,376	43,072	43,067	284	0.7%
<b>Skamania</b>	4,768	4,779	4,928	5,002	5,042	5,001	5,126	5,075	5,188	5,103	5,060	292	6.1%
<b>Oregon</b>	1,843,740	1,850,024	1,849,720	1,856,062	1,893,267	1,921,081	1,954,125	1,972,962	1,973,793	1,975,393	1,962,908	119,168	6.5%
<b>Clackamas</b>	189,738	189,349	190,199	191,232	195,283	196,328	200,108	201,930	198,863	199,654	199,576	9,838	5.2%
<b>Columbia</b>	23,078	23,233	23,207	23,340	23,771	23,737	24,188	24,586	24,484	24,265	24,221	1,143	5.0%

Hood River	12,091	12,200	12,353	12,321	12,612	12,878	13,346	13,936	14,384	14,438	14,497	2,406	19.9%
Marion	147,299	148,851	149,066	148,651	150,558	151,714	155,295	157,808	158,598	156,976	154,899	7,600	5.2%
Multnomah	379,516	374,435	366,118	362,362	368,171	379,016	388,198	392,741	400,065	404,114	404,357	24,841	6.5%
Polk	33,782	34,348	34,993	35,752	37,090	38,455	39,688	40,136	39,198	38,834	38,442	4,660	13.8%
Washington	265,363	265,300	265,583	269,807	279,060	283,871	289,259	290,455	288,873	292,843	293,472	28,109	10.6%
Yamhill	43,745	43,915	43,969	44,285	45,617	46,566	47,868	48,294	48,538	48,604	48,611	4,866	11.1%
Study Area	1,329,482	1,328,339	1,328,281	1,337,040	1,364,217	1,388,746	1,421,296	1,437,124	1,439,558	1,441,538	1,437,644	108,162	8.1%

Source: Bureau of Labor Statistics



**Table 4.4-12. Unemployment by County in Project Vicinity**

County Name	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Change 2002- 2012	% Change
<b>Washington</b>	227,676	232,924	199,708	179,555	163,868	154,123	188,174	329,488	349,128	320,421	284,170	56,494	24.8
Clark	17,223	18,141	14,502	12,834	11,727	11,734	15,272	28,789	30,464	26,456	22,021	4,798	27.9
Cowlitz	4,565	4,267	3,612	3,087	2,764	2,746	3,626	5,968	5,786	5,160	4,687	122	2.7
Skamania	475	484	418	378	354	335	439	660	687	642	545	70	14.7
<b>Oregon</b>	139,609	150,345	135,273	115,072	101,228	99,254	127,093	219,109	211,926	189,993	171,178	31,569	22.
Clackamas	13,155	14,231	12,693	10,576	9,345	8,991	11,391	20,662	20,086	17,749	15,752	2,597	19.7
Columbia	2,179	2,410	2,105	1,721	1,362	1,357	1,712	3,229	2,958	2,582	2,309	130	6.0
Hood River	996	1,045	912	783	690	582	714	1,121	1,188	1,134	1,010	14	1.4
Marion	10,722	11,875	11,262	9,689	8,540	8,204	10,251	17,298	17,578	16,256	14,793	4,071	38.0
Multnomah	30,571	31,668	27,217	22,087	18,956	18,521	22,740	40,819	39,452	34,993	31,342	771	2.5
Polk	2,135	2,352	2,313	2,019	1,841	1,895	2,230	3,745	3,650	3,482	3,244	1,109	51.9
Washington	18,355	19,564	16,462	13,982	12,299	12,261	15,288	27,121	25,923	22,914	20,695	2,340	12.7
Yamhill	3,234	3,585	3,179	2,704	2,344	2,334	3,090	5,527	5,152	4,594	4,136	902	27.9
<b>Study Area</b>	103,610	109,622	94,675	79,860	70,222	68,960	86,753	154,939	152,924	135,962	120,534	16,924	16.3

Source: Bureau of Labor Statistics

**Table 4.4-13. Unemployment Rate by County in Project Vicinity**

County Name	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Washington	7.3%	7.4%	6.2%	5.5%	4.9%	4.6%	5.4%	9.4%	9.9%	9.2%	8.2%
Clark	9.2%	9.6%	7.4%	6.4%	5.7%	5.6%	7.1%	13.2%	14.0%	12.4%	10.4%
Cowlitz	10.7%	10.0%	8.5%	7.2%	6.5%	6.3%	8.2%	13.4%	13.0%	12.0%	10.9%
Skamania	10.0%	10.1%	8.5%	7.6%	7.0%	6.7%	8.6%	13.0%	13.2%	12.6%	10.8%
<b>Oregon</b>	7.6%	8.1%	7.3%	6.2%	5.3%	5.2%	6.5%	11.1%	10.7%	9.6%	8.7%
Clackamas	6.9%	7.5%	6.7%	5.5%	4.8%	4.6%	5.7%	10.2%	10.1%	8.9%	7.9%
Columbia	9.4%	10.4%	9.1%	7.4%	5.7%	5.7%	7.1%	13.1%	12.1%	10.6%	9.5%
Hood River	8.2%	8.6%	7.4%	6.4%	5.5%	4.5%	5.3%	8.0%	8.3%	7.9%	7.0%
Marion	7.3%	8.0%	7.6%	6.5%	5.7%	5.4%	6.6%	11.0%	11.1%	10.4%	9.6%
Multnomah	8.1%	8.5%	7.4%	6.1%	5.1%	4.9%	5.9%	10.4%	9.9%	8.7%	7.8%
Polk	6.3%	6.8%	6.6%	5.6%	5.0%	4.9%	5.6%	9.3%	9.3%	9.0%	8.4%
Washington	6.9%	7.4%	6.2%	5.2%	4.4%	4.3%	5.3%	9.3%	9.0%	7.8%	7.1%
Yamhill	7.4%	8.2%	7.2%	6.1%	5.1%	5.0%	6.5%	11.4%	10.6%	9.5%	8.5%
<b>Study Area</b>	7.8%	8.3%	7.1%	6.0%	5.1%	5.0%	6.1%	10.8%	10.6%	9.4%	8.4%

Source: Bureau of Labor Statistics

According to data from the U.S. Census Bureau 2011 County Business Patterns, health care and social assistance are the largest sources of jobs in the study area, accounting for approximately 150,000 of the 1 million jobs. Retail trade is the second-largest source of employment, accounting for 126,000 jobs, followed by manufacturing (110,000 jobs), accommodation and food services (99,000 jobs), and wholesale trade (69,000 jobs).

The Facility falls into the transportation and warehousing sector, which accounted for nearly 37,000 jobs in the study area in 2011.

Average wages vary significantly by sector and county. According to the County Business Pattern data, the average annual wage for the region, across all sectors, was \$45,700. In the transportation and warehousing sector, the average annual wage is slightly lower, at \$44,300, and in the County, it is \$39,200. This information is shown in greater detail by the tables on the following pages.

**Table 4.4-14. Employment by Sector in 2011**

NAICS	Description	Clark County, Washington	Cowlitz County, Washington	Skamania County, Washington	Clackamas County, Oregon	Columbia County, Oregon	Hood River County, Oregon	Marion County, Oregon	Multnomah County, Oregon	Polk County, Oregon	Washington County, Oregon	Yamhill County, Oregon	Study Area Total
0	Total for all sectors	107,452	30,312	1,185	121,901	6,948	8,501	93,122	375,965	10,795	223,496	26,599	1,006,276
11	Agriculture, forestry, fishing and hunting	110	737	2	243	245	150	1,152	700	410	258	232	4,089
21	Mining, quarrying, and oil and gas extraction	277	89		50	54		286	50	10	66	50	872
22	Utilities	50	50		300	150	50	251	4,272	50	700	50	4,523
23	Construction	8,710	2,872	101	8,347	357	378	5,005	15,509	807	10,936	1,089	54,111
31-33	Manufacturing	11,195	5,974	150	15,779	1,177	1,095	8,247	31,389	1,564	26,982	5,547	109,099
42	Wholesale trade	5,601	1,109	14	9,180	56	300	3,735	22,714	289	26,003	300	69,001
44-45	Retail trade	15,238	4,678	142	17,281	1,347	1,269	15,420	37,000	1,606	28,400	3,312	125,693
48-49	Transportation and warehousing	2,986	983	10	4,087	296	106	3,551	20,718	244	3,088	560	36,629
51	Information	3,751	369	14	1,909	55	192	1,827	10,789	50	9,146	188	28,290
52	Finance and insurance	4,633	877	50	5,053	292	142	3,540	20,119	245	9,911	800	45,662
53	Real estate and rental and leasing	2,067	344	10	2,450	89	50	2,034	8,631	181	4,713	257	20,826
54	Professional, scientific, and technical services	6,535	838	50	8,294	251	385	3,891	29,224	333	16,581	614	66,996
55	Management of companies and enterprises	1,872	700		2,751	10	50	1,347	14,282	10	11,640	199	32,801
56	Administrative and support and waste management and remediation services	6,693	741	10	6,304	165	139	6,029	25,117	270	18,065	833	64,366
61	Educational services	1,369	294		2,051	47	50	3,000	14,799	187	5,739	2,778	30,264
62	Health care and social assistance	18,946	5,634	85	17,213	999	1,790	18,616	56,182	2,455	24,088	4,357	150,365
71	Arts, entertainment, and recreation	1,817	349	10	1,773	69	653	1,132	6,390	161	3,291	216	15,851
72	Accommodation and food services	10,477	2,572	504	12,284	914	1,241	9,498	40,086	1,247	16,415	3,976	99,214
81	Other services (except public administration)	5,065	1,176	27	6,549	300	356	4,731	18,026	653	7,402	1,079	45,364

Source: 2011 County Business Patterns (U. S. Census Bureau)

**Table 4.4-15. Average Wage-Annual Payroll per Worker by Sector in 2011**

NAICS	Description	Clark County, Washington	Cowlitz County, Washington	Skamania County, Washington	Clackamas County, Oregon	Columbia County, Oregon	Hood River County, Oregon	Marion County, Oregon	Multnomah County, Oregon	Polk County, Oregon	Washington County, Oregon	Yamhill County, Oregon	Study Area Total
0	Total for all sectors	\$43,100	\$42,000	\$30,000	\$42,800	\$30,200	\$28,900	\$33,300	\$47,300	\$29,100	\$54,600	\$35,100	\$45,700
11	Agriculture, forestry, fishing and hunting	\$60,700	\$47,200	\$55,500	\$27,800	\$40,400	n/a	\$22,600	\$34,100	\$37,700	\$36,400	\$36,200	\$34,600
21	Mining, quarrying, and oil and gas extraction	\$72,100	\$73,000	n/a	n/a	\$54,300	n/a	\$72,400	n/a	n/a	\$53,400	\$42,900	\$64,000
22	Utilities	n/a	n/a	n/a	n/a	n/a	n/a	\$75,300	\$97,300	n/a	n/a	n/a	\$96,100
23	Construction	\$53,100	\$53,700	\$47,100	\$49,400	\$34,900	\$31,400	\$46,400	\$61,200	\$49,000	\$54,400	\$39,800	\$53,900
31-33	Manufacturing	\$53,500	\$64,100	n/a	\$57,300	\$46,300	\$35,800	\$38,800	\$51,700	\$36,500	\$59,300	\$50,700	\$53,700
42	Wholesale trade	\$74,200	\$51,500	\$56,200	\$56,900	\$52,000	n/a	\$46,800	\$55,200	\$42,200	\$117,700	\$76,300	\$80,000
44-45	Retail trade	\$27,200	\$24,100	\$20,000	\$26,500	\$23,700	\$24,400	\$24,000	\$26,900	\$23,700	\$26,900	\$25,600	\$26,300
48-49	Transportation and warehousing	\$43,200	\$39,200	\$24,400	\$38,600	\$32,800	\$29,500	\$44,100	\$45,100	\$34,000	\$44,600	\$83,300	\$44,300
51	Information	\$77,300	\$42,900	\$37,200	\$55,200	\$31,900	\$47,300	\$38,200	\$67,100	\$33,300	\$64,600	\$44,200	\$64,200
52	Finance and insurance	\$55,200	\$42,500	\$14,600	\$57,900	\$36,700	\$50,900	\$47,400	\$78,600	\$34,000	\$58,200	\$45,700	\$65,200
53	Real estate and rental and leasing	\$34,700	\$21,600	\$19,300	\$35,000	\$25,700	\$34,200	\$28,200	\$38,000	\$16,800	\$36,600	\$23,100	\$35,400
54	Professional, scientific, and technical services	\$50,600	\$39,900	\$40,100	\$69,100	\$31,100	\$47,600	\$43,600	\$70,600	\$32,400	\$57,800	\$40,900	\$62,600
55	Management of companies and enterprises	\$99,700	\$77,800	n/a	\$73,700	n/a	n/a	\$61,900	\$92,900	\$45,200	\$114,600	\$78,700	\$97,700
56	Administrative and support and waste management and remediation services	\$27,100	\$25,000	\$15,900	\$30,600	\$24,500	\$21,600	\$23,900	\$28,400	\$27,700	\$29,900	\$25,400	\$28,400
61	Educational services	\$19,700	\$17,300	n/a	\$22,400	\$14,600	n/a	\$21,700	\$26,600	\$20,000	\$22,800	\$20,700	\$24,100
62	Health care and social assistance	\$48,300	\$42,200	\$30,400	\$49,300	\$27,100	\$30,600	\$40,700	\$53,000	\$28,400	\$46,000	\$36,600	\$47,600
71	Arts, entertainment, and recreation	\$19,500	\$16,200	n/a	\$20,300	\$13,000	\$15,100	\$18,400	\$33,400	\$10,900	\$27,600	\$20,900	\$26,500
72	Accommodation and food services	\$15,900	\$14,700	\$20,600	\$16,200	\$12,800	\$16,100	\$14,600	\$17,900	\$13,700	\$16,500	\$22,200	\$16,900
81	Other services (except public administration)	\$23,800	\$21,900	\$18,600	\$23,500	\$20,800	\$22,600	\$23,700	\$29,900	\$21,900	\$29,600	\$19,000	\$26,900

Source: 2011 County Business Patterns (U. S. Census Bureau)

Construction of the Facility is expected to pay wages higher than the study area average. Because the Facility is located on public property, this analysis assumes that it is subject to the Davis-Bacon act and must pay local prevailing wages. Average hourly wages were based on 2013 Occupational Employment and Wage Estimates for Clark County, for each of the trades expected to be used on the Facility. The analysis also assumes that a share of the jobs in each trade will be filled by apprentices who make lower wages than journeymen, and the wages were adjusted to account for this.

The hourly wage was converted into a fully-loaded hourly rate (including wages and benefits), and then the annual compensation per job was calculated assuming 2,080 hours per year per worker. Because construction of the Facility will last less than one year, and the number of workers from each trade needed will vary through the Facility, the actual amount earned will vary substantially among the individual workers. Overall, a total of 250 workers are expected to be employed during construction, with total compensation of \$8,961,986.

When the Facility is in operation, the total compensation earned by workers is likely to be relatively high, when compared with the study area. At start-up in 2016, the Facility is estimated to generate a total of 151 jobs, and this is projected to grow to 295 jobs at full operation in 2036. Total compensation (including wages and benefits) is estimated to be \$112,880 at start-up, and to grow to \$118,710 in 2036.

The majority of the jobs at start-up will be terminal workers. Based on the 2013 Occupational Employment and Wage Estimates, workers in industry 537121 (Car, Truck, & Ship Loaders) in Washington State earn an average of \$64,461 per year. With benefits added in, the total compensation per worker is \$96,691 per year.

In addition to the terminal workers, the Facility will directly create the need for various transportation-related jobs, including ships pilots, longshore workers, ship assist tugboats, and railroad crews. The need for railroad transportation will increase as the volume of product handled through the facility grows, and the number of railroad jobs associated with the Facility is projected to grow from 58 at start-up to 151 at full operating capacity. According to data from the Association of American Railroads, average total compensation for rail workers is \$118,790 per year.

**Table 4.4-15i. Estimated Employment and Compensation from Operations**

<u>Type of Worker</u>	<u>Start-up – (2016)</u>			<u>Full Capacity Build-out (2036)</u>		
	<u>Number</u>	<u>Compensation</u>	<u>Average Income</u>	<u>Number</u>	<u>Compensation</u>	<u>Average Income e</u>
<u>Terminal workers</u>	<u>80</u>	<u>\$7,735,320</u>	<u>\$96,692</u>	<u>110</u>	<u>\$10,636,065</u>	<u>\$96,692</u>
<u>Longshore</u>	<u>2</u>	<u>\$368,134</u>	<u>\$189,077</u>	<u>5</u>	<u>\$959,778</u>	<u>\$189,077</u>
<u>Pilots - Bar</u>	<u>1</u>	<u>\$427,406</u>	<u>\$299,998</u>	<u>4</u>	<u>\$1,114,307</u>	<u>\$299,998</u>
<u>Pilots - River</u>	<u>4</u>	<u>\$1,234,020</u>	<u>\$302,151</u>	<u>11</u>	<u>\$3,217,267</u>	<u>\$302,151</u>
<u>Tug ship assist</u>	<u>6</u>	<u>\$406,713</u>	<u>\$71,369</u>	<u>15</u>	<u>\$1,060,360</u>	<u>\$71,369</u>
<u>Rail Transportation</u>	<u>58</u>	<u>\$6,909,625</u>	<u>\$118,790</u>	<u>151</u>	<u>\$17,900,012</u>	<u>\$118,790</u>
<u>Total</u>	<u>151</u>	<u>\$6,909,625</u>	<u>\$112,880</u>	<u>295</u>	<u>\$34,887,789</u>	<u>\$118,710</u>

**Table 4.4-16. Employment Trends and Forecast in Southwest Washington**

Industry	Est. Emp. 2009	Est. Emp. 2014	Est. Emp. 2019	Avg. Annual Growth Rate 2009-2014	Avg. Annual Growth Rate 2014-2019	Avg. Annual Growth Rate 2009-2019	State Rate
Natural Resources And Mining	1,000	1,100	1,100	1.9%	0.0%	1.0%	1.4%
Construction	11,500	12,000	13,300	0.9%	2.1%	1.5%	1.1%
Manufacturing	17,800	20,200	21,500	2.6%	1.3%	1.9%	1.1%
Wholesale Trade	6,900	7,700	8,500	2.2%	2.0%	2.1%	1.4%
Retail Trade	19,300	21,000	22,200	1.7%	1.1%	1.4%	1.0%
Transportation, Warehousing And Utilities	5,800	6,600	7,400	2.6%	2.3%	2.5%	1.6%
Information	3,300	3,800	4,100	2.9%	1.5%	2.2%	2.3%
Financial Activities	7,400	7,800	7,900	1.1%	0.3%	0.7%	0.3%
Professional And Business Services	16,200	19,000	22,400	3.2%	3.3%	3.3%	2.9%
Education And Health Services	24,100	27,100	31,100	2.4%	2.8%	2.6%	2.0%
Leisure And Hospitality	15,800	16,800	18,100	1.2%	1.5%	1.4%	1.3%
Other Services	5,800	6,100	6,200	1.0%	0.3%	0.7%	0.4%
Government	30,200	31,500	33,700	0.8%	1.4%	1.1%	0.9%
Total Nonfarm	165,100	180,700	197,500	1.8%	1.8%	1.8%	1.4%

Note: Southwest Washington is Clark, Cowlitz, and Wahkiakum County Washington Employment Security Department

Most of the largest employers in the County fall into one of four sectors: medical services, education, manufacturing, and government. The medical sector includes the largest employer in 2012, PeaceHealth Southwest Washington; other medical providers in the top 28 employers include the Vancouver Clinic, Legacy Salmon Creek Medical Center, Veterans' Administration Medical Center, and Kaiser Permanente Northwest. These five providers account for more than 22 percent of the jobs generated by the top employers

Education accounts for nearly one-third of the jobs generated by the top 28 employers. Major agencies include the Evergreen, Vancouver, Battle Ground school districts as well as Clark College and Washington State University Vancouver.

Manufacturing accounts for nearly 15 percent of the jobs provided by the top 28 employers in the County. Top manufacturers include WaferTech, Northwest Natural Products, SEH America, Georgia-Pacific, Frito-Lay, and Columbia Machine.

Government agencies represent two of the top 28 employers, and account for more than 9 percent of the jobs.

**Table 4.4-17. Major Employers in County**

<b>2012 Rank</b>	<b>Employer</b>	<b>2012 FTE</b>
1	Southwest Washington Medical Center	2,841
2	Evergreen Public Schools	2,455
3	Vancouver Public Schools	2,203
4	Clark County, Washington	1,561
5	Fred Meyer Stores, Inc.	1,500
6	Battle Ground Public Schools	1,213
7	Bonneville Power Administration	1,181
8	WaferTech, LLC	1,040
9	Clark College	985
10	City of Vancouver	932
11	The Vancouver Clinic	912
12	Legacy Salmon Creek Medical Center	860
13	VA Medical Clinic	809
14	BNSF Railway Railroad	800
15	Northwest Natural Products, Inc.	790
16	Camas School District No. 117	750
17	Kaiser Permanente Northwest	724
18	SEH America	711
19	Wells Fargo	654
20	Dick Hannah Dealerships	650
21	Charter Communications	605
22	Educational Service District No. 112	600
23	Georgia-Pacific LLC	508
24	Frito-Lay, Inc.	475
25	Columbia Machine, Inc.	400
26	Clark Co. Public Transportation Benefit Area	384
27	Washington State University, Vancouver	352
28	CPU	340

Source: Columbia River Economic Development Council

A recent study completed for the Port included an analysis of where workers live, as illustrated in Table 4.4-18. Excluding rail crew and rail headquarters employment, more than 75 percent of the workers with jobs directly related to the Port (and its tenants) are residents of the County. This includes 45.8 percent who are residents of Vancouver, and 29.9 percent who live elsewhere in the County. Nearly 20 percent of Port-related workers commute from Oregon, including 12.1 percent from Multnomah County.

Because the Facility is located at the Port of Vancouver, it is assumed that the distribution of county of residence of the Facility's workers will be similar to that of existing Port-related workers.



**Table 4.4-18. Distribution of Port of Vancouver Direct Jobs by Place of Residence**

Location	Percent	Direct Jobs
Vancouver	45.8%	579
Other Clark	29.9%	378
Skamania	0.5%	7
Other WA	3.5%	45
Multnomah	12.1%	152
Washington	1.1%	14
Clackamas	3.2%	40
Other OR	3.2%	41
Other U.S.	0.7%	8
Total	100.0%	1,265

#### 4.4.1.5 Lodging

Clark County is one of seven counties in the Portland, Oregon, lodging market, as defined by STR Lodging. According to STR Lodging, the Portland market currently has total of 25,903 hotel rooms, of which approximately 10 percent are in the County.

Two-thirds of the hotel rooms in the County are at hotels rated as upper economy, midscale, or upper midscale. The two least-expensive hotel types, economy and midscale, each account for approximately 20 to 23 percent of the available rooms in the County, and there are a total of approximately 1,100 such rooms.

In the Portland market, these three least expensive tiers of hotels account for 56 percent of the total rooms available. Nearly 11,000 available rooms in the Portland market are in economy or midscale hotels.

**Table 4.4-19. Hotel/Motel Rooms in Portland Market**

County	Economy	Midscale	Upper Midscale	Upscale	Upper Upscale	Luxury	Total
Clark County, WA	521	587	571	642	226	-	2,547
Clackamas County, OR	517	525	464	685	230	-	2,421
Columbia County, OR	90	112	40	-	-	-	242
Multnomah County, OR	2,750	2,328	2,417	3,358	3,971	581	15,405
Washington County, OR	1,207	588	1,314	1,013	366	124	4,612
Yamhill County, OR	276	221	66	20	-	93	676
Portland market total	5,361	4,361	4,872	5,718	4,793	798	25,903

Source: STR Lodging

Another source of data for the hotel market is PKF Hospitality Research, LLC. PKF provides data for sub-markets of the Portland region, as well historical occupancy data. According to PKF, occupancy at hotels in the Airport/Vancouver sub-market averaged 59.8 percent between 2008 and 2012. The revenue per available room (Revenue PAR) averaged approximately \$50.00 during that period, and the estimated revenue per occupied room was approximately \$82.50.

The Airport/Vancouver sub-market is the least expensive of the four tracked by PKF. Average occupancy is also relatively low.

**Table 4.4-20. Hotel/Motel Occupancy & Revenue in Portland Market**

Year	Downtown		Airport/ Vancouver		Beaverton/ Sunset Hwy West		Lake Oswego/ I-5 South	
	Occupancy	Revenue PAR	Occupancy	Revenue PAR	Occupancy	Revenue PAR	Occupancy	Revenue PAR
2008	72.3%	\$93.94	63.2%	\$56.20	63.3%	\$57.36	60.2%	\$53.36
2009	66.8%	\$78.01	54.2%	\$44.13	57.4%	\$45.84	54.2%	\$43.81
2010	71.3%	\$84.02	57.3%	\$44.83	66.0%	\$50.25	57.7%	\$47.48
2011	74.0%	\$91.45	59.8%	\$48.19	69.6%	\$58.73	59.4%	\$50.43
2012	75.9%	\$100.45	64.6%	\$53.90	72.3%	\$66.55	62.2%	\$55.77
2013 ytd	66.0%	\$77.72	57.2%	\$46.97	65.3%	\$63.72	54.7%	\$46.77

Source: PKF Hospitality Research, LLC

#### 4.4.1.6 Taxes

The proposed project-Facility is located on land owned by the Port. Port land is not subject to property taxes, but privately owned improvements located on land leased from the Port are subject to property tax. In this case, all of the equipment associated with the Facility will be subject to property taxes.

The total property tax at the project-Facility location is \$14.11773 per thousand dollars of assessed value. The distribution of these taxes is presented in the following table. Schools are the primary recipient of property taxes, with \$5.609446 going to Vancouver schools and \$2.489687 going to the state school fund.

**Table 4.4-21. Breakdown of Taxing District Millage Rate**

Taxing District	Tax Rate
Port Vancouver General Adref	0.000449
County General Adref	0.003626
Veterans Asst	0.009925
City Vancouver General Adref	0.010346
Dev Disability	0.012500
Mental Health	0.012500
Vancouver Library Capital Facilities	0.256084
Sd37 Vancouver M&O Adref	0.016503
Conservation Futures	0.062500
Port Vancouver Bonds	0.223412
Port Vancouver General	0.211683
County General	1.537209
Sd37 Vancouver Debt Svc	1.851094

Taxing District	Tax Rate
Sd37 Vancouver M&O	3.758351
State Schools	2.489687
City Vancouver General	3.161863
Ft. Vancouver Regional Library	0.500000
<b>Totals</b>	<b>14.11773</b>

Source: Clark County Assessor

#### 4.4.1.7 Fire, Police, and Medical Services

##### *Fire Protection*

The Vancouver Fire Department provides services to 246,441 people in the combined City of Vancouver and Clark County Fire District 5 service area, which is comprised of 90.9 square miles. The Fire Department consists of 198 personnel. The Fire Department serves a population equating to the second largest city in Washington State with the highest call volume per firefighter and the fewest firefighters per thousand in population of comparable cities in the state. Vancouver Fire Department is a full service fire department, providing: fire suppression, prevention, emergency medical services, hazardous materials, trench and confined space rescue, water rescue, high angle rescue, and citywide emergency management. These services are provided by ten fire stations.

The Vancouver Fire Department maintains a Class 4 rating from the Washington Surveying and Rating Bureau. Class 1 is the best rating, classified as the ideal fire department, and Class 10 is one with the most deficiency points or no department at all. The Fire Department was downgraded one class in October 2002 due to staffing, fire prevention, and marine response deficiencies. This resulted in an increase in insurance premiums paid by most businesses in the fire service area.

**Table 4.4-22. Fire Departments in Clark County**

Department	City
City of Vancouver	Vancouver
Clark County	Camas
City of Camas	Camas
City of Washougal	Washougal
Town of Yacolt	Yacolt
Cowlitz County Fire District 1	Woodland

Source: Dun & Bradstreet

##### *Police Services*

The Vancouver Police Department covers approximately 49 square miles and provides 24-hour response for public safety and services within the City. The Facility is located approximately 5.5 miles west of the nearest police station, located at 2800 NE Stapleton Road. The VPD currently employs 185 sworn staff, with 62 Police Officers, 10 Corporals and 18 Sergeants assigned to patrol. VPD provides police services and respond to 911 calls for service.

The VPD provides a range of public safety and police services including patrol, investigations division, and special operations division. The VPD currently has on staff 3 EMT-Paramedics and 2 EMT-IV Technicians that provide medical support as part of the region's SWAT Team.

### Medical Services

The closest hospital to the Facility is the Peace Health Southwest Washington Medical Center which is approximately 7.5 miles east of the Facility on Mill Plain Boulevard. Southwest Washington Medical Center is designated as a Level II Trauma Center by the Washington State Department of Health. There are five levels of trauma centers designated by the state with Level I providing the highest level of care and Level V providing the lowest level. Harborview Medical Center in Seattle is the only Level I Trauma Center in Washington State. In Oregon, Legacy Emanuel and Oregon Health Sciences University in Portland are both Level I Hospitals designated by the State of Oregon. The State of Oregon has a 4 level designation with Level I providing the highest level of definitive, comprehensive care for severely injured patients. Legacy Emanuel and Oregon Health Sciences University are approximately 10 and 14 miles south of the project site Facility, respectively.

**Table 4.4-23. Ambulance Service Providers in Project Vicinity**

Department	City
City of Vancouver	Vancouver
Clark County	Camas
City of Camas	Camas
City of Washougal	Washougal
Town of Yacolt	Yacolt
Cowlitz County Fire District 1	Woodland

Source: Dun & Bradstreet

#### 4.4.1.8 School Enrollment

School enrollment in the study area has grown slowly over the past 6 school years. Total enrollment grew from 423,542 during the 2007–2008 school year to 425,891 during the 2012–2013 school year. The increase in enrollment of 2,349 students represents average annual growth of just 0.11 percent.

Within the study area, enrollment in the County grew at one of the fastest rates. Schools in the County saw an increase of nearly 2,000 students between the 2007–2008 and 2012–2013 school years, with growth of 0.51 percent.

**Table 4.4-24. Enrollment Trends in Project Vicinity**

County	2007–2008	2008–2009	2009–2010	2010–2011	2011–2012	2012–2013	Avg. Annual Growth
<b>Washington</b>							
Clark	76,106	76,782	76,720	76,644	77,134	78,054	0.51%
Cowlitz	17,930	17,715	17,382	17,161	17,013	16,931	-1.14%
Skamania	1,213	1,294	1,617	1,538	1,307	1,198	-0.25%
<b>Oregon</b>							
Clackamas	58,590	58,847	58,394	57,996	57,702	57,870	-0.25%
Columbia	8,639	8,584	8,281	8,241	8,139	7,835	-1.93%
Hood River	3,968	3,973	4,026	3,989	4,076	4,086	0.59%
Marion	60,051	60,268	60,068	60,474	60,324	60,691	0.21%
Multnomah	90,278	89,814	90,080	90,474	91,010	90,405	0.03%

County	2007–2008	2008–2009	2009–2010	2010–2011	2011–2012	2012–2013	Avg. Annual Growth
Polk	6,749	6,749	6,710	6,666	6,569	6,514	-0.71%
Washington	83,404	83,699	84,165	85,155	85,471	85,863	0.58%
Yamhill	16,614	16,612	16,763	16,506	16,438	16,444	-0.21%
<b>Study Area</b>	<b>423,542</b>	<b>424,337</b>	<b>424,206</b>	<b>424,844</b>	<b>425,183</b>	<b>425,891</b>	<b>0.11%</b>

Source: Washington Superintendent of Public Instruction, Oregon Department of Education

## 4.4.2 Impacts

### 4.4.2.1 Construction

The Applicant has developed estimates of the manpower needed for the construction of the Vancouver facility. Over the nine-month construction period, a total of 250 construction workers will be employed, with a maximum of 125 workers on site per day. The trades represented by these workers will vary over the course of the project Facility, depending on the project Facility phase. The total number of each category of worker is presented in Table 4.4-25.

The project Facility is located in a major metropolitan area (i.e., Portland-Vancouver MSA) that is capable of supplying most of the needed construction workforce. As demonstrated in Table 4.4-26, for most of the trades required, peak construction employment will account less than 3 percent of the available local workforce. The exceptions are ironworkers (10.7 percent of local workforce) and boilermakers (5.9 percent); a portion of these workers in these trades may need to travel from outside of the Portland-Vancouver region.

**Table 4.4-25. Impact on Local Workforce**

Trade	Regional Employment	Project Facility Maximum	% Increase
Mechanical	2,285	50	2.2%
Electricians	4,872	35	0.7%
Operating Engineers	1,689	25	1.5%
Laborers	5,637	53	0.9%
Ironworkers	300	32	10.7%
Carpenters	5,306	20	0.4%
Concrete	876	15	1.7%
Boilermakers	339	20	5.9%
Total	21,304	250	1.2%

Over the nine months of the project Facility, the direct employment is projected to be 250 workers, with a maximum of 125 on site per day. For this analysis it is assumed that these workers earn the prevailing wage for Clark County. The Applicant estimates that the total capital cost of the project Facility is estimated to be \$110 million, of which an estimated \$10 million will be supplies purchased from out of state.

The results of the IMPLAN analysis for construction are presented in Table 4.4-26. Direct employment of 250 is projected to support an additional 517 indirect and induced jobs in the study area. The total number of jobs supported by the construction is estimated to be 767 in the study area. Direct labor income of \$21.2 million is projected to support an additional \$26.7 million in labor income. Total labor income supported by the Facility is projected to be \$47.9 million. Labor income includes both employee compensation (wages, benefits, and taxes) and proprietor's income.

The estimated direct labor income associated with the project is estimated to \$20.6 million. Labor income includes both employee compensation (wages, benefits, and taxes) and proprietor's income. While the annual wage in the study area averages \$45,700 across all sectors (see Table 4.4-15), the construction jobs associated with the project are likely to generate direct income (including wages and all benefits) that is substantially higher than the study area average wage.

Total economic impacts were estimated using the IMPLAN input-output model. Including both indirect and induced benefits, the construction project is projected to support a total of 677 jobs in Washington, with associated total income of \$43.6 million.

**Table 4.4-26. Economic Impacts of in Construction on Study Area**

Trade	Jobs Employment	Labor Income (\$ millions)
Direct	250	\$20.621.2
Indirect and Induced	427517	\$23.026.7
Total	677767	\$43.647.9

Note: Compensation and labor income are reported in 2013 dollars

Source: Tesoro Savage Petroleum Terminal LLC, BST Associates using IMPLAN model

The Facility will not result in the displacement of minority or low-income populations. The developed area will occur on land owned by the Port and therefore no land use displacements or relocations will occur. The potential impacts from construction and/or operation of the proposed Facility will be from additional traffic (including rail traffic), noise, air quality, visual quality and aesthetics, and safety or security. As described in Parts 2.0, 3.0, and 4.0 of this application, these potential impacts will be mitigated through design features and construction techniques to ensure that they are reduced to less than significant levels.

#### 4.4.2.2 Operations

The proposed terminal will directly employ an estimated 120 workers at full operation. In addition, the terminal will generate work for longshore labor, vessel assist crews, ships pilots, and railroad employees. The number of additional workers in Washington State is presented in Table 4.4-28. In addition to the 120 workers estimated to be employed at the terminal, the largest impact is on line-haul rail, where the additional rail traffic is projected to support an additional 151 rail workers in Washington.

The Applicant is expected to bring a small number of management employees from out of the area, but the remaining terminal jobs are anticipated to be filled by the local workforce.

In addition to the terminal workers, the projected direct employment impacts include:

- Longshore workers will be used for mooring each vessel that calls at the terminal.
- Ship pilots are required for vessels entering and leaving the Columbia River.
- Columbia River Bar Pilots guide ships through the mouth of the Columbia River, between Astoria and the open ocean.
- Columbia River Pilots guide ships between Astoria and the ports and anchorages upriver as far as Portland and Vancouver.
- Each vessel is expected to use the services of two ship-assist tugboats for arrival and departure at the terminal.
- Railroad crews will operate trains from point of origin to the terminal, with approximately one-third of the rail trip occurring in Washington.

**Table 4.4-27. Direct Employment from Operation at Full Build-Out and Operating Capacity**

Type of Worker	Jobs
Terminal workers	120
Longshore	2
Pilots – Bar	4
Pilots – River	11
Tug ship assist	15
Line-Haul Rail	151
<b>Total</b>	<b>303</b>

Source: BST Associates, Tesoro Savage Petroleum Terminal LLC

The direct labor income associated with the full operation is estimated to be \$33.0 million (in 2013 dollars). Labor income includes both employee compensation (wages, benefits, and taxes) and proprietor's income.

Total economic impacts were estimated using the IMPLAN input-output model. Including both indirect and induced benefits, the operation of the terminal is projected to support a total of 890 jobs in Washington, with associated total income of \$64.1 million.

As illustrated in Table 4.4 15, the average wage in the study area is \$45,700 per year across all sectors, and \$44,300 in the transportation and warehousing sector. Including wages and benefits, the jobs directly associated with operation of the project are likely to generate employee income that is substantially higher than the study area average wage.

**Table 4.4-28. Economic Impact of Full Operation**

Trade	Jobs	Labor Income
Direct	303	\$33.0
Indirect and Induced	587	\$31.1
<b>Total</b>	<b>890</b>	<b>\$64.1</b>

Source: Tesoro Savage Petroleum LLC, BST Associates using IMPLAN

The results of the IMPLAN analysis for operations are presented in Table 4.4-28. In the first year of operation (2016), direct employment of 151 at the Facility is estimated to support 265 additional jobs in the study area, or a total of 416 jobs. At full operation (in 2036), direct employment of 296 is projected to support an additional 375 jobs in the study area, or a total of 672.

Direct income of \$16.9 million at start-up is projected to support an additional \$13.2 million of income in the study area, or a total of \$30.0 million. At full operating capacity, direct income of \$33.8 million is projected to support an additional \$18.0 million in the study area, or a total of \$51.8 million.

**Table 4.4-28. Economic Impacts in Study Area from Operations**

Impact Type	Start-up (2016)		Full Build Out/Capacity (2036)	
	Employment	Labor Income (\$millions)	Employment	Labor Income (\$millions)
Direct	151	\$16.9	296	\$33.8
Indirect & Induced	265	\$13.2	375	\$18.0
Total	416	\$30.0	672	\$51.8

Note: Compensation and labor income are reported in 2013 dollars

Source: Tesoro Savage, BST Associates

#### 4.4.2.3 Housing Impact

With maximum daily employment of 125 construction workers and total rental housing inventory of nearly 1.2 million rental units in the study area, construction of the Facility should have no noticeable impact on housing in the study area. In Clark County there are more than 9,600 vacant housing units and an occupancy rate of 94.3%. If each of the 125 workers rented on vacant unit in Clark County, the housing occupancy rate would grow from 94.30% to 94.37%, an increase of less than 0.1%. This small increase in occupancy rate should also have no noticeable impact on median gross rent, median housing values, or new housing construction.

The impact of construction workers on hotel occupancy in the study area is also likely to be limited. As described in section 4.4.1.5 Lodging, the Portland lodging market has nearly 26,000 hotel/motel rooms, with occupancy of less than 60%. Of this total, more than 5,300 are classified as “Economy” rooms and more than 4,300 are classified as mid-scale. Assuming that construction workers rent rooms in one of these two categories, the 125 workers on site would increase demand for these rooms by 1.3%. This magnitude of demand increase is not likely to impact pricing.

With direct employment of 120 workers, operation of the Facility should also have no noticeable impact on housing in the study area. This number is essentially the same as the number of construction workers on site daily, and this number is very small relative to the inventory of housing in the study area. Further reducing the impact on housing is the plan to recruit most of the operational workforce from the local area. In this case, the majority of the workforce does not represent an increase in demand for housing in the study area. The operational workforces should have no noticeable impact on median gross rent, median housing values, or new housing construction.



### 4.4.3 Taxes

The project-Facility will be subject to a variety of state and local taxes. Taxes on the construction will be assessed on a one-time basis, while taxes on operations will be on-going. Construction-related taxes evaluated for this analysis include Business and Occupation tax (B & O) and retail sales taxes. For operations, the annual property tax impact was evaluated.

#### 4.4.3.1 Construction-related Taxes

Businesses in Washington are subject to the B & O tax, which is levied on gross sales. Construction of the terminal ~~would~~ will be subject to the state B & O tax rate of 0.00471. With a construction value of \$110 million, the total state B & O tax associated with construction would be \$518,100.

In addition to the state B & O tax, a number of cities levy a local B & O tax. However, there is no local B & O tax in the City of Vancouver.

Retail sales tax is assessed against the value of the construction project-Facility. In Vancouver total sales tax rate is 8.4%, of which 6.5% goes to the State and 1.9% to local government. The \$110 million in construction is projected to generate a total of \$9.24 million, of which the State would receive \$7.15 million and local government \$2.09 million.

In total, construction of the terminal is expected to generate \$9.76 million in non-recurring taxes, of which Washington State can be expected to receive \$7.67 million and local government \$2.09 million.

**Table 4.4-29. Summary of Construction-related Tax  
(\$ millions)**

Trade	State	Local	Total
Business and Occupation	\$0.52	\$0.00	\$0.52
Retail Sales	\$7.15	\$2.09	\$9.24
Total	\$7.67	\$2.09	\$9.76

Source: BST Associates

#### 4.4.3.2 Operations-related Tax

The project-Facility is located on land owned by the Port of Vancouver. Port land is not subject to property taxes, but privately owned improvements located on land leased from the Port are subject to property tax. In this case, all of the equipment associated with the ~~Project would~~ Facility will be subject to property taxes.

Based on the taxing millage rate of an adjacent parcel, the property tax rate at the project-Facility location is \$14.11773 per thousand dollars of assessed value. The distribution of these taxes is presented in the following table. Schools are the primary recipient of property taxes, with \$5.609446 going to Vancouver schools and \$2.489687 going to the state school fund.

The value of the project-Facility is estimated to be \$110,000,000. Based on this value, the annual property tax generated is estimated to be \$1,552,951 in current (2013) dollars.

**Table 4.4-30. Property Tax**

Taxing District	Tax Rate	Est Property Tax
Port Vancouver General Adref	0.000449	\$49
County General Adref	0.003626	\$399
Veterans Asst	0.009925	\$1,092
City Vancouver General Adref	0.010346	\$1,138
Dev Disability	0.012500	\$1,375
Mental Health	0.012500	\$1,375
Vanc Library Capital Facilities	0.256084	\$28,169
SD37 Vancouver M&O Adref	0.016503	\$1,815
Conservation Futures	0.062500	\$6,875
Port Vancouver Bonds	0.223412	\$24,575
Port Vancouver General	0.211683	\$23,285
County General	1.537209	\$169,093
SD37 Vancouver Debt Svc	1.851094	\$203,620
SD37 Vancouver M&O	3.758351	\$413,419
State Schools	2.489687	\$273,866
City Vancouver General	3.161863	\$347,805
Ft Vancouver Reg Library	0.500000	\$55,000
Totals	14.11773	\$1,552,951

Source: Clark County Assessor, BST Associates

The IMPLAN model estimates other taxes associated with construction and operations. According to the IMPLAN results, total state and local taxes associated with construction are projected to be approximately \$4.9 million. Total state and local taxes related to operations are estimated to grow from approximately 4.0 million in 2016 (in 2013 dollars) to \$5.2 million in 2036.

**Table 4.4-31. State and Local Taxes from Construction and Operations**

Description	Employee Compensation	Tax on Production and Imports	Households	Corporations	Total
Construction	\$35,467	\$4,037,019	\$818,392	\$54,158	\$4,945,036
Start-up in 2016	\$30,950	\$3,469,550	\$501,435	\$42,881	\$4,044,816
Full Build Out/ Operating Capacity in 2036	\$54,996	\$4,244,765	\$863,543	\$52,557	\$5,215,861

Note: all dollar figures are reported in 2013 dollars  
Source: BST Associates using IMPLAN model

#### 4.4.3.3 Impact on Clark County Public Service Costs

The potential for gaps in County expenditures on additional Facility-related county-provided public services versus tax revenue from the Facility was also estimated. County services provided within City jurisdiction are primarily related to providing direct assistance to residents (community services, public health), funding county operations and debt (General Government, Internal Support, Capital and Debt, Fiscal Entities), funding a portion of the County Public Works budget, and providing Law and Justice services (for example, the City of Vancouver does

not maintain a municipal court). The cost of the services provided within the boundaries of the City of Vancouver are primarily a function of the number of city residents. Table 4.4-32 summarizes the estimated cost of County services required as a result of the addition of new residents resulting from operation of the Facility. The additional service cost to the County, estimated at \$42, 862, is approximately one quarter the value of taxes to be collected by the County (\$169,492; see Table 4.4-30, "County General Adref" plus "County General").

**Table 4.4-32. Estimated Cost of Additional Clark County Services**

	<b>County Budget</b> <sup>(1)</sup>	<b>County Population</b> <sup>(2)</sup>	<b>Budget per capita</b>	<b>Additional Residents</b> <sup>(3)</sup>	<b>Additional Cost</b>
General Government	\$98,054,506	441,572	\$ 222.06	22	\$ 4,955
Law & Justice	220,523,379	441,572	\$ 499.41	22	\$ 11,143
Public Works	225,982,039	441,572	\$ 511.77	22	\$ 11,418
Community Development	17,136,446	441,572	\$ 38.81	22	\$ 866
Community Services	85,943,279	441,572	\$ 194.63	22	\$ 4,343
Public Health	24,106,507	441,572	\$ 54.59	22	\$ 1,218
Internal Support	43,899,519	441,572	\$ 99.42	22	\$ 2,218
Capital & Debt	74,707,315	441,572	\$ 169.19	22	\$ 3,775
Fiscal Entities	57,931,532	441,572	\$ 131.19	22	\$ 2,927
<b>Total</b>	<b>\$848,284,522</b>				<b>\$ 42,862</b>

(1) <http://www.clark.wa.gov/budget/2013-2014/5%20-%20Financial/13-14%20Financial.pdf#page=46>

(2) (2) Interpolated to FY 2013/2014, based on Table 4.4.1

(3) Calculated based on Page 4-445 bottom paragraph (origin of employees), Table 4.4-3 (population), and Table 4.4-7 (occupied housing units)

Clark Regional Emergency Services Agency (CRESA) is a regional public safety agency that provides 9-1-1 call taking and dispatch, technology support services, emergency management coordination, and ambulance contract oversight for EMS District #2. CRESA's service area includes Clark County and each of its seven cities, and Woodland in Cowlitz County. CRESA also hosts the Region IV Homeland Security Office which coordinates Homeland Security efforts within four southwest Washington counties: Clark, Cowlitz, Skamania and Wahkiakum. CRESA 911 activities are funded through excise taxes and stakeholder agencies' user fees. In 2012, the City of Vancouver's contribution amounted to 25% of the CRESA 911 budget (CRESA, 2012). The Region IV Homeland Security Coordinating Council's program is funded 100% by federal grants related to Homeland Security. The County provides Emergency Medical Services (e.g. ambulance service) to the City of Vancouver; these services are funded 100% by the ambulance contractor through a contract administration fee. Increases in CRESA 911 service-use as a result of the Facility would be funded through the City of Vancouver's user fee, which will in turn be funded through City of Vancouver taxes collected from the Facility construction and operations. Any negative impact from the Facility on CRESA 911 service costs is therefore likely to be mitigated by the Facility's payment of taxes to the City of Vancouver.

#### 4.4.4 Mitigation

The socioeconomic conditions will not be negatively affected; therefore, no mitigation measures will be required.

