

Chapter 2 Appendix

This appendix provides additional tables, charts, or maps to show all the technical information behind the discussion in Chapter 2 regarding the SWRTPO region, each county, and the Longview-Kelso-Rainier MPO.

Southwest Washington Regional Transportation Planning Organization (SWRTPO)

Below is a table that shows population from each decennial census since 1980 and the most recent population estimates from the US Census Bureau in 2016.

SWRTPO County	1980 Census	1990 Census	2000 Census	2010 Census	Total Change 2000 - 2010	Percent Change 2000 - 2010	2016 Estimate	Total Change 2010-2016	Percent Change 2010 -2016
Cowlitz	79,548	82,119	92,948	102,410	9,462	10.18	105,160	2,750	2.69
Grays Harbor	66,314	64,175	67,194	72,797	5,603	8.34	71,628	-1,169	-1.61
Lewis	56,025	59,358	68,600	75,455	6,855	9.99	77,066	1,611	2.14
Pacific	17,237	18,882	20,984	20,920	-64	-0.30	21,249	329	1.57
Wahkiakum	3,832	3,327	3,824	3,978	154	4.03	4,139	161	4.05
SWRTPO	222,956	227,861	253,550	275,560	22,010	8.68	279,242	3,682	1.34

Table 2A-1: SWRTPO Population Change and Estimates

Source: US Census Bureau, 1980, 1990, 2000, 2010 Decennial Census; US Census Bureau Annual Population Estimates, 2016

Below is the population pyramid developed for the entire SWRTPO region based on 2015 American Community Survey data that shows population distribution by age range and sex.

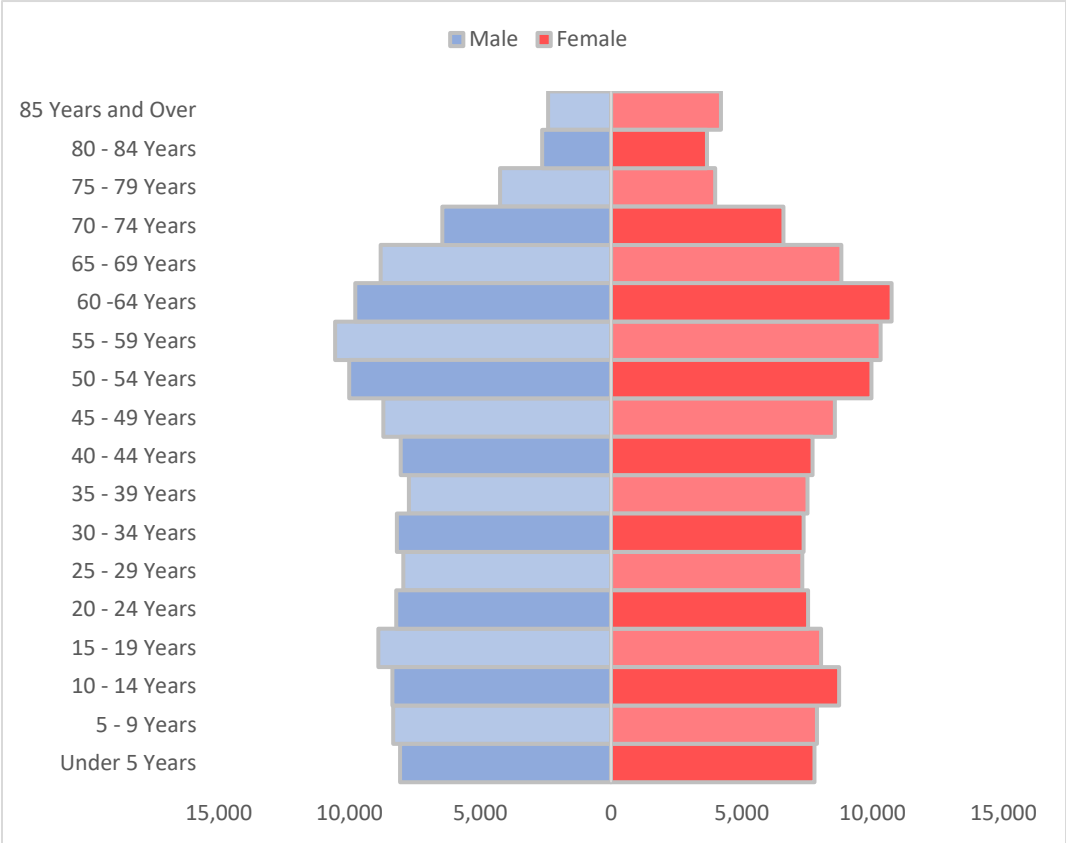


Figure 2A-1: SWRTPO Population Pyramid
 Source: US Census Bureau, 2011-2015 American Community Survey 5-year Estimates

The following table lists the location quotients for each of the SWRTPO counties as reported by the Bureau of Labor Statistics for 2015. The location quotient is a way of showing employment specialization. An area is more specialized in a certain industry and likely producing for export to outside areas when the location quotient is significantly over one.

Industry (NAICS Code)	Cowlitz County	Grays Harbor County	Lewis County	Pacific County	Wahkiakum County
Total of all Industries (10)	1.00	0.85	0.94	0.84	0.74
Natural Resources and Mining (1011)	2.17	2.16	4.00	7.79	14.20
Construction (1012)	1.26	0.86	0.91	0.61	1.71
Manufacturing (1013)	1.94	1.27	1.52	1.32	0.73
Trade, Transportation, and Utilities (1021)	1.06	0.90	1.12	0.59	0.43
Information (1022)	0.40	0.33	0.38	0.39	1.35
Financial Activities (1023)	0.58	0.63	0.45	0.79	0.50
Professional and Business Services (1024)	0.41	0.39	0.33	0.16	0.39
Education and Health Services (1025)	1.11	0.85	1.01	0.63	0.33
Leisure and Hospitality (1026)	0.86	0.98	0.91	1.32	0.32
Other Services (1027)	0.83	1.02	0.56	0.90	0.27

Table 2A-2: Location Quotient by SWRTPO Counties

Source: BLS Quarterly Census of Employment and Wages, 2015 Annual Averages

Cowlitz County

Below are population forecasts released by the Washington State Office of Financial Management (OFM) in 2012 for 2020 through 2040. These forecasts represent the “Medium” series, the forecast in between the most conservative and most aggressive one developed.

Cowlitz County			
Year	Forecasted Population	Forecasted Percent Change Since 2010 or Preceding 5 Year Period	Forecasted Average Annual Growth Rate Over Preceding 10 or 5 Year Period
2020	108,588	6.03%	0.60%
2025	111,706	2.87%	0.57%
2030	114,158	2.20%	0.44%
2035	115,798	1.44%	0.29%
2040	116,897	0.95%	0.19%

Table 2A-3: Cowlitz County Population Projections 2020-2040

Source: OFM Forecasting and Research Division, 2012 GMA Projections (5-Year Interval), MEDIUM series

The following is a population pyramid developed for Cowlitz County based on 2015 American Community Survey data showing age range and sex distribution.

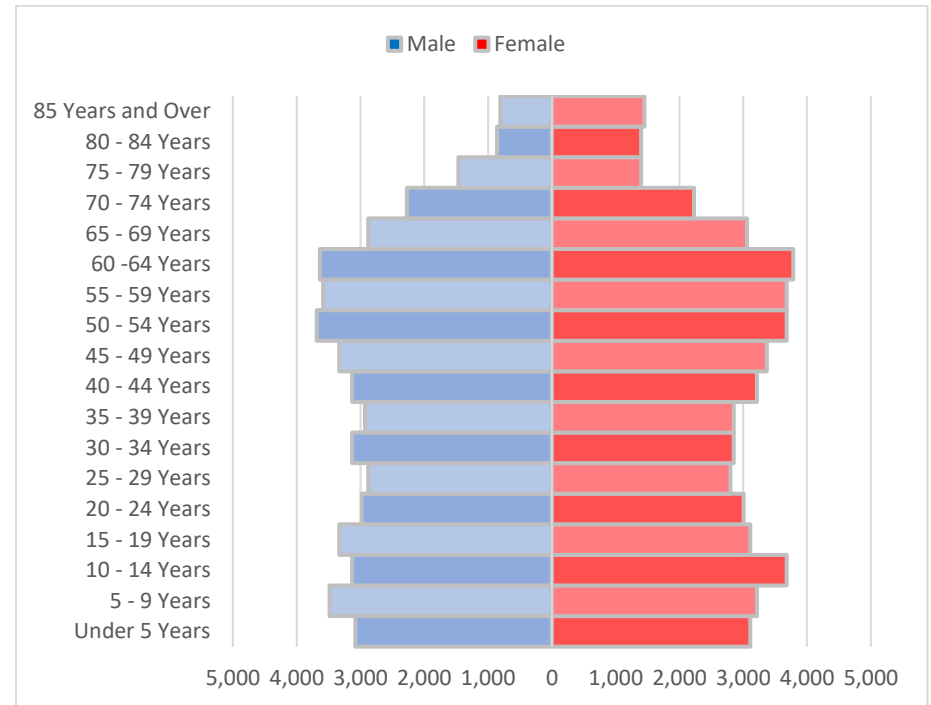


Figure 2A-2: Cowlitz County Population Pyramid

Source: US Census Bureau 2011-2015 American Community Survey 5-Year Estimates

This table shows the specific top ten locations where workers or residents are traveling to in terms of commuting.

Cowlitz County					
Workers - Where They Live?			Residents - Where They Work?		
City	Number	Percent	City	Number	Percent
Longview city, WA	7,410	22.3%	Longview city, WA	10,312	24.5%
Kelso city, WA	2,525	7.6%	Kelso city, WA	3,606	8.6%
West Side Highway CDP, WA	1,409	4.2%	Vancouver city, WA	2,586	6.2%
Vancouver city, WA	1,178	3.6%	Portland city, OR	2,127	5.1%
Longview Heights CDP, WA	968	2.9%	Woodland city, WA	1,388	3.3%
Woodland city, WA	559	1.7%	Seattle city, WA	935	2.2%
Castle Rock city, WA	516	1.6%	Tacoma city, WA	648	1.5%
Kalama city, WA	389	1.2%	Kalama city, WA	568	1.4%
Portland city, OR	329	1.0%	Olympia city, WA	530	1.3%
Salmon Creek CDP, WA	212	0.6%	Castle Rock city, WA	445	1.1%

Table 2A-4: Cowlitz County Commuting Patterns

Source: US Census Bureau, 2014 *OnTheMap* Application

Grays Harbor County

Below are population forecasts released by the Washington State Office of Financial Management (OFM) in 2012 for 2020 through 2040. These forecasts represent the “Medium” series, the forecast in between the most conservative and most aggressive one developed.

Grays Harbor County			
Year	Forecasted Population	Forecasted Percent Change Since 2010 or Preceding 5 Year Period	Forecasted Average Annual Growth Rate Over Preceding 10 or 5 Year Period
2020	74,408	2.21%	0.22%
2025	75,529	1.51%	0.30%
2030	76,428	1.19%	0.24%
2035	76,905	0.62%	0.12%
2040	77,070	0.21%	0.04%

Table 2A-5: Grays Harbor County Population Projections 2020-2040

Source: OFM Forecasting and Research Division, 2012 GMA Projections (5-Year Interval), MEDIUM series

The following is a population pyramid developed for Grays Harbor County based on 2015 American Community Survey data showing age range and sex distribution.

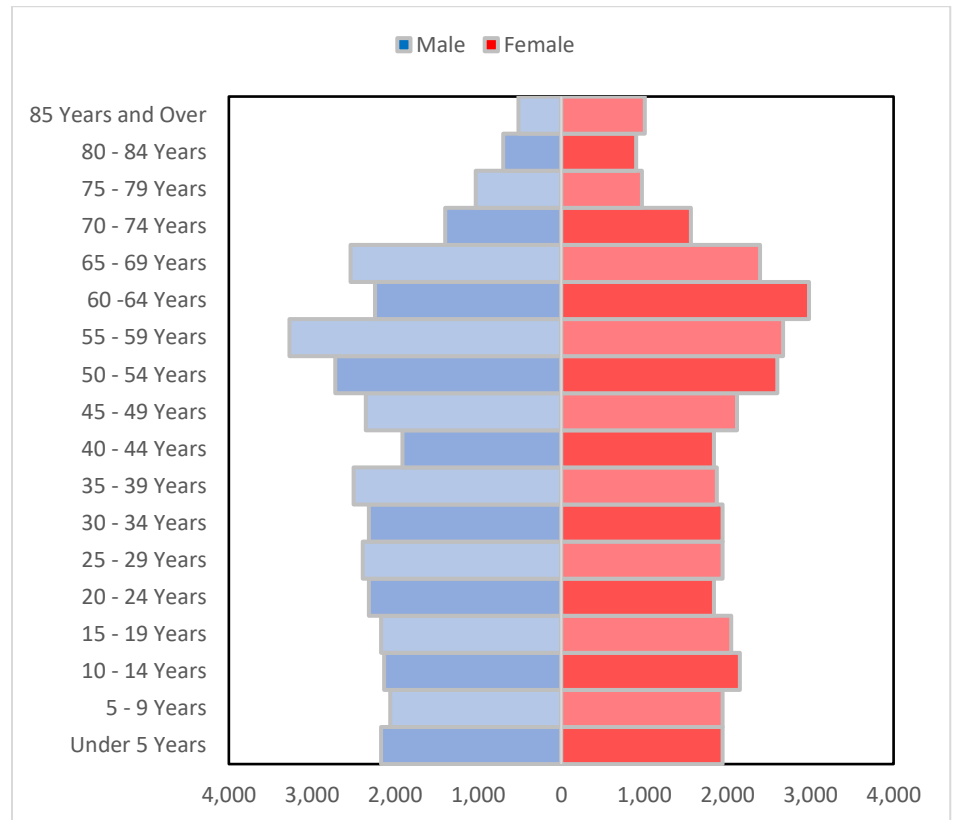


Figure 2A-3: Grays Harbor County Population Pyramid

Source: US Census Bureau 2011-2015 American Community Survey 5-Year Estimates

This table shows the specific top ten locations where workers or residents are traveling to in terms of commuting.

Grays Harbor County					
Workers - Where They Live?			Residents - Where They Work?		
City	Number	Percent	City	Number	Percent
Aberdeen city, WA	3,311	17.9%	Aberdeen city, WA	4,701	17.5%
Hoquiam city, WA	2,030	11.0%	Hoquiam city, WA	1,702	6.3%
Montesano city, WA	837	4.5%	Olympia city, WA	1,375	5.1%
Ocean Shores city, WA	777	4.2%	Montesano city, WA	1,304	4.8%
Central Park CDP, WA	629	3.4%	Seattle city, WA	1,229	4.6%
Elma city, WA	471	2.5%	Ocean Shores city, WA	894	3.3%
Cosmopolis city, WA	321	1.7%	Tacoma city, WA	732	2.7%
Olympia city, WA	212	1.1%	Westport city, WA	608	2.3%
Westport city, WA	183	1.0%	Tumwater city, WA	486	1.8%
McCleary city, WA	179	1.0%	Lacey city, WA	460	1.7%

Table 2A-6: Grays Harbor County Commuting Patterns

Source: US Census Bureau, 2014 *OnTheMap* Application

Lewis County

Below are population forecasts released by the Washington State Office of Financial Management (OFM) in 2012 for 2020 through 2040. These forecasts represent the “Medium” series, the forecast in between the most conservative and most aggressive one developed. This “Medium” series was reported along with the OFM “Low” and “High” series in the draft Appendix B of the Countywide Planning Policies document for Lewis County. Appendix B (at the end of the chapter 2 appendix) also listed locally-developed population allocations within Lewis County for 2040. The draft Appendix B was received via email on March 31, 2017 from Lewis County Community Development Department.

Year	Forecasted Population	Lewis County	
		Forecasted Percent Change Since 2010 or Preceding 5 Year Period	Forecasted Average Annual Growth Rate Over Preceding 10 or 5 Year Period
2020	80,385	6.53%	0.65%
2025	82,924	3.16%	0.63%
2030	85,165	2.70%	0.54%
2035	87,092	2.26%	0.45%
2040	88,967	2.15%	0.43%

Table 2A-7: Lewis County Population Projections 2020-2040

Source: OFM Forecasting and Research Division, 2012 GMA Projections (5-Year Interval), MEDIUM series

The following is a population pyramid developed for Lewis County based on 2015 American Community Survey data showing age range and sex distribution.

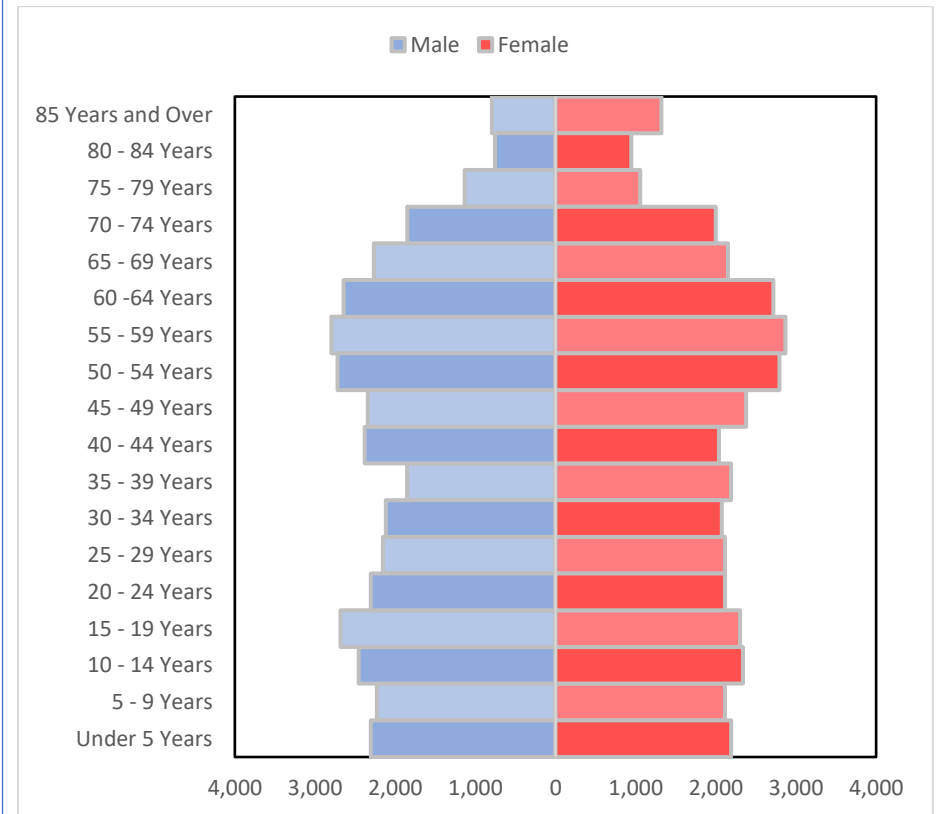


Figure 2A-4: Lewis County Population Pyramid

Source: US Census Bureau 2011-2015 American Community Survey 5-Year Estimates

This table shows the specific top ten locations where workers or residents are traveling to in terms of commuting.

Lewis County					
Workers - Where They Live?			Residents - Where They Work?		
City	Number	Percent	City	Number	Percent
Centralia city, WA	2,567	12.9%	Chehalis city, WA	3,249	11.3%
Chehalis city, WA	1,246	6.3%	Centralia city, WA	3,062	10.6%
Olympia city, WA	318	1.6%	Seattle city, WA	1,499	5.2%
Lacey city, WA	280	1.4%	Olympia city, WA	1,447	5.0%
Napavine city, WA	260	1.3%	Tacoma city, WA	1,047	3.6%
Longview city, WA	225	1.1%	Tumwater city, WA	853	3.0%
Fords Prairie CDP, WA	213	1.1%	Morton city, WA	631	2.2%
Winlock city, WA	206	1.0%	Lacey city, WA	583	2.0%
Grand Mound CDP, WA	191	1.0%	Longview city, WA	544	1.9%
Seattle city, WA	175	0.9%	Bellevue city, WA	532	1.8%

Table 2A-8: Lewis County Commuting Patterns

Source: US Census Bureau, 2014 *OnTheMap* Application

Pacific County

Below are population forecasts released by the Washington State Office of Financial Management (OFM) in 2012 for 2020 through 2040. These forecasts represent the “Medium” series, the forecast in between the most conservative and most aggressive one developed.

Year	Forecasted Population	Pacific County	
		Forecasted Percent Change Since 2010 or Preceding 5 Year Period	Forecasted Average Annual Growth Rate Over Preceding 10 or 5 Year Period
2020	20,990	0.33%	0.03%
2025	21,261	1.29%	0.26%
2030	21,495	1.10%	0.22%
2035	21,736	1.12%	0.22%
2040	22,042	1.41%	0.28%

Table 2A-9: Pacific County Population Projections 2020-2040

Source: OFM Forecasting and Research Division, 2012 GMA Projections (5-Year Interval), MEDIUM series

The following is a population pyramid developed for Pacific County based on 2015 American Community Survey data showing age range and sex distribution.

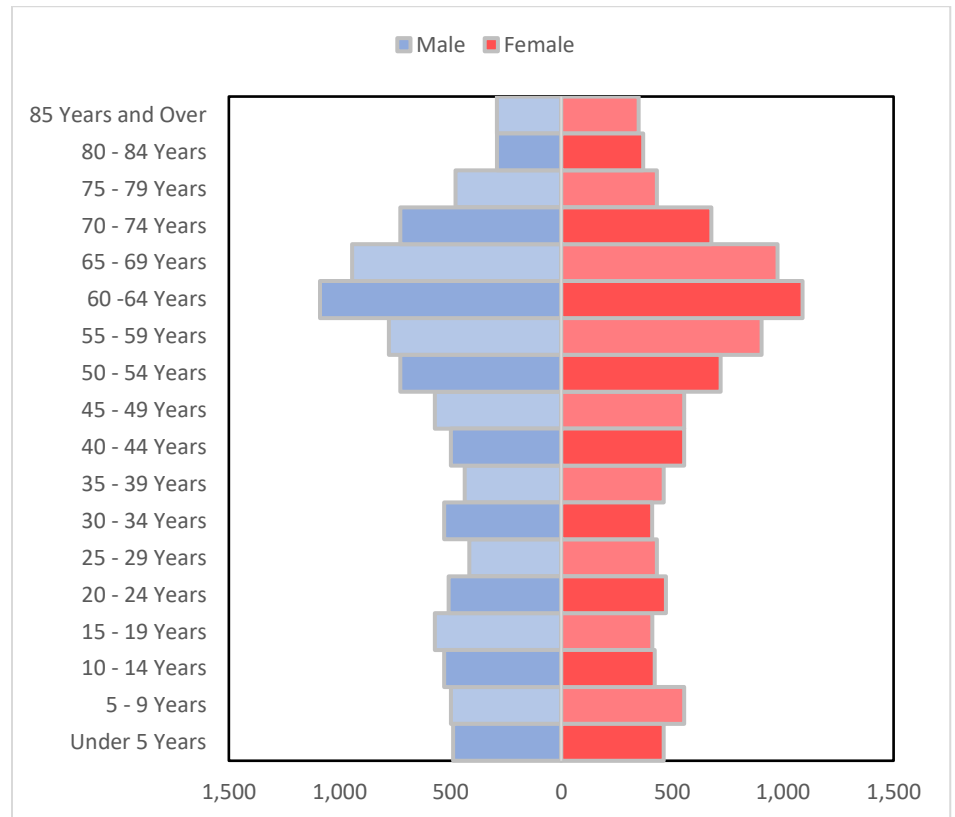


Figure 2A-5: Pacific County Population Pyramid

Source: US Census Bureau 2011-2015 American Community Survey 5-Year Estimates

This table shows the specific top ten locations where workers or residents are traveling to in terms of commuting.

Pacific County					
Workers - Where They Live?			Residents - Where They Work?		
City	Number	Percent	City	Number	Percent
Raymond city, WA	589	10.9%	South Bend city, WA	629	8.5%
Ocean Park CDP, WA	191	3.5%	Long Beach city, WA	615	8.4%
Long Beach city, WA	162	3.0%	Raymond city, WA	582	7.9%
South Bend city, WA	145	2.7%	Seattle city, WA	276	3.7%
Ilwaco city, WA	143	2.6%	Ilwaco city, WA	231	3.1%
Aberdeen city, WA	97	1.8%	Aberdeen city, WA	229	3.1%
Astoria city, OR	81	1.5%	Ocean Park CDP, WA	218	3.0%
Chinook CDP, WA	71	1.3%	Vancouver city, WA	211	2.9%
Naselle CDP, WA	54	1.0%	Olympia city, WA	177	2.4%
Hoquiam city, WA	52	1.0%	Astoria city, OR	173	2.3%

Table 2A-10: Pacific County Commuting Patterns

Source: US Census Bureau, 2014 *OnTheMap* Application

Wahkiakum County

Below are population forecasts released by the Washington State Office of Financial Management (OFM) in 2012 for 2020 through 2040. These forecasts represent the “Medium” series, the forecast in between the most conservative and most aggressive one developed.

Wahkiakum County			
Year	Forecasted Population	Forecasted Percent Change Since 2010 or Preceding 5 Year Period	Forecasted Average Annual Growth Rate Over Preceding 10 or 5 Year Period
2020	3,877	-2.54%	-0.25%
2025	3,830	-1.21%	-0.24%
2030	3,772	-1.51%	-0.30%
2035	3,716	-1.48%	-0.30%
2040	3,669	-1.26%	-0.25%

Table 2A-11: Wahkiakum County Population Projections 2020-2040

Source: OFM Forecasting and Research Division, 2012 GMA Projections (5-Year Interval), MEDIUM series

The following is a population pyramid developed for Wahkiakum County based on 2015 American Community Survey data showing age range and sex distribution.

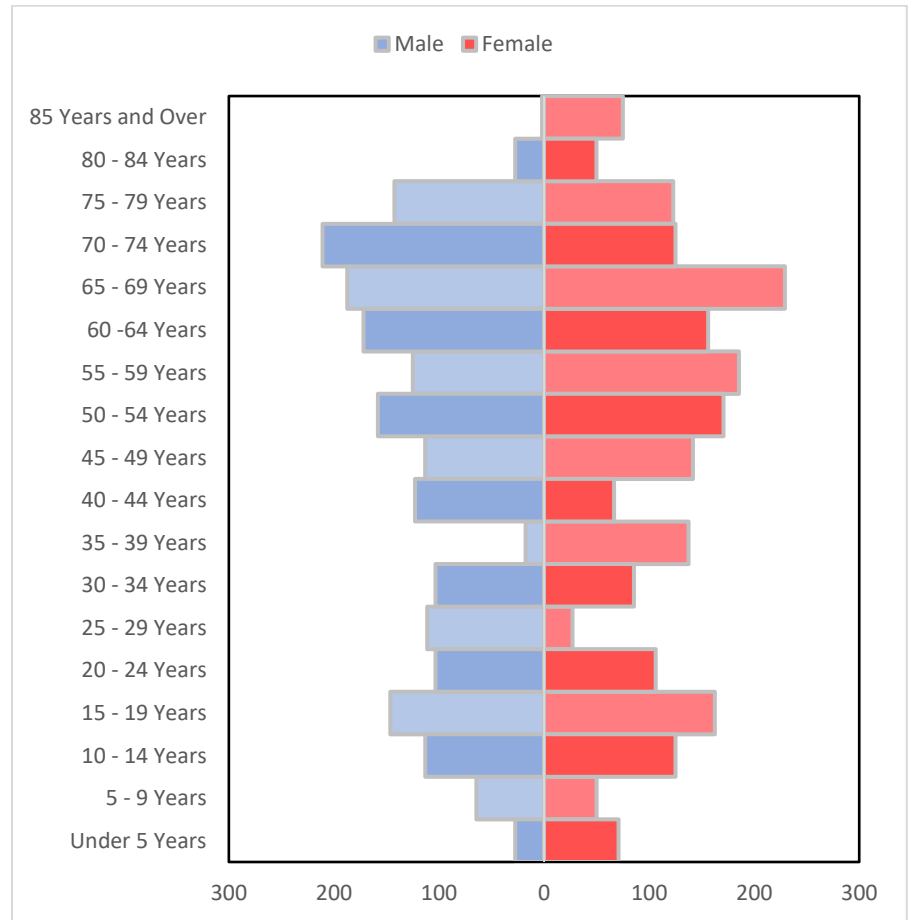


Figure 2A-6: Wahkiakum County Population Pyramid

Source: US Census Bureau 2011-2015 American Community Survey 5-Year Estimates

This table shows the specific top ten locations where workers or residents are traveling to in terms of commuting.

Wahkiakum County					
Workers - Where They Live?			Residents - Where They Work?		
City	Number	Percent	City	Number	Percent
Puget Island CDP, WA	75	11.4%	Cathlamet town, WA	175	13.0%
Longview city, WA	42	6.4%	Longview city, WA	101	7.5%
Cathlamet town, WA	38	5.8%	Portland city, OR	70	5.2%
East Cathlamet CDP, WA	38	5.8%	Vancouver city, WA	62	4.6%
Skamokawa Valley CDP, WA	25	3.8%	Lower Elochoman CDP, WA	42	3.1%
Rosburg CDP, WA	24	3.6%	Seattle city, WA	38	2.8%
Grays River CDP, WA	21	3.2%	Olympia city, WA	32	2.4%
Deep River CDP, WA	19	2.9%	East Cathlamet CDP, WA	28	2.1%
Upper Elochoman CDP, WA	19	2.9%	Astoria city, OR	27	2.0%
Lower Elochoman CDP, WA	17	2.6%	Puget Island CDP, WA	27	2.0%

Table 2A-12: Wahkiakum County Commuting Patterns

Source: US Census Bureau, 2014 *OnTheMap* Application

Metropolitan Planning Organization (MPO)

The following is a population pyramid developed for the Longview-Kelso-Rainier MPO based on the 2010 Census showing age range and sex distribution.

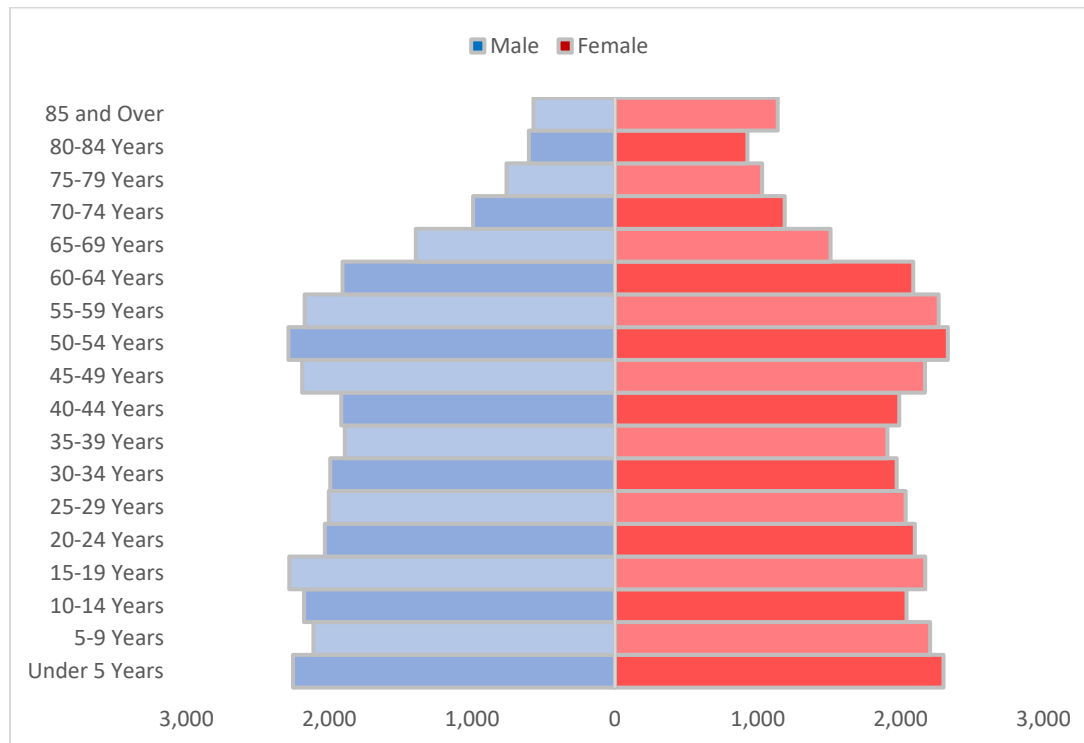
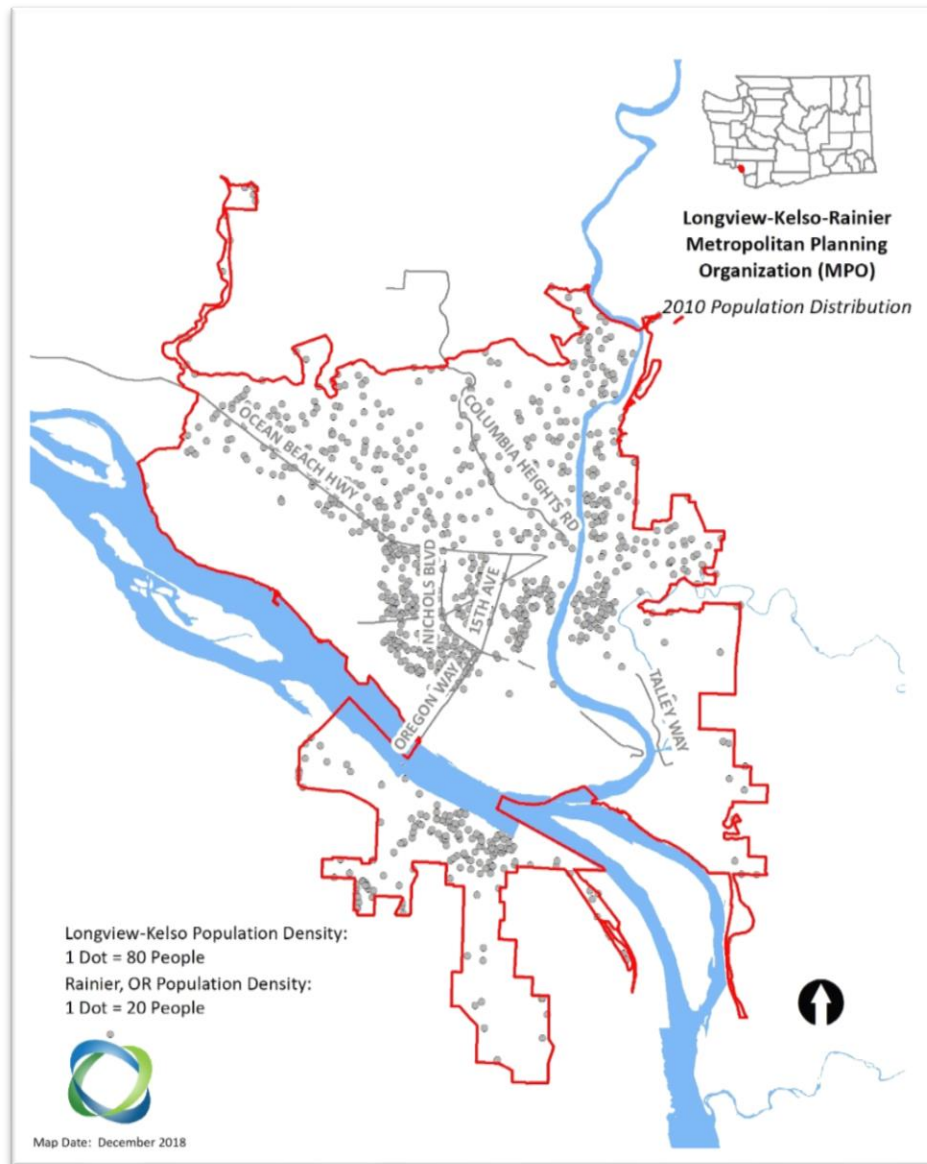


Figure 2A-7: MPO Population Pyramid

Source: US Census Bureau 2010 Decennial Census

Below is a map developed to show population distribution within the MPO area based on the 2010 Census.



**Figure 2A-8: Longview-Kelso-Rainier MPO
Population Distribution**
Source: CWCOG

This table shows the specific top ten locations where workers or residents are traveling to in terms of commuting.

MPO					
Workers - Where They Live?			Residents - Where They Work?		
City	Number	Percent	City	Number	Percent
Longview city, WA	6,725	25.3%	Longview city, WA	7,312	28.0%
Kelso city, WA	2,268	8.5%	Kelso city, WA	2,561	9.8%
West Side Highway CDP, WA	1,275	4.8%	Vancouver city, WA	1,276	4.9%
Longview Heights CDP, WA	886	3.3%	Portland city, OR	1,161	4.4%
Vancouver city, WA	735	2.8%	Seattle city, WA	606	2.3%
Castle Rock city, WA	371	1.4%	Woodland city, WA	492	1.9%
Kalama city, WA	257	1.0%	Tacoma city, WA	396	1.5%
Portland city, OR	207	0.8%	Olympia city, WA	310	1.2%
Seattle city, WA	169	0.6%	Kalama city, WA	251	1.0%
Rainier city, OR	159	0.6%	Rainier city, OR	226	0.9%

Table 2A-13: MPO Commuting Patterns

Source: US Census Bureau, 2014 *OnTheMap* Application

ATTACHMENT C
Countywide Planning Policies

Lewis County

Appendix B

Lewis County Adopted 2040 Population Allocations

Lewis County	104,722
Centralia	26,280
Chehalis	11,230
Morton	1,869
Mossyrock	1,874
Napavine	4,500
Onalaska	700
PeEll	814
Toledo	1,131
Vader	1,229
Winlock	4,550
 Total Urban	 54,177
Total Rural	50,545

Projections of the Total Resident Population for the Growth Management Act*

	Census	Projections					
	2010	2015	2020	2025	2030	2035	2040
Low	75,455	72,964	72,964	72,964	72,964	72,964	72,964
Medium	75,455	77,621	80,385	82,924	85,165	87,092	88,967
High	75,455	86,431	92,016	97,358	102,378	107,059	111,684

*OFM/Forecasting May 2012