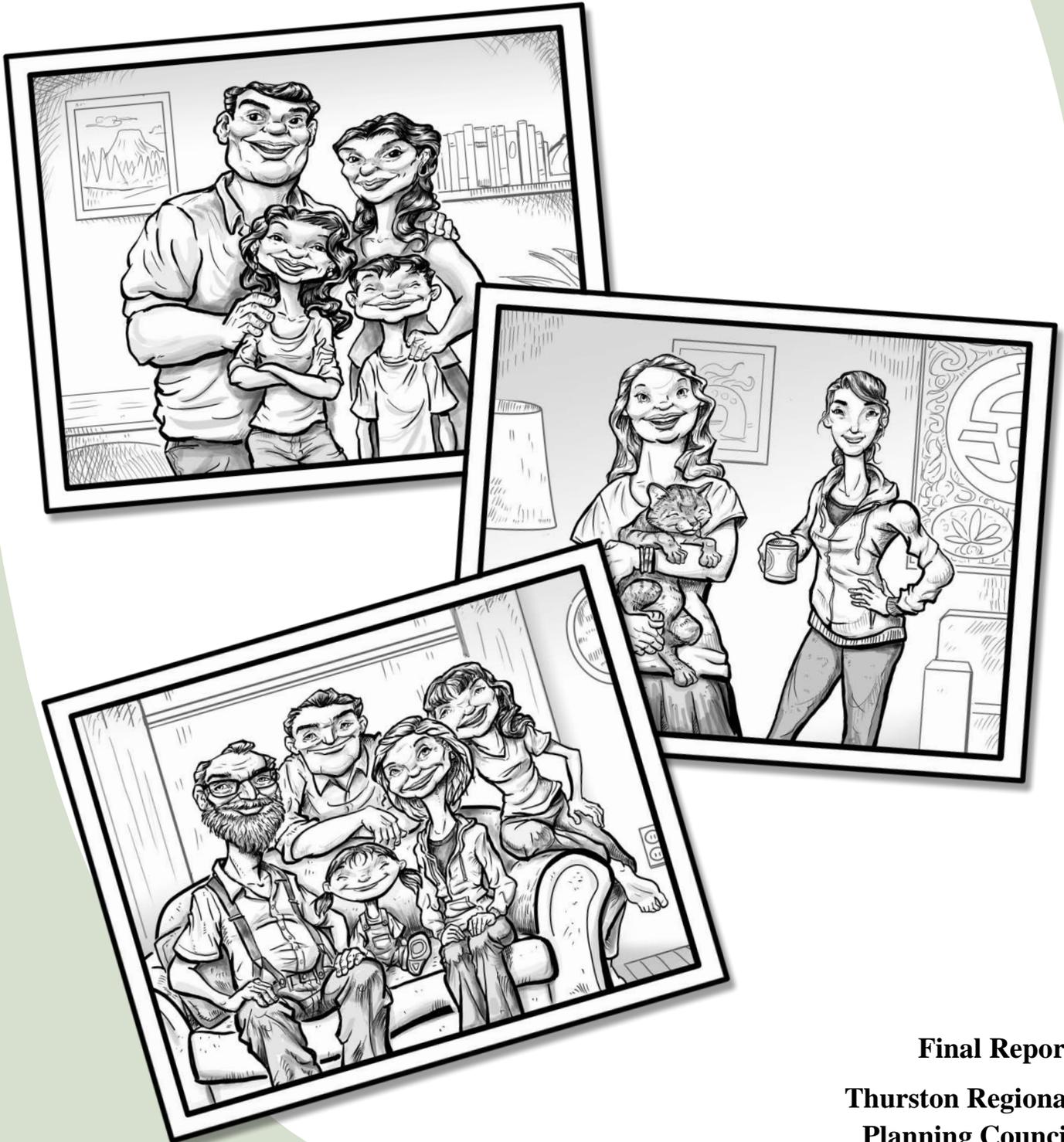


Population Forecast Allocations

For Thurston County



Final Report
Thurston Regional
Planning Council
November 2012

THURSTON REGIONAL PLANNING COUNCIL (TRPC) is a 22-member intergovernmental board made up of local governmental jurisdictions within Thurston County, plus the Confederated Tribes of the Chehalis Reservation and the Nisqually Indian Tribe. The Council was established in 1967 under RCW 36.70.060, which authorized creation of regional planning councils.

TRPC's mission is to "Provide Visionary Leadership on Regional Plans, Policies, and Issues."

To Support this Mission:

- A. Support **regional transportation** planning consistent with state and federal funding requirements.
- B. Address **growth management, environmental quality**, and other topics determined by the Council.
- C. **Assemble** and **analyze data** that support local and regional decision making
- D. Act as a "**convener**", build regional **consensus** on issues through information and citizen involvement.
- E. Build **intergovernmental consensus** on regional plans, policies, and issues, and advocate local implementation.

This report was prepared as part of the Thurston Regional Planning Council's 2012 regional work program.

**2012 MEMBERSHIP
THURSTON REGIONAL PLANNING COUNCIL**

Governmental Jurisdiction	Name of 2012 Representative
City of Lacey	Virgil Clarkson , Councilmember
City of Olympia	Nathaniel Jones , Councilmember
City of Rainier	Dennis McVey , Councilmember
City of Tenino	Bret Brodersen , Councilmember
City of Tumwater	Tom Oliva , Councilmember
City of Yelm	Robert Isom , Councilmember
Confederated Tribes of the Chehalis Reservation	Amy Loudermilk
Nisqually Indian Tribe	Willie Frank , Tribal Councilmember
	James Slape, Jr. , Tribal Councilmember
Town of Bucoda	Alan Vanell , Councilmember
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Intercity Transit	Sandra Romero , Transit Authority Board Member
LOTT Clean Water Alliance	Cynthia Pratt , Board Member
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Summary

The Thurston Regional Planning Council (TRPC) develops updated population and employment forecasts every three to five years. These forecasts are used for transportation, sewer, water, land use, school, and other local governmental planning purposes. They are also used by the private sector for market studies and business planning. They address both the county level and the neighborhood level. TRPC has been preparing these forecasts since the late 1960s. This report documents the development of the 2012 land population allocations to the city and planning area level/neighborhood level.

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Introduction

Over the past three decades, Thurston County has experienced one of the highest growth rates in the nation. This growth has generated a need for new schools and hospitals, and prompted major investments in water, sewer, and transportation facilities. As these investments are expensive and must be planned many years in advance, forecasts of future population growth and its distribution are used to estimate where and when new facilities will be needed. For this reason, the Thurston Regional Planning Council (TRPC) has prepared population and employment forecasts periodically since 1969. Local jurisdictions, however, were not required to use the figures for the purposes of developing comprehensive planning documents and capital facilities plans prior to 1990.

This all changed with the passage of senate bill 2929 in 1990, known as the Growth Management Act, which required that certain fast growing counties plan for the future in a very specific and prescribed manner.

A key provision in the GMA required that the State Office of Financial Management (OFM) prepare a twenty year population forecast for each county in the state.

OFM's forecast is provided to the counties as a low to high range. Counties required to plan for growth under GMA are directed that:

“Based upon the population forecast made for the county by the Office of Financial Management, the urban growth areas in the county shall include areas and densities sufficient to permit the urban growth that is projected to occur in the county for the succeeding twenty year period.”

In 1992 Thurston County, in consultation with the Cities and Towns, adopted the County-Wide Planning Policies . One provision in these policies was that:

“The state Office of Financial Management growth management planning population projections for Thurston County will be used as the range of population to be accommodated for the coming 20 years.

Within the overall framework of the OFM population projections for the County, Thurston Regional Planning Council will develop county-wide and smaller area population projections, pursuant to RCW 36.70A.110 and based on current adopted plans, zoning and environmental regulations and buildout trends.”

The Population Forecast is conducted in two phases – first at the county-wide level, and then a further distribution to cities, towns, planning areas, neighborhoods, and traffic analysis zones. The forecast allocations – or “smaller area population projections,” along with employment allocations, provide information to assist local governments in their planning efforts.

This report documents the population allocations phase of the forecast.

Consistent with the County-Wide Planning Policies, these forecasts are based on current adopted plans, zoning and environmental regulations, and buildout trends, along with other demographic trends.

Background

Once the county-wide population and employment forecast is complete a forecast is generated to identify where the new growth is likely to locate, based on the adopted plans and policies of local cities, towns, and the county and market realities. Only then can planning for roads, utilities, school sites, park sites, and other public services and facilities take place.

Thurston Regional Planning Council (TRPC) has been providing population forecast since 1969. Over time the techniques used to forecast growth have changed, but the basic premise remains the same.

Where population locates within Thurston County is related to several factors, including:

- Housing market demand, which is influenced by:
 - Proximity to jobs and employment opportunities
 - Quality of life within each community
- Buildable land supply
- Availability of infrastructure such as municipal water, sewers and roads

TRPC has developed a Population Allocation computer model to distribute housing and population growth to areas within the County.

The basic assumption of the Population Allocation model is that housing market behavior can be simulated by maintaining reasonable relationships between supply and demand.

This simply means that current conditions, market preference, and available land supply all have an influence on where housing (and population) locates within Thurston County. By gaining a reasonable understanding of that relationship, future housing patterns within Thurston County can be forecast.

A buildout factor related to land availability is used when determining where future residential growth is likely to locate, and to shift growth shares as planning areas become full. It is a simple ratio of projected *demand* for dwellings versus available *capacity* for dwellings.

The 2012 update contains several enhancements compared to previous forecast allocations:

- Incorporation of a housing market study for projected demand in city and urban centers to better assess redevelopment and infill areas
- Census 2010 housing and population data
- A comprehensive inventory of proposed development projects
- An analysis of buildable land supply by type

Current Population Distribution

Thurston County is comprised of seven incorporated Cities and Towns (Bucoda, Lacey, Olympia, Rainier, Tenino, Tumwater, and Yelm), one unincorporated area designated for urban growth (Grand Mound), two Tribal Reservations, with the remainder of the land being in forest, agriculture, or rural residential uses.

In the north County, Lacey, Olympia and Tumwater and their unincorporated urban growth areas share common boundaries, and together contain 63 percent of the County's population. The south County contains smaller communities (including the Tribal Reservations) and around 5.5 percent of the County's population. The remainder of the population (31.5 percent) lives in the rural areas.

Table 1: Population Distribution in Thurston County.

Jurisdiction	Population	Population
	2012	Distribution 2012
Bucoda	560	0.2%
Lacey & UGA	77,260	30.1%
Olympia & UGA	59,555	23.2%
Rainier & UGA	1,935	0.8%
Tenino & UGA	1,720	0.7%
Tumwater & UGA	24,075	9.4%
Yelm & UGA	8,525	3.3%
Grand Mound UGA	1,195	0.5%
Chehalis Reservation ¹	70	0.0%
Nisqually Reservation ¹	600	0.2%
<hr/>		
Olympia-Lacey-Tumwater UGA	160,890	62.7%
South County Urban Areas	13,935	5.4%
<hr/>		
Total Urban Areas	174,825	68.1%
Total Reservations ¹	660	0.3%
Rural Unincorporated County ²	81,195	31.6%
Thurston County Total	256,800	100%

Sources: Cities and County Total - Washington State Office of Financial Management and U.S. Bureau of the Census; UGAs - TRPC Small Area Population Estimates.

Explanations: UGA is Urban Growth Area. Data are for April 1 of each year. Numbers may not add due to rounding. ¹Data is for Thurston County portion of reservation only. ²Rural unincorporated county is the portion of the unincorporated county that lies outside UGA and Reservation boundaries.

Rural – Urban Population Distribution

Trends

The Region’s comprehensive plans call for a greater share of growth to be located in urban areas, or areas where urban services such as city water and sewer are already available or nearby. Concentrating urban growth in urban areas allows us to protect our rural and resource lands from urban sprawl. It also allows for more efficient delivery of urban services – since the cost of many services is related to the miles of pipes necessary to deliver the water or remove the waste.

Most local post-Growth Management Act comprehensive plans were adopted by 1995. In the first decade after they were adopted, the expected shift of population growth to the urban areas did not take place. In actuality there was a slight increase in the proportion of population that lived in Thurston County’s rural areas. One of the reasons was that there was a large inventory of existing rural lots at the time the comprehensive plans were adopted – an estimated eight year supply of undersized rural lots – or rural lots with an average lot size of 2.5 acres in 2000 (2003 Buildable Lands Report for Thurston County (contained within the Regional Benchmarks Report for Thurston County, 2003)).

By the mid-2000s the expected shift of new housing growth to the urban areas began to take place (Figure 1; Table 2).

Some of the factors leading to this change included:

- *Changes in rural zoning.* In 1990 much of the rural County was zoned to one unit per five acres. In 2007 a range of rural zoning densities was adopted ranging from one unit per five acres to one unit per twenty acres. It took longer than expected to see the effects of these changes due to the large inventory of existing lots.
- *Increased attractiveness of urban living and planned communities.* During the housing boom in the mid-2000s, single-family attached and detached homes on small urban lots in planned communities captured a very large share of Thurston County’s market. These planned communities offered residents a walkable, attractive urban setting with a mix of housing styles.

In addition, there was an overall shift in population that took place due to changing demographic trends.

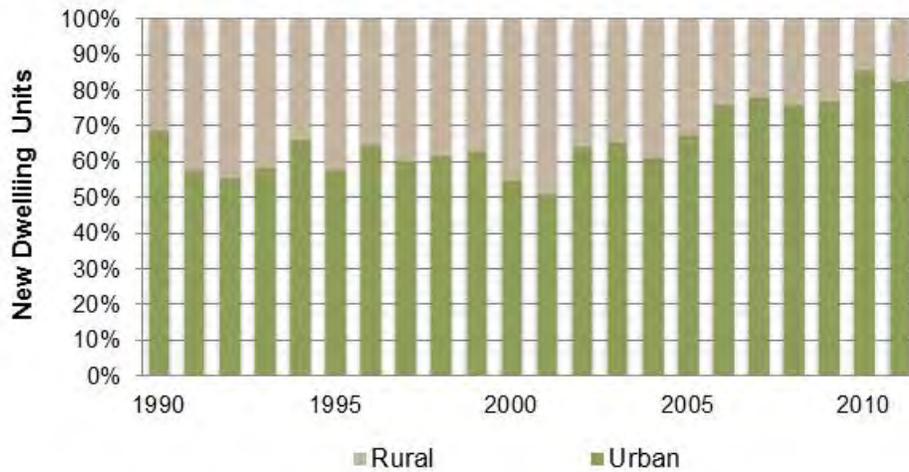
- *Change in household size:* Over the last twenty years, average household size has stayed fairly consistent in the Thurston County cities, but has decreased in the unincorporated areas by around 6 percent. This means that in the rural areas, the growth rate for population was lower than that for dwelling units (Table 3; Table 4).

What is Sprawl?

Sprawl is difficult to define, but people know it when they see it. It typically has the following characteristics:

- Unlimited outward extension of development
- Low-density commercial and residential settlement
- Leap frog development
- Dominance of transportation by private automotive
- Widespread strip commercial development

Figure 1: New Dwellings Permitted in Thurston County, 1990 to 2011.



Source: TRPC Data Program.

Table 2: Dwelling Unit Growth Distribution in Thurston County, 2000-2005 & 2005-2012.

Jurisdiction	Dwelling Units				Dwelling Unit Growth Distribution		
	2000	2005	2010	2012	2000-2005	2005-2010	2010-2012
Bucoda	235	245	245	245	0.1%	0.0%	0.0%
Lacey & UGA	24,170	26,960	31,750	32,350	28.9%	38.0%	26.1%
Olympia & UGA	23,540	24,950	26,960	27,830	14.6%	20.3%	37.8%
Rainier & UGA	615	665	765	795	0.5%	0.9%	1.3%
Tenino & UGA	675	710	745	750	0.4%	0.3%	0.2%
Tumwater & UGA	9,040	9,830	10,570	10,930	8.2%	7.8%	15.7%
Yelm & UGA	1,750	2,320	3,050	3,150	5.9%	5.9%	4.3%
Grand Mound UGA	315	335	375	395	0.2%	0.4%	0.9%
Chehalis Reservation ¹	15	15	20	20	0.0%	0.0%	0.0%
Nisqually Reservation ¹	210	215	190	200	0.1%	-0.1%	0.4%
Olympia-Lacey-Tumwater UGA	56,750	61,740	69,280	71,110	51.7%	66.1%	79.6%
South County Urban Areas	3,590	4,275	5,180	5,335	7.1%	7.5%	6.7%
Total Urban Areas	60,340	66,015	74,460	76,445	58.7%	73.6%	86.3%
Total Reservations ¹	225	230	210	220	0.1%	-0.1%	0.4%
Rural Unincorporated County ²	26,080	30,060	33,520	33,820	41.2%	26.5%	13.0%
Thurston County Total	86,650	96,310	108,180	110,480	100%	100%	100%

Sources: Cities and County Total - Washington State Office of Financial Management and U.S. Bureau of the Census; UGAs - TRPC Small Area Population Estimates.

Explanations: UGA is Urban Growth Area. Data are for April 1 of each year. Numbers may not add due to rounding. ¹Data is for Thurston County portion of reservation only. ²Rural unincorporated county is the portion of the unincorporated county that lies outside UGA and Reservation boundaries.

Table 3: Changes in Average Household Size of Occupied Units.

Jurisdiction	1990	2000	2010	Change 1990-2000	Change 2000-2010
Bucoda	2.76	2.87	2.53	4%	-12%
Lacey	2.44	2.47	2.44	1%	-1%
Olympia	2.22	2.21	2.18	-1%	-1%
Rainier	2.97	2.82	2.73	-5%	-3%
Tenino	2.60	2.52	2.45	-3%	-3%
Tumwater	2.27	2.20	2.27	-3%	3%
Yelm	2.86	2.67	2.95	-7%	11%
Chehalis Reservation ¹	3.03	3.56	3.05	17%	-14%
Nisqually Reservation ¹	3.48	3.40	3.16	-2%	-7%
Incorporated	2.32	2.32	2.33	0%	0%
Unincorporated	2.75	2.67	2.59	-3%	-3%
Thurston County	2.55	2.50	2.46	-2%	-1%

Source: U.S. Bureau of the Census.

Explanation: ¹Data is for the reservation as a whole, including those portions outside Thurston County.

Table 4: Population and Dwelling Unit Growth for Thurston County Jurisdictions, 2000-2012.

Jurisdiction	Population		Annual Growth Rate	Dwelling Units		Annual Growth Rate
	2000	2012	2000-2012	2000	2012	2000-2012
Bucoda	628	560	-1.0%	235	245	0.3%
Lacey & UGA	59,858	77,260	2.1%	24,170	32,350	2.5%
Olympia & UGA	51,783	59,555	1.2%	23,540	27,830	1.4%
Rainier & UGA	1,655	1,935	1.3%	615	795	2.2%
Tenino & UGA	1,598	1,720	0.6%	675	750	0.9%
Tumwater & UGA	19,979	24,075	1.6%	9,040	10,930	1.6%
Yelm & UGA	4,384	8,525	5.7%	1,750	3,150	5.0%
Grand Mound UGA	1,015	1,195	1.4%	315	395	1.9%
Chehalis Reservation ¹	35	70	5.9%	15	20	2.4%
Nisqually Reservation ¹	600	600	0.0%	210	200	-0.4%
Olympia-Lacey-Tumwater UGA	131,619	160,890	1.7%	56,750	71,110	1.9%
South County Urban Areas	9,280	13,935	3.4%	3,590	5,335	3.4%
Total Urban Areas	131,619	174,825	2.4%	56,750	76,450	2.5%
Total Reservations ¹	635	660	0.3%	225	220	-0.2%
Rural Unincorporated County ²	65,825	81,195	1.8%	26,080	33,820	2.2%
Thurston County Total	207,355	256,800	1.8%	86,650	110,480	2.0%

Sources: Cities and County Total - Washington State Office of Financial Management and U.S. Bureau of the Census; UGAs - TRPC Small Area Population Estimates.

Explanations: UGA is Urban Growth Area. Data are for April 1 of each year. Numbers may not add due to rounding. ¹Data is for Thurston County portion of reservation only. ²Rural unincorporated county is the portion of the unincorporated county that lies outside UGA and Reservation boundaries.

Forecast Assumption: Rural – Urban Growth Shares

The forecast assumption is that there will be an increased share of growth going into urban areas versus rural areas over time. Both areas will receive some share of the growth, as both urban and rural areas are desirable to people, however the share of growth going into the urban areas is expected to increase over time for several reasons:

- Demographers are predicting that an increasing share of people will seek out live-work-play neighborhoods - or neighborhoods where they can have a lifestyle with more choices in transportation (walking, bicycling, transit - in addition to a car) and more activity within walking distance. The retiring baby boom generation and singles and young couples without children will drive this shift back into the city center. This trend will not only drive a shift from rural to urban growth, but also a shift from urban suburbs to city centers.
- There is also projected to be strong demand for multifamily housing. In part this is driven by the desirability of live-work-play walkable neighborhoods, where the affordable housing choice tends to be multifamily rather than single-family homes. In addition, single and young couples entering the work force are finding it harder than their parents did to afford a single-family home. They are tending to either stay in their parents' homes longer, or rent. The retiring baby boom generation will also drive demand for multifamily housing – owner-occupied, rentals, and senior facilities – as they downsize.

This is not to say that all retirees will move into the city as many will continue to live in their existing homes. Rather, an increasing share of this generation will seek out multifamily homes. Multifamily homes are predominately found in urban areas where city services such as sewer and water can support denser types of housing. In the Thurston Region, much of the multifamily housing stock is two to three story garden style walk-up apartment complexes found predominately in the suburban areas.

Table 5: Forecast Assumption – Urban – Rural Growth Shares – Dwelling Units.

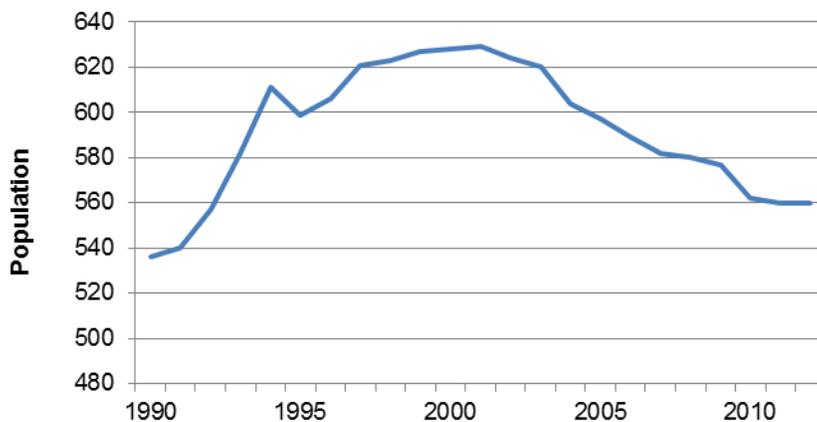
	Urban	Rural
Actual		
2005-2010	74%	26%
2010-2012	82%	18%
Forecast		
2010-2015	85%	15%
2015-2020	87%	13%
2020-2025	87%	13%
2025-2030	87%	13%
2030-2035	87%	13%

South County Urban Areas

Town of Bucoda

Bucoda experienced a decrease in population over the last 12 years – in large part due to a decrease in household size. The average household in Bucoda in 2000 was 2.87 people per household, and was down to 2.53 by 2010 – approaching the County average. Even without the decrease in household size, Bucoda has experienced little population growth over the last 22 years – only 4 percent or 24 people based on estimates from the State Office of Financial Management.

Figure 2: Population Estimates For the Town of Bucoda, 1990-2012.



Source: State Office of Financial Management.

Bucoda has also experienced little economic growth over the last 20 years, which may account for the low population growth. A recent survey showed that approximately 5 percent of the town’s population works in Bucoda – with a large share working in the Lacey-Olympia-Tumwater area (46 percent), Lewis County (17 percent) and Pierce County (12 percent) (Table 6).

Forecast Assumption: A wastewater treatment plant will be built in Bucoda between 2025 and 2030.

Table 6: South County Communities - Where People Work.

Work In:	Live In:			
	Bucoda	Rainier	Tenino	Yelm
Work in Own Community	5%	10%	15%	22%
Elsewhere in South County	12%	12%	2%	2%
Lacey-Olympia-Tumwater	46%	46%	59%	27%
Pierce County	12%	17%	4%	37%
Lewis County	17%	1%	12%	1%
Grays Harbor and Mason Counties	0%	3%	2%	1%
Other	7%	13%	6%	11%
Total	100%	100%	100%	100%

Source: Thurston Regional Planning Council Surveys; 2011 & 2012.

Community of Grand Mound

Grand Mound was designated an urban growth area when the County’s comprehensive plan was adopted. It has urban utilities – water and sewer treatment, and underwent an economic boom in the late 2000s with the opening of the Great Wolf Lodge.

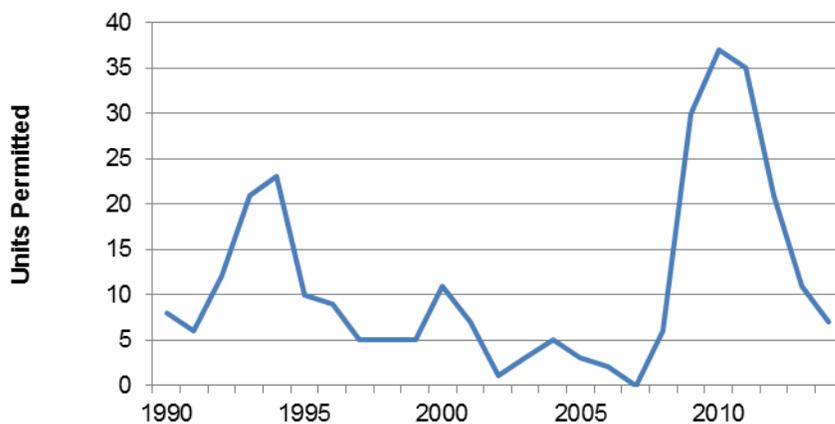
The other major employment center in Grand Mound – the Maple Lane Correctional Facility was closed by the State in June of 2011 – accounting for a decrease in population (203 juvenile inmates were housed at Maple Lane during Census 2010) and jobs. The State has not determined what the future holds for this facility.

Residential activity was slow in Grand Mound until the Great Wolf Lodge was built. At that time it was thought that there would be a surge of building activity – notably several apartment complexes were proposed. Since that time, interest in residential development has waned.

In 2009 the Confederated Tribes of the Chehalis Reservation worked with residents and business owners to develop a 10 year plan for Grand Mound – a plan to transform the community into a more compact community with opportunities for jobs, shopping, housing, and recreation, as in older, traditional towns.

Forecast Assumption: Maple Lane Juvenile Correctional Facility will not reopen to house inmates; it is more likely to be a future center for employment. Growth is likely to be low to moderate in Grand Mound until recommendations in the 10-year development plan are implemented, including changes in zoning.

Figure 3: Grand Mound Building Permits, 1988-2011.



Source: Thurston Regional Planning Council; Thurston County.

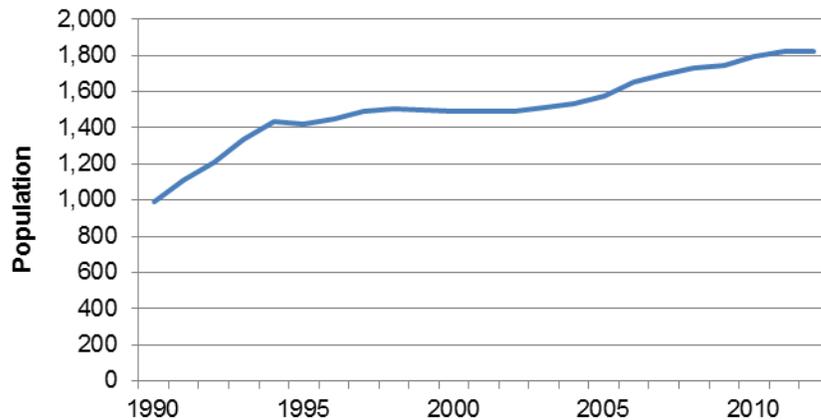
City of Rainier

Rainier has seen slow and steady growth over the last 22 years, increasing in population by 84 percent – adding more than 830 people. Ten percent of Rainier’s workforce is estimated to work in Rainier, with a fairly significant share working in the Olympia-Lacey-Tumwater area (46 percent), and Pierce County (17 percent) (Table 6). The fairly high percentage of people working in Pierce County is likely related to Joint-Base Lewis McChord.

The land supply in Rainier is conducive to small subdivisions. The City does not have a wastewater treatment facility, and residential lots must accommodate a septic system. The timing of a sewer will influence growth patterns. If land develops at lower densities, the growth rate will be modest – at rates similar to that experienced in the last 15 years. When a wastewater treatment facility is built, it is likely that the growth rate will increase.

Forecast Assumption: A wastewater treatment plant will be built in Rainier between 2020 and 2025.

Figure 4: Population Estimates For the City of Rainier, 1990-2012.



Source: State Office of Financial Management.

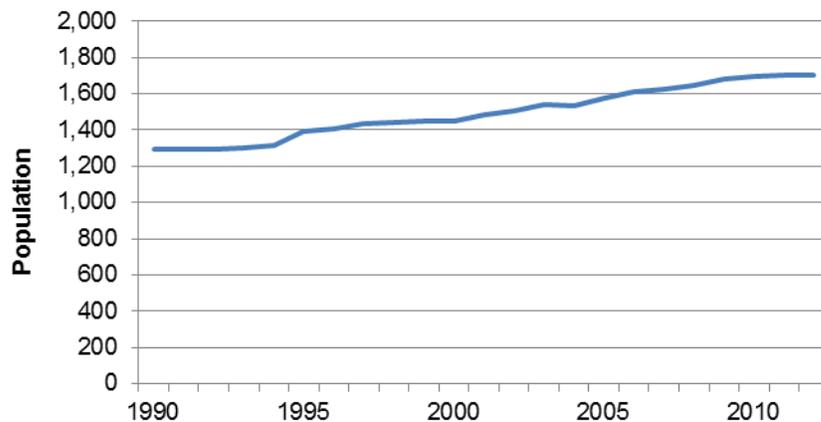
City of Tenino

The City of Tenino has experienced slightly less growth than Rainier during a similar time period – a growth rate of 32 percent or addition of just over 400 people. There are several reasons for this, including:

- Rainier is closer to Joint Base Lewis-McChord, and likely receives a greater percentage of military personnel moving there compared to Tenino
- Rainier had an easier to develop land supply than Tenino – with subdividable parcels of vacant land near the city center.

Tenino built a wastewater treatment plant several years ago could lead to increased growth – especially increased commercial and industrial growth. The City also annexed a large portion of land on the west side of the City Center several years ago. This land comprises much of the city’s buildable land supply, and can support a mixture of commercial, industrial, and residential growth.

Figure 5: Population Estimates For the City of Tenino, 1990-2012.



Source: State Office of Financial Management.

Tenino has approximately the same population that Yelm did around the time Yelm’s wastewater treatment plant was built in the early 1990s. It is unlikely that Tenino will see the same rate of growth Yelm experienced as much of Yelm’s growth is related to the expansion of Joint Base Lewis-McChord.

In addition, much of Tenino’s buildable lands supply is under one ownership in the large annexation area to the west of the City. Such a large property will take several years to undergo the necessary planning and environmental review steps once market demand returns. However master planned communities tend to build out at a higher rate than conventional development if they contain the amenities such as walkable neighborhoods and goods and services within close proximity.

Forecast Assumption: The westside area of Tenino will support 800 additional residential units, with a buildout as shown in Table 7.

Table 7: Buildout Assumption for Large Master Planned Communities in Thurston County.

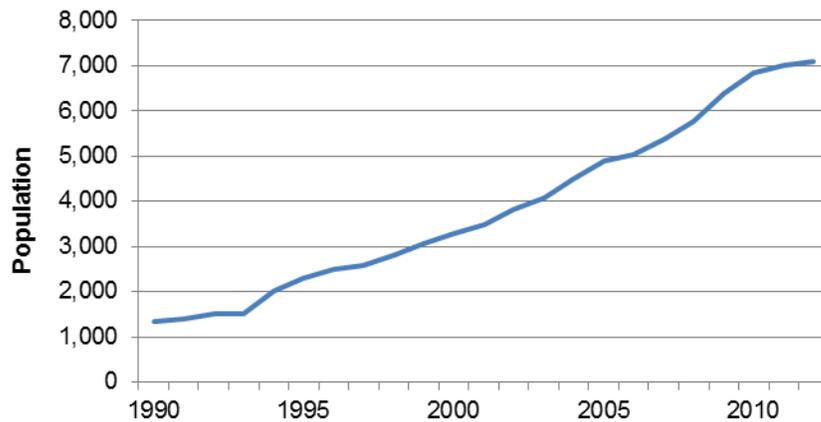
Jurisdiction	Community Name	Total Units Planned or Estimated	Single-family Units	Multi-family Units	Timing Assumption						2035 Buildout Percent ¹
					2010-2015	2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	
Lacey	Hawks Prairie Gateway (Estimate - Phase 1)	500	-	500	0%	0%	25%	25%	25%	25%	75%
Lacey	Meridan Campus	266	170	96	25%	75%	0%	0%	0%	0%	100%
Lacey UGA	Village at Union Mills	305	195	110	0%	50%	50%	0%	0%	0%	100%
Lacey UGA	Freestone Ridge	1,186	938	230	0%	0%	20%	20%	20%	40%	60%
Olympia	Mill Pond Village	293	155	138	0%	50%	50%	0%	0%	0%	100%
Olympia	Bentridge	501	160	241	0%	50%	50%	0%	0%	0%	100%
Olympia	Briggs (East-Remainder Unplatted)	286	-	286	15%	55%	30%	0%	0%	0%	100%
Olympia	Woodbury Crossing (Remainder-Unplatted)	278	-	278	30%	70%	0%	0%	0%	0%	100%
Tenino	Tenino West Side (Estimate)	800	800	-	0%	0%	5%	35%	40%	20%	80%
Tumwater	Doelman (Estimate)	800	800	-	0%	0%	25%	25%	25%	25%	75%
Yelm	Thurston Highlands	5,000	3,000	2,000	0%	12%	24%	24%	24%	16%	84%
Yelm	Tahoma Terra (Remainder Unplatted)	700	700	-	0%	50%	50%	0%	0%	0%	100%

Source: Master Plans and Planner estimates. ¹ 20 year planning horizon.

City of Yelm

Yelm had the highest rate of growth of all the communities within Thurston County – adding almost 6,000 people in the last 22 years (Figure 6). In part this was due to an increase in household size – from 2.67 to 2.95 people per household between 2000 and 2010 - likely due to an influx of young families – including many military families. Overall Yelm’s population has the youngest median age of all of the Cities and Towns in Thurston County at 29 years old (Census 2010). Almost five percent of off-base Joint Base Lewis-McChord households live in Yelm (Table 8).

Figure 6: Population Estimates For the City of Yelm, 1990-2012.



Source: State Office of Financial Management.

The City of Yelm can be thought of as having two distinct markets for population growth – the Master Planned Communities to the west, and the remainder of the City. The Master Planned Communities – Tahoma Terra and Thurston Highlands – together will comprise over 7,200 dwelling units. Tahoma Terra has an estimated build-out of 1,200 units, and is currently under construction. Thurston Highlands has an estimated build-out of 5,000 units. To understand the magnitude of these projects, Yelm has around 3,000 dwelling units currently – outside of those in Tahoma Terra. These two projects – at completion – will triple the Cities’ population – even without considering other smaller subdivisions planned for other areas of the City.

The question remains as to the timing of these large projects. Smaller residential projects can take 3 to 5 years to work their way through the development process and environmental reviews, and then another 3 to 5 years to build out. The timeframe for large projects can be much longer.

Northwest Landing in DuPont – a 4,000 multi- and single-family home master planned community was completed in nearly 20 years. Like Yelm, DuPont is home to many military families (Table 8) – and Joint Base Lewis-McChord saw rapid growth in the last decade.

If Joint Base Lewis-McChord continues to expand, Yelm will continue to be a fast growing community, although not likely at the same rate of DuPont.

Forecast Assumption: The master planned communities will have a buildout as shown in Table 7.

Table 8: Joint Base Lewis-McChord Off-Base Households.

City	Percent
Lacey	16.3%
Tacoma	13.3%
DuPont	10.2%
Lakewood	10.0%
Puyallup	8.8%
Spanaway	5.9%
Olympia	4.9%
Yelm	4.5%
Steilacoom	2.7%
University Place	1.4%
Graham	1.0%
Roy	1.0%
Tumwater	0.7%
Gig Harbor	0.7%
Other/Community not provided	18.6%
Total	100.0%

Source: Community Needs Survey of Joint Base Lewis-McChord Personnel and Families Summary Report. AECOM, 2012.

Yelm, Tenino, Rainier Unincorporated Growth Areas

The unincorporated urban growth area (UGA) of Tenino, Rainier, and Yelm (Bucoda does not currently have an unincorporated growth area) serve as holding areas for urban growth for the adjacent cities. They fall under the planning jurisdiction of Thurston County adjacent city or town, and for the most part are zoned for Rural Residential Resource or Rural Residential development at densities of one home per five acres.

At some time in the future, between now and 20 years from now, these rural UGAs are likely to be annexed into their adjacent city.

Forecast Assumption: Once the unincorporated growth areas are annexed into the adjacent cities they will develop at urban densities, or a minimum of four units per acre. Annexation is assumed to occur midway through the planning horizon as a general guideline.

Confederated Tribes of the Chehalis Reservation

The Confederated Tribes of the Chehalis Reservation is located along the Chehalis River. Only the eastern portion of the Reservation is within the Thurston County forecast area – the remainder – where most of the population resides – is in Grays Harbor County.

The Chehalis River flood plain presents an environmental constraint to the amount of buildable land in the Thurston County region of the Reservation. Very little residential building activity has been reported in the last decade.

Nisqually Indian Reservation

The Nisqually Indian Reservation builds housing for Tribal members. Plans are to continue this trend over the coming decades – with land identified for future housing in specified areas of the Reservation.

The household size on the Reservation is higher than the remainder of the County – most likely due to a greater proportion of multi-generational families. It is likely that some of the new housing will be filled by current residents – and the remainder by other Tribal members moving onto the Reservation. Therefore growth in housing will be higher than the increase in population.

North County Urban Areas

Trends

The cities of Lacey, Olympia, and Tumwater share common boundaries – and in many ways function as one large housing market along with the north County rural areas.

The three-city region is the seat of State Government for Washington State, and has a strong economic base serving as the regional medical and shopping hub for the counties to the south and west.

The market is also strongly influenced by economic growth in Pierce County – both within the cities in Pierce County such as Tacoma, but also by the expansion of Joint Base Lewis-McChord (JBLM) – which resulted in an increase of over on-base 15,000 jobs (Figure 7) and around 40,000 people including civilian employees and family members over seven years.

Compare this to overall employment growth in Thurston County – which was around 12,000 jobs in the same period of time (Figure 8).

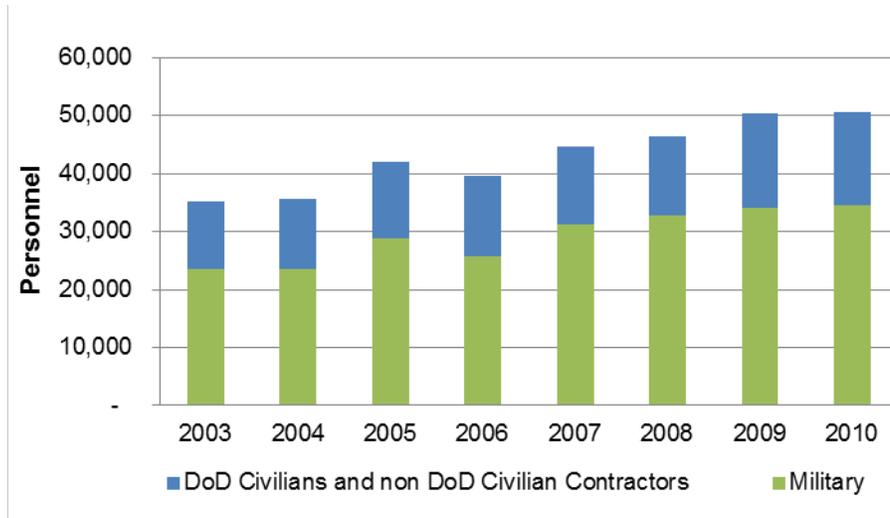
Lacey is closer to JBLM than the remainder of the urban areas in Thurston County, and has the highest share of off-base JBLM households in the State according to a recent survey (Table 8). In the last twelve years, growth in Lacey’s urban area has out-paced the remainder of the County (Table 4). Much of this is attributed to the expansion of JBLM and associated economic spin-off effects such as supporting retail and services.

Recent Activity

In the last two years a different trend has emerged, as Olympia has experienced a boom in building activity (Table 2). In large part this is due to the effects of the Great Recession and collapse of the single-family housing market nationwide. Over the urban areas of the County as a whole there has been an increase in multifamily building permits – mainly apartments – to meet a growing demand for rental housing. This does not necessarily signify a long-term trend as the multifamily market is always cyclical – as many units are brought onto the market in a short time when apartment complexes are constructed. There is capacity and demand for multifamily construction in all of the large urban cities (Lacey, Olympia, Tumwater, and Yelm).

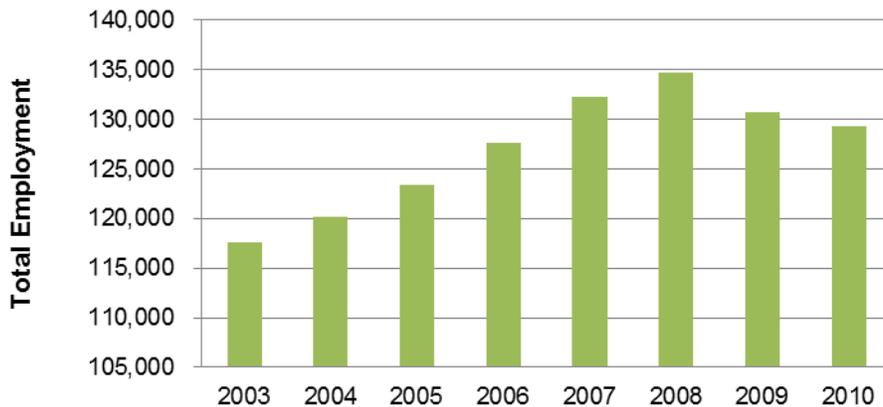
Over the longer term – vacant lots and recently approved multifamily projects give an indication of where market share is likely to be in the near future.

Figure 7: Expansion of Joint Base Lewis-McChord from 2003 to 2010.



Source: JBLM Growth Coordination Plan.
Note: DoD is Department of Defense.

Figure 8: Total Full-Time and Part-Time Employment in Thurston County, 2003 to 2010.



Source: Bureau of Economic Analysis, 2012.
Note: DoD is Department of Defense.

Forecast Assumption: The urban growth areas of Olympia-Lacey-Tumwater function as one urban market. Growth shares between these areas will initially be distributed based on recent activity.

Table 9: Recent Building Permits and New Residential Lots in Thurston County

Jurisdiction	Recent Building Permit (2000-2011)		Vacant Lots in New Long Plat Subdivisions (2005 plus) and Recently Approved Multifamily		Total Recent Activity	
	Number	Share	Number	Share	Number	Share
Bucoda	2	0.1%	0	0.0%	2	0.0%
Lacey & UGA	687	29.0%	1,194	35.0%	1,881	32.6%
Olympia & UGA	868	36.6%	691	20.3%	1,559	27.0%
Rainier & UGA	22	0.9%	2	0.1%	24	0.4%
Tenino & UGA	3	0.1%	1	0.0%	4	0.1%
Tumwater & UGA	363	15.3%	753	22.1%	1,116	19.3%
Yelm & UGA	99	4.2%	586	17.2%	685	11.9%
Grand Mound UGA	18	0.8%	38	1.1%	56	1.0%
Unincorporated County ¹	308	13.0%	143	4.2%	451	7.8%
Total	2,370	100.0%	3,408	100.0%	5,779	100.0%

Source: Thurston Regional Planning Council.

Note: ¹ Most of the rural County's subdivision activity is in large-lot subdivisions and will not be captured in the vacant lot portion of this table.

Subdivision Buildout Trends

Recent Activity

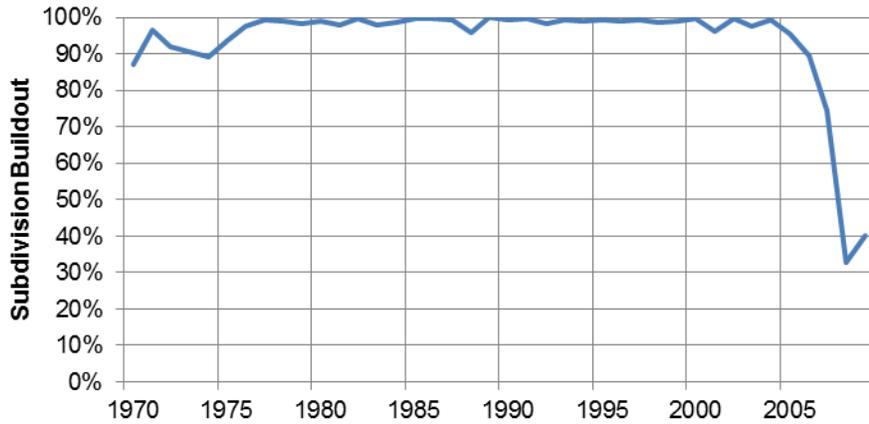
Long plat subdivisions are the larger subdivisions in Thurston County. In general, larger subdivisions can take several years to buildout, depending on their size, as build out is related to demand. Examining build out trends (Figure 9; Table 10) indicates that an inventory of available lots exists in subdivisions platted in the 1970s and after 2005.

Buildout trends since 2005 were strongly influenced by both demand and the finances of developers and builders. The Great Recession influenced both of these factors. Demand was still strong from growth at JBLM.

Many residential developments went into bankruptcy during this period. While recovery has been slow, building permit activity has picked up in the last year.

Over time, urban subdivisions tend to have high buildout rates. In rural subdivisions, demand is lower than supply, and buildout rates are slower (Table 10).

Figure 9: Long Plat Subdivision Buildout Trends (1970-2009).



Source: Thurston Regional Planning Council.

Table 10: Long Plat Subdivision Buildout by Jurisdiction

Jurisdiction	1970-2004 Approved Subdivisions			2005-2009 Approved Subdivisions		
	Approved Lots	Built Lots	% Buildout	Approved Lots	Built Lots	% Buildout
Bucoda	19	17	89%	-	-	n/a
Lacey & UGA	12,833	12,754	99%	4,259	3,795	89%
Olympia & UGA	6,608	6,522	99%	996	683	69%
Rainier & UGA	230	228	99%	172	115	67%
Tenino & UGA	47	47	100%	-	-	n/a
Tumwater & UGA	2,798	2,784	99%	1,419	828	58%
Yelm & UGA	1,216	1,209	99%	1,215	723	60%
Grand Mound UGA	-	-	n/a	184	146	79%
Olympia-Lacey-Tumwater UGA	22,239	22,060	99%	6,674	5,306	80%
South County Urban Areas	1,512	1,501	99%	1,571	984	63%
Total Urban Areas	23,751	23,561	99%	8,245	6,290	76%
Rural Unincorporated County ¹	6,120	5,566	91%	616	492	80%
Thurston County Total	29,871	29,127	98%	8,861	6,782	77%

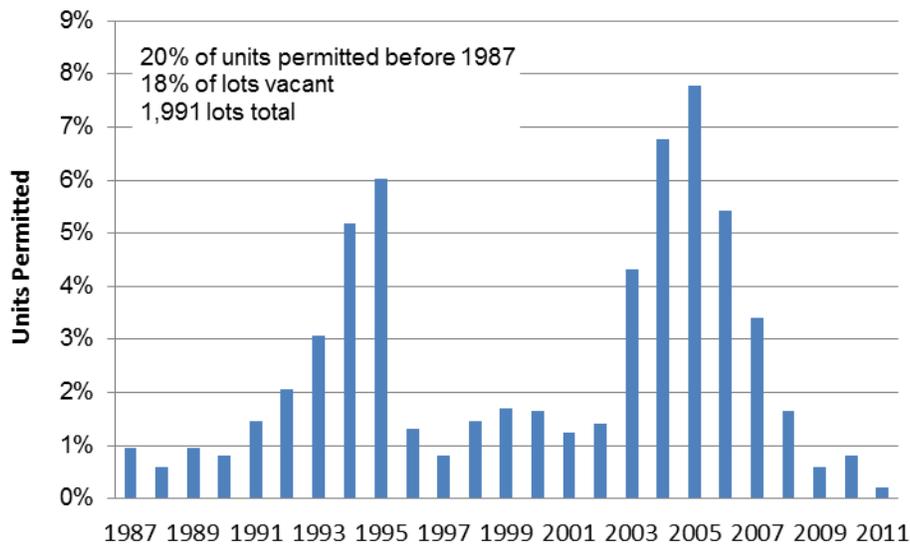
Source: Thurston Regional Planning Council.

Explanations: UGA is Urban Growth Area. ¹Rural unincorporated county is the portion of the unincorporated county that lies outside UGA and Reservation boundaries.

Absorption in Older Subdivision

The buildable lands supply for Thurston County contains an inventory of older rural lots. Many of these lots are smaller than what would be allowable under today’s development regulations, and have been slow to build out due to demand, accessibility, and costs of infrastructure. However the build out has been steady (Figure 10) with building spurts related to county-wide boom periods.

Figure 10: Build-Out Rate for select Rural Subdivisions Platted in the 1970s.



Source: Thurston Regional Planning Council.

Notes: Rural subdivisions included in this analysis: Nisqually Pines, Clearwood, Deschutes Village, Lake Lucinda, and Single Tree Estates.

Existing Land Use

The existing land use in Thurston County supports a variety of uses, as outlined in Table 11. Residential development can occur in many areas of the County, at densities outlined in local government Comprehensive Plans, Zoning Ordinances, and consistent with Development Guidelines. In general, areas designated as parks, preserves, open space, military, roads and rights of way, public forest lands, or lands zoned for long term forestry or agricultural lands are not likely to be developed for residential purposes.

Although Thurston County is not commonly noted as a county with a strong agricultural base, approximately 7 percent of the County’s land use is given to agricultural activities, and adds to the support of local food production, conservation of rural landscapes, and economic diversification of the County. An additional 26 percent of the land use is in forestry – both public and private forest lands. Most of this area is enrolled in a voluntary tax program called the Open Space Tax Program, administered by the County. This program gives a tax break to property owners that forego the development of their land in favor of preserving wildlife habitat, recreation sites, forest land, agriculture, and other natural resource amenities that benefit the community. Properties enrolled in the program are valued based on their current land use, rather than their “highest and best” use – e.g. residential or commercial development.

Table 11: 2010 Land Use in Thurston County.

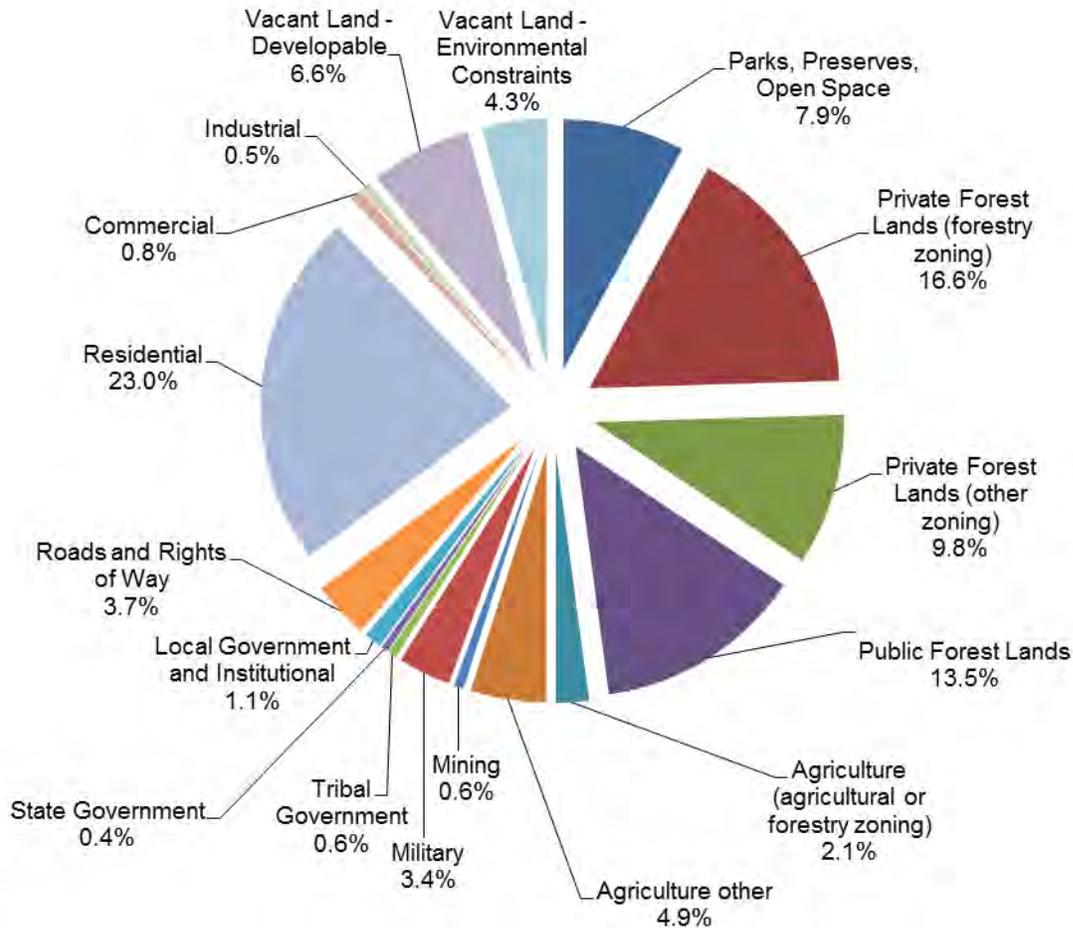
Thurston County Land Use - 2010	Acres	Percent
Parks, Preserves, Open Space ¹	37,100	7.9%
Private Forest Lands (forestry zoning)	78,400	16.6%
Private Forest Lands (other zoning)	46,200	9.8%
Public Forest Lands	63,800	13.5%
Agriculture (agricultural or forestry zoning)	10,000	2.1%
Agriculture other	23,100	4.9%
Mining	3,000	0.6%
Military	16,200	3.4%
Tribal Government	2,800	0.6%
State Government	2,100	0.4%
Local Government and Institutional	5,300	1.1%
Roads and Rights of Way	17,500	3.7%
Residential	108,300	23.0%
Commercial	3,900	0.8%
Industrial	2,500	0.5%
Vacant Land - Developable	30,900	6.6%
Vacant Land - Environmental Constraints	20,100	4.3%
Total Area	471,200	100.0%

Source: Thurston Regional Planning Council.

Note: ¹ includes golf courses.

Over the long term, however, these properties may be developed – albeit with land owners paying a tax – unless they are also in long term agriculture or forestry zoning. Two percent of identified agricultural lands in Thurston County are in long term agriculture or other agriculture zoning. The remaining five percent are in other types of zoning designations – for the most part rural residential / resource zoning, which allows them to develop at rural residential densities.

Figure 11: 2010 Land Use in Thurston County



Residential Land Supply and Capacity

The Population and Employment Land Supply Assumptions Report documents the types of land with the potential for residential development capacity. Supply is determined at a theoretical build-out capacity based on a series of assumptions on if and how land can be developed.

If a piece of land is determined to have “residential capacity,” the capacity is assigned a type. Examples of types of capacity can be found in the Land Supply Assumptions documentation. Each type of capacity is “released” into the model to absorb demand based on the assumptions outlined in Table 12.

The basic assumption is that some types of capacity are already in various stages of the development approval process and are likely to develop in the nearer term than other land with potential development capacity.

Table 12: Residential Development Capacity Assumptions.

Type of Capacity	Timing of Development	Rationale
Recently Permitted	Immediate (2010-2015)	Once a building permit is issued, a unit is very likely to be built
Recently Approved but Vacant Subdivision Lots (approved 2005 plus)	Near term (2010–2020)	Recent subdivision tend to build out fairly quickly
Subdivisions Approved 1970-2004	Mid-term (2010-2020) after immediate and near term capacity is absorbed	The existing inventory of older subdivision lots is being slowly built out
Planned Projects	Mid-term (2010-2020) after immediate and near term capacity is absorbed	Planned projects
Master Planned Communities	As shown in Table 7	Informed estimates
Vacant Single Lots (not platted through the subdivision process)	Mid-long term (2010-2035) Gradual increase using buildout factor	Will take some time to work through the development approval process unless short-platted
Vacant and partially-used subdividable land	Mid-long term (2010-2035) Gradual increase using buildout factor	Will take some time to work through the development approval process unless short-platted
Redevelopable Land	Gradual increase; only 50% within planning horizon	Very difficult to develop without additional amenities/incentives
Urban Land with Constrained Development Capacity (Areas identified by Planning Staff as costly to extend municipal services due to topography and environmental constraints)	Long-term (2025-2035)	This land is likely to be the hardest to develop in urban areas for the single-family market
Other Rural Lands	Steadily throughout the planning horizon	Some rural areas difficult to develop due to distance from existing infrastructure, topography, and/or environmental constraints.

Figure 12: Urban Growth Areas – Residential Build-Out Capacity (dwelling units)

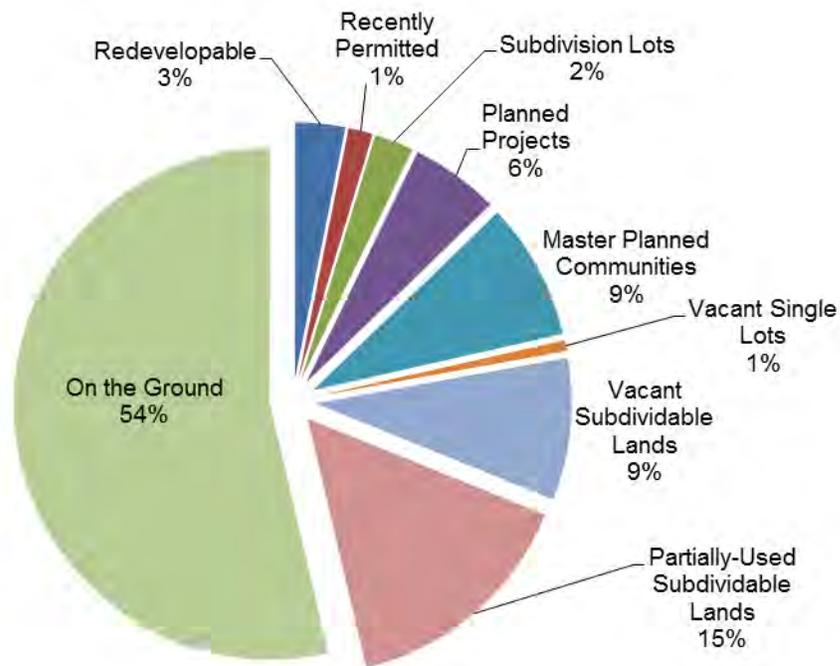
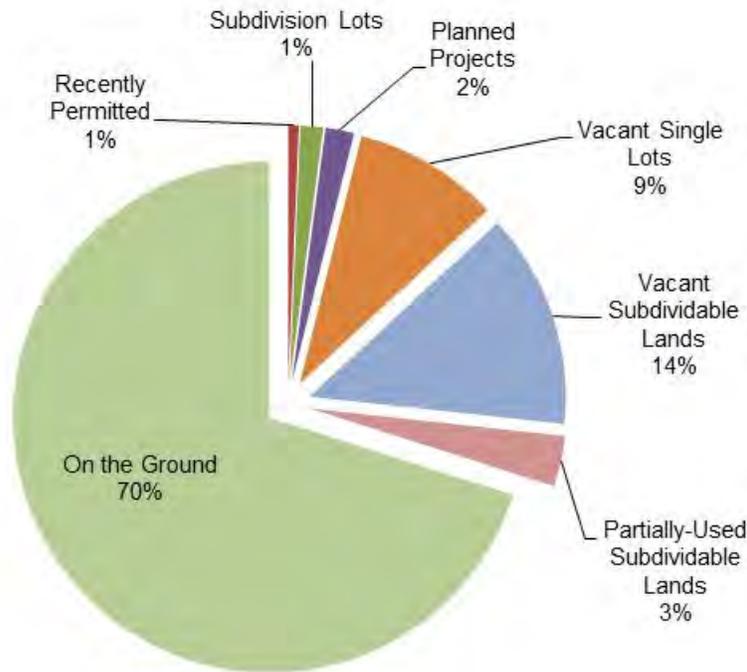


Figure 13: Rural Areas – Residential Build-Out Capacity (dwelling units)



Housing Demand

Estimating Regional Housing Demand

Estimates of future dwelling unit demand for Thurston County are developed from the county-wide population forecast.

TRPC uses a four step process to forecast dwelling unit demand based on how households form, and what type of housing units people typically prefer during different stages of their lives. The estimates are based on typical Thurston County household preferences, derived from thirty years of census information.

Driven mainly by demographic trends – the aging of the baby boom generation – multifamily homes will gain an increasing share of Thurston County’s housing market over the next 30 years. This will include demand for accessory dwelling units, duplexes, townhomes, apartments, and senior assisted-living facilities.

Today, 78 percent of our housing stock is in single-family homes (either stick built or manufactured homes) with the remaining 22 percent multifamily homes. By 2035-2040 – it is estimated that around 40 percent of the demand for new homes will be multifamily units, and our total housing stock will be around 73 percent multifamily units. This is comparable to Pierce County today – where census estimates show around 71 percent of their housing stock in single-family housing.

Process Used to Forecast Dwelling Units Demand

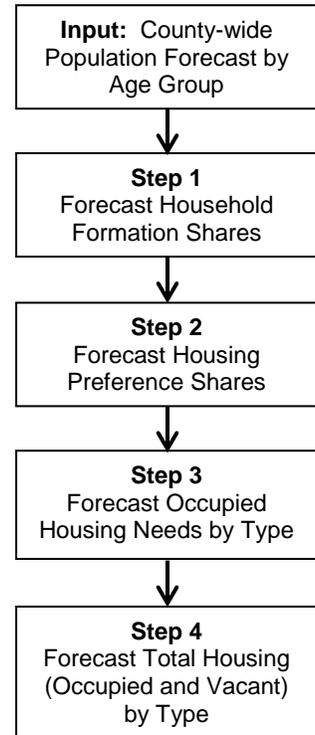
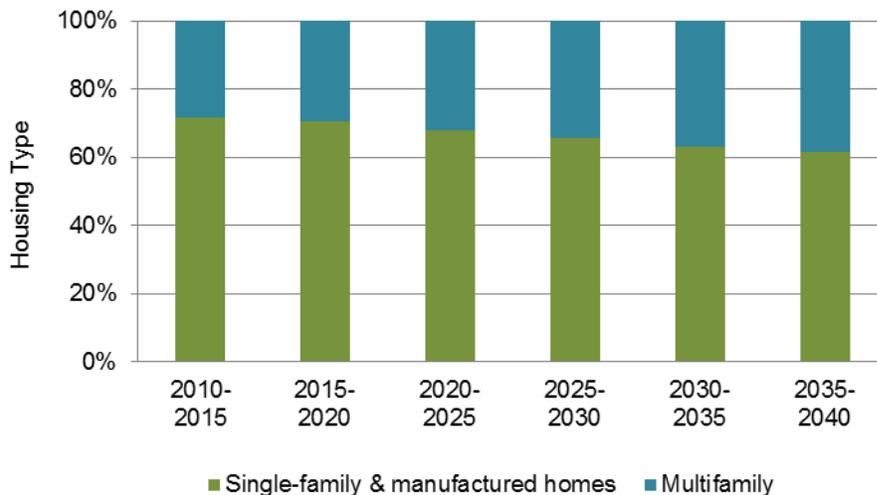


Figure 14: Forecast of Housing Market Demand for New Housing – 2010 to 2040.



Details on How Housing Demand is Estimated

Step 1 – Forecast Household Formation Shares

For each of nine age groups, forecast how households form at different life stages after accounting for population in group quarters. During different life stages, the percentage of population that lives in various types of households changes. For instance, children are most often householders (live in someone else's house) or in group quarters. The share of population living in single person households increases steadily as people age. Shares by age group are forecast for each of the following types of households:

1. Group quarters such as jails, dorms, or nursing homes
2. Single person households
3. Two or more person households
 - a. Head of household or a
 - b. Householder (such as spouse or child)

Step 2 – Forecast Housing Preference Shares

For each of nine age groups and household type, forecast preference for type of dwelling units (housing type). Different types of households show a preference for different types of housing. The demand for multifamily housing is highest for single people aged 15-34 and seniors. Two or more person households show a preference for single-family homes. Dwelling unit types are forecast in four categories.

1. Group quarters
2. Single-family homes
3. Multifamily home
4. Manufactured homes (homes that are built off site and moved to the property)

Step 3 – Forecast Occupied Housing Needs by Type

Combine the results of the county-wide population projections by age groups, forecast of household formation (Step 1), and forecast of housing types (Step 2) to develop forecasts of housing type by age groups. The sum of these forecasts results in a county-wide forecast of *occupied* housing types.

Step 4 – Forecast Total (Occupied and Vacant) Housing

Apply a vacancy rate (based on average vacancy rates by type) to determine total occupied and unoccupied housing needs.

Estimated Demand – Theoretical versus Likely to be Accommodated

The estimated housing demand¹ is a theoretical demand – and does not take into account any factors such as land plans and zoning. How demand is accommodated is based on the build-out factor.

Build-Out Factor

The build-out factor is a simple ratio of an area's development capacity (in dwellings) divided by the demand or number of dwellings allocated to that sub-area during a given five-year forecast period – by dwelling type. As a planning area begins to fill up (usually a large neighborhood area), its build-out factor rises. The aim is to keep the build-out factor fairly even between planning areas and housing types.

Based on initial land supply assumptions, the build-out factor for multifamily becomes much higher than single-family/manufactured homes by approximately 2025. Therefore two adjustments are made.

1. An increase in multifamily shares in zoning districts that support both multifamily and single-family development
2. A decrease in multifamily demand – as households preferring multifamily choices will opt for single-family if it is offered and fairly affordable – see Table 13 and Table 14.

Model Assumption: Five percent of single-family capacity remaining in 2025 was shifted to multifamily in zoning districts where both types of development are allowable.

Vacancy Rates

Housing and rental vacancy rates were higher than average during the 2010 Census due to the amount of foreclosures on the market. The model assumption is that vacancy rates will decrease over time as the foreclosures are absorbed (Table 15). Details on historic vacancy rates can be found in the Appendix.

¹Details on theoretical estimated housing demand can be found in the appendix.

Table 13: Theoretical Market Demand for Housing in Thurston County.

Interval (Years)	Single-family	Multifamily	Manuf. Homes	Total Growth	Single-family/ Man. Home Percent
2010-2015	4,570	1,770	-70	6,270	72%
2015-2020	8,610	3,580	-50	12,140	71%
2020-2025	8,170	3,830	-10	11,990	68%
2025-2030	8,180	4,150	-280	12,050	66%
2030-2035	6,880	3,540	-820	9,600	63%
2035-2040	7,300	3,940	-1,000	10,240	61%
Total Growth	43,710	20,820	-2,240	62,290	67%

Note: The model predicts a net decrease in manufactured homes as they are replaced by single-family homes. There has been little to no net increase in manufactured housing stock in Thurston County over the last decade.

Table 14: Demand Likely to be Accommodated with Existing Conditions/Trends.

Interval (Years)	Single-family	Multifamily	Manuf. Homes	Total Growth	Single-family/ Man. Home Percent
2010-2015	4,570	1,770	-70	6,270	72%
2015-2020	8,610	3,580	-50	12,140	71%
2020-2025	8,170	3,830	-10	11,990	68%
2025-2030	8,480	3,850	-280	12,050	68%
2030-2035	7,380	3,040	-820	9,600	68%
2035-2040	8,000	3,240	-1,000	10,240	68%
Total Growth	45,210	19,320	-2,240	62,290	69%

Note: The model predicts a net decrease in manufactured homes as they are replaced by single-family homes. There has been little to no net increase in manufactured housing stock in Thurston County over the last decade.

Table 15: Model Assumption for Housing Vacancy Rates.

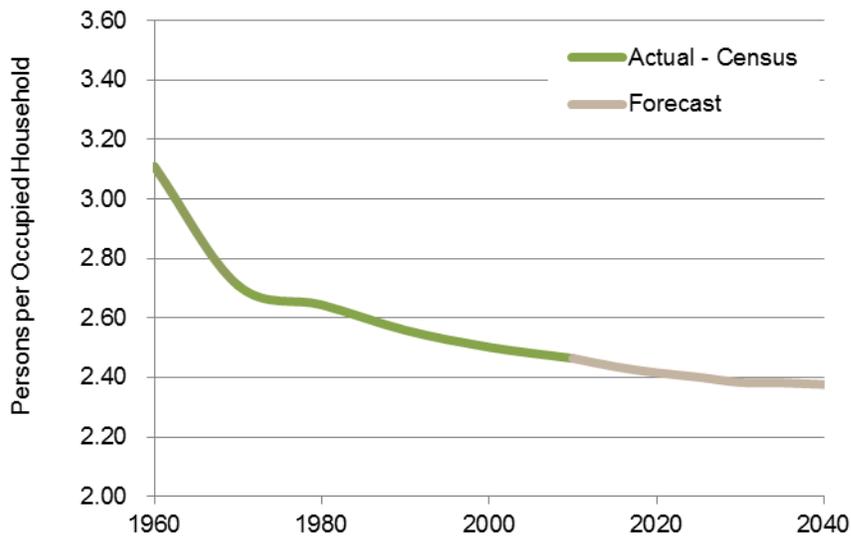
Interval (Years)	Vacancy Rate Assumption
2010	7.0%
2015	6.0%
2020	4.9%
2025	4.9%
2030	4.9%
2035	4.9%
2040	4.8%

Other Factors

Household Size

Based on housing and demographic projections, the model also assumes a decrease in household size. Initial household size forecasts are shown in the appendix.

Figure 15: Household Size Projections to Accommodate Projected Demand (people per occupied housing unit).



Accessory Dwellings and Family Member Units

Accessory Dwelling Units (ADUs) and Family Member Units (FMUs) are additional units added to a previously developed parcel. For the most part, these units are added to parcels that contain a single-family home, and therefore the rate at which they are built is dependent on the existing number of single-family homes at the beginning of the evaluation period. Table 16 shows historic estimate of new family member units and accessory dwellings, and the forecast assumption.

The forecast assumes a decrease in family member units, and slight increase in accessory dwellings over what was achieved in the last decade or so.

Table 16: Model Assumptions for Family Member Units and Accessory Dwellings.

	Family Member Units (Rural Areas only)		Accessory Dwellings (Infill Areas Only)
	Single- family	Manufactured Homes	
<i>Estimate - 2000-2011 (11 yrs.</i>	50	140	24
Forecast Assumption for Baseline Projections -5 year intervals			
2010-2015	50	70	15
2015-2020	5	40	20
2020-2025	5	25	50
2025-2030	5	15	75
2030-2035	0	10	100
2035-2040	0	10	150
Total Forecast Period	65	170	410

Group Quarters

Group Quarters were identified by Census 2010. Group quarters are assumed to increase based on the rates shown in Table 17.

Table 17: Model Assumptions for Group Quarters

Type of Group Quarter	Census	Forecast					
	2010	2015	2020	2025	2030	2035	2040
Institutional Group Quarters							
Correction Facilities	1,189	1,190	1,370	1,420	1,470	1,520	1,570
Nursing Homes	938	1,030	1,220	1,510	1,850	2,010	2,260
Non Institutional Group Quarters							
Dormitories	1,169	1,220	1,270	1,320	1,370	1,420	1,470
Other	926	900	1,090	1,370	1,710	1,860	2,120
Total	4,222	4,340	4,950	5,620	6,400	6,810	7,420
Population	252,287	266,000	296,000	322,000	348,000	370,000	393,000
Percent of Total Population	1.7%	1.6%	1.7%	1.7%	1.8%	1.8%	1.9%

Changes in Dwelling Unit Type (swap of one type of dwelling for another)

The model assumes that some of the manufactured housing stock in the rural county will be replaced by single-family housing, as this has been the trend over the last decade. An estimate of the number of units that are replaced was developed from the housing demand table.

2012 Forecast

Comparison with Previous Forecast

The 2007 Forecast extended to 2030. The 2012 Forecast extends to 2035 for local allocations. This represents a 20 year planning horizon from 2015/16 – when Local Comprehensive Plans are required to be updated under the Growth Management Act.

Some of the other differences between the two forecasts include:

- The 2030 Forecast for almost all jurisdictions is slightly lower than the previous forecast. This is due to the lower county-wide forecast. The exception is the Nisqually Indian Reservation – where a slight increase in population is forecast based on plans of the Tribe to provide housing on the Reservation.
- An increasing share of population (1.3 percent) into the urban areas. The difference is mainly due to the difference in actual trends in the last 10 years – that are projected into the future.
- Olympia, Lacey, and Tumwater are expected to receive a higher share of county-wide growth than previously forecast. In large part this is due to an increase in the demand for multifamily housing that is expected to occur.
- Yelm, Bucoda, and Rainier’s growth shares are expected to remain the same as the previous forecast.
- Tenino’s share of the forecast population is slightly less than the previous forecast. This is due to the complexity of developing land annexed during the West Side Annexation – which will require master planning.
- Grand Mound’s share of county-wide population has been decreased from the previous forecast. Grand Mound was expected to experience a boom in construction after the Great Wolf Lodge was built. This has not occurred; nor had a change in land use.
- Population shares on the Chehalis and Nisqually Reservations are similar to the previous forecast.
- Population shares have been shifted slightly in the rural areas based on information from the 2010 Census, and development projects in the pipeline.

Table 18: Comparison of 2007 (old) and 2012 (new) Forecast

Comparison of Forecasts		2010		2015		2020		2025		2030		2035	
Jurisdiction	Forecast	Num	%										
Lacey & UGA	Old	73,970	29.0%	82,920	29.1%	92,210	28.9%	99,930	28.7%	106,670	28.6%		
	New	75,540	29.9%	79,660	29.9%	88,610	29.9%	95,000	29.5%	101,510	29.1%	107,720	29.1%
Olympia & UGA	Old	60,720	23.8%	66,970	23.5%	72,970	22.9%	77,860	22.4%	82,090	22.0%		
	New	58,310	23.1%	61,820	23.2%	67,850	22.9%	74,030	23.0%	79,950	22.9%	84,400	22.8%
Tumwater & UGA	Old	24,290	9.5%	27,120	9.5%	32,470	10.2%	37,440	10.8%	41,960	11.2%		
	New	23,350	9.3%	25,840	9.7%	30,840	10.4%	35,620	11.1%	40,160	11.5%	42,880	11.6%
Bucoda & UGA	Old	680	0.3%	710	0.2%	800	0.2%	900	0.3%	1,050	0.3%		
	New	560	0.2%	570	0.2%	580	0.2%	670	0.2%	890	0.3%	1,060	0.3%
Rainier & UGA	Old	1,950	0.8%	2,170	0.8%	2,480	0.8%	2,680	0.8%	2,900	0.8%		
	New	1,900	0.8%	2,030	0.8%	2,150	0.7%	2,310	0.7%	2,840	0.8%	3,150	0.8%
Tenino & UGA	Old	1,960	0.8%	2,480	0.9%	2,890	0.9%	3,310	1.0%	3,590	1.0%		
	New	1,710	0.7%	1,730	0.6%	1,760	0.6%	2,030	0.6%	2,750	0.8%	3,190	0.9%
Yelm & UGA	Old	8,380	3.3%	12,210	4.3%	16,560	5.2%	20,010	5.7%	24,060	6.4%		
	New	8,200	3.3%	9,690	3.6%	14,050	4.7%	18,600	5.8%	22,460	6.4%	26,280	7.1%
Grand Mound UGA	Old	1,160	0.5%	1,530	0.5%	1,900	0.6%	2,340	0.7%	2,690	0.7%		
	New	1,340	0.5%	1,270	0.5%	1,470	0.5%	1,630	0.5%	1,770	0.5%	1,880	0.5%
Rochester Sub-Area	Old	8,180	3.2%	8,330	2.9%	8,470	2.7%	8,710	2.5%	9,070	2.4%		
	New	8,780	3.5%	9,010	3.4%	9,230	3.1%	9,530	3.0%	9,850	2.8%	10,270	2.8%
Chehalis Reservation	Old	60	0.0%	80	0.0%	110	0.0%	140	0.0%	180	0.0%		
	New	70	0.0%	80	0.0%	90	0.0%	110	0.0%	130	0.0%	160	0.0%
Nisqually Reservation	Old	640	0.3%	710	0.2%	790	0.2%	870	0.2%	940	0.3%		
	New	600	0.2%	750	0.3%	980	0.3%	1,040	0.3%	1,070	0.3%	1,120	0.3%

Table 18: Comparison of 2007 (old) and 2012 (new) Forecast (continued).

Comparison of Forecasts		2010		2015		2020		2025		2030		2035	
Jurisdiction	Forecast	Num	%										
County Northeast	Old	10,500	4.1%	11,130	3.9%	11,630	3.6%	12,060	3.5%	12,210	3.3%		
	New	10,610	4.2%	10,860	4.1%	11,750	4.0%	11,980	3.7%	12,190	3.5%	12,450	3.4%
County Cooper Point	Old	5,130	2.0%	5,340	1.9%	5,610	1.8%	5,900	1.7%	6,160	1.7%		
	New	5,010	2.0%	5,140	1.9%	5,250	1.8%	5,350	1.7%	5,440	1.6%	5,550	1.5%
County Steamboat Island	Old	5,400	2.1%	5,760	2.0%	6,090	1.9%	6,340	1.8%	6,470	1.7%		
	New	4,960	2.0%	5,100	1.9%	5,220	1.8%	5,310	1.6%	5,400	1.5%	5,510	1.5%
County Northwest	Old	7,980	3.1%	8,610	3.0%	9,290	2.9%	9,770	2.8%	10,010	2.7%		
	New	7,570	3.0%	7,730	2.9%	8,100	2.7%	8,400	2.6%	8,780	2.5%	9,150	2.5%
County Southwest	Old	4,010	1.6%	4,710	1.7%	5,630	1.8%	6,410	1.8%	7,130	1.9%		
	New	3,700	1.5%	3,750	1.4%	3,830	1.3%	4,110	1.3%	4,410	1.3%	4,750	1.3%
County South Central	Old	11,820	4.6%	13,300	4.7%	15,430	4.8%	17,330	5.0%	18,910	5.1%		
	New	11,800	4.7%	12,170	4.6%	12,820	4.3%	13,740	4.3%	14,710	4.2%	15,650	4.2%
County Southeast	Old	22,270	8.7%	24,690	8.7%	26,980	8.5%	29,040	8.3%	29,800	8.0%		
	New	22,990	9.1%	23,930	9.0%	25,770	8.7%	27,070	8.4%	28,460	8.2%	29,340	7.9%
County East	Old	5,910	2.3%	6,240	2.2%	6,700	2.1%	6,990	2.0%	7,140	1.9%		
	New	5,270	2.1%	5,340	2.0%	5,540	1.9%	5,660	1.8%	5,790	1.7%	6,080	1.6%
<hr/>													
Total Urban Areas	Old	173,100	68.0%	196,100	68.8%	222,300	69.7%	244,500	70.4%	265,000	71.0%		
	New	170,900	67.8%	182,600	68.5%	207,300	69.9%	229,900	71.4%	252,300	72.3%	270,600	73.1%
Total Reservations	Old	700	0.3%	790	0.2%	900	0.2%	1,010	0.2%	1,120	0.3%		
	New	670	0.2%	830	0.3%	1,070	0.3%	1,150	0.3%	1,200	0.3%	1,280	0.3%
Rural Areas	Old	81,200	31.7%	88,100	31.0%	95,800	30.1%	102,600	29.4%	106,900	28.7%		
	New	80,700	32.1%	83,000	31.2%	87,500	29.6%	91,200	28.4%	95,000	27.3%	98,800	26.7%
<hr/>													
Total	Old	255,000	100%	285,000	100%	319,000	100%	348,100	100%	373,000	100%		
	New	252,300	100%	266,500	100%	295,900	100%	322,200	100%	348,600	100%	370,600	100%

Note: Numbers may not add due to rounding.

Forecast Tables

Table 19: Population Forecast Allocations, Thurston County Cities and UGAs, 2010-2035.

Jurisdiction		Forecast					
		2010	2015	2020	2025	2030	2035
Bucoda	Total	560	570	575	675	890	1,065
Lacey	City	42,400	45,370	49,360	50,850	52,160	53,090
	UGA	33,140	34,280	39,250	44,150	49,350	54,630
	Total	75,540	79,660	88,610	94,990	101,510	107,720
Olympia	City	46,510	49,550	54,610	60,130	64,980	67,730
	UGA	11,800	12,270	13,240	13,900	14,960	16,670
	Total	58,310	61,820	67,850	74,030	79,940	84,400
Rainier	City	1,795	1,920	2,035	2,175	2,480	2,660
	UGA	110	110	110	135	360	485
	Total	1,905	2,030	2,145	2,310	2,840	3,150
Tenino	City	1,695	1,710	1,745	2,010	2,670	3,095
	UGA	15	15	15	25	80	90
	Total	1,710	1,725	1,760	2,030	2,750	3,190
Tumwater	City	17,330	19,290	22,930	25,800	28,440	30,090
	UGA	6,020	6,540	7,920	9,830	11,720	12,790
	Total	23,350	25,830	30,840	35,620	40,160	42,880
Yelm	City	6,775	8,260	12,570	16,985	19,910	21,975
	UGA	1,425	1,425	1,480	1,610	2,545	4,305
	Total	8,200	9,685	14,050	18,595	22,455	26,285
Grand Mound UGA	Total	1,550	1,480	1,670	1,630	1,775	1,885
Chehalis Reservation ²	Total	70	75	90	105	125	160
Nisqually Reservation ²	Total	595	750	985	1,035	1,070	1,120
Total Cities		117,070	126,680	143,820	158,620	171,530	179,710
Total UGAs¹		54,050	56,120	63,680	71,270	80,790	90,860
Total Reservations²		665	825	1,070	1,145	1,200	1,280
Rural Unincorporated County³		80,470	82,820	87,290	91,130	95,030	98,740
Thurston County Total		252,300	266,500	295,900	322,200	348,600	370,600

Sources: Thurston Regional Planning Council Population and Employment Forecast 2012.

Explanations: Numbers may not add due to rounding.

¹UGA - Urban Growth Area. Unincorporated area designated to be annexed into city limits over 20 years time to accommodate urban growth.

²Data is for Thurston County portion of reservation only.

³Rural unincorporated county is the portion of the unincorporated county that lies outside UGA and Reservation boundaries.

Table 20: Thurston County Population Forecast by Planning Area.

Area	Planning Area		2010	2015	2020	2025	2030	2035
Lacey & UGA	Central Lacey	City	11,450	11,640	11,850	12,180	12,510	12,770
	Hawks Prairie	City	5,690	7,240	9,640	10,150	10,560	10,850
	Hawks Prairie	UGA	1,700	1,700	1,710	1,970	2,160	2,320
	Horizons	City	12,550	13,590	14,340	14,400	14,450	14,510
	Horizons	UGA	970	970	970	960	960	960
	Lakes	City	9,690	9,860	10,080	10,390	10,680	10,850
	Lakes	UGA	7,100	7,440	7,970	8,480	8,890	9,150
	Meadows	City	740	740	760	830	880	920
	Meadows	UGA	10,650	10,990	12,500	13,310	13,860	14,220
	Pleasant Glade	City	1,080	1,100	1,460	1,680	1,880	1,970
	Pleasant Glade	UGA	1,330	1,520	2,970	3,400	4,170	5,330
	Seasons	UGA	3,570	3,810	4,930	6,800	9,190	11,990
	Tanglewilde-Thompson	City	1,210	1,210	1,220	1,220	1,220	1,220
	Tanglewilde-Thompson	UGA	7,840	7,860	8,210	9,230	10,130	10,680
Olympia & UGA	Downtown	City	2,060	2,120	2,390	2,640	2,910	3,100
	High Density Corridor - Eastside	City	1,950	1,960	2,110	2,310	2,520	2,650
	High Density Corridor - Westside	City	550	590	730	740	740	750
	Northside	City	11,130	11,160	11,540	12,490	13,260	13,680
	Northside	UGA	1,960	1,970	2,080	2,120	2,450	3,180
	Southside	City	13,240	14,370	16,300	19,040	21,390	22,700
	Southside	UGA	6,950	7,330	8,090	8,590	9,120	9,640
	Westside	City	17,260	18,650	20,410	21,580	22,690	23,290
	Northwest	UGA	2,720	2,810	2,900	2,930	3,080	3,490
	Southwest	City	320	700	1,140	1,320	1,480	1,570
Southwest	UGA	170	170	170	260	320	360	
Tumwater & UGA	Airport	City	90	650	1,730	1,970	2,170	2,290
	Brewery	City	140	170	200	250	310	380
	Deschutes	City	2,100	2,150	2,160	2,230	2,290	2,340
	Deschutes	UGA	20	20	20	20	20	20
	Littlerock	City	3,230	3,390	4,480	5,950	7,250	8,060
	Littlerock	UGA	210	210	220	290	350	380
	Mottman-Black Lake	City	150	150	150	270	380	440
	Southeast Capitol Blvd.	City	3,120	3,270	3,650	3,810	3,960	4,070
	Southeast Capitol Blvd.	UGA	10	10	10	10	10	10
	Trosper	City	1,860	2,100	2,910	3,350	3,800	4,050
	Trosper	UGA	80	80	80	80	80	80
	Tumwater Hill	City	5,930	6,690	6,930	7,200	7,490	7,680
	Tumwater Hill	UGA	160	160	160	190	220	230
	New Market	City	740	740	730	760	790	800
	Eastside	UGA	2,790	3,280	3,880	4,220	4,550	4,770
	Southside	UGA	1,510	1,550	2,300	3,170	4,010	4,480
Westside	UGA	1,240	1,240	1,260	1,860	2,480	2,830	

Table 20: Thurston County Population Forecast by Planning Area (continued).

Area	Planning Area	2010	2015	2020	2025	2030	2035
Bucoda	Bucoda	560	570	580	670	890	1,060
Rainier & UGA	Rainier	1,790	1,920	2,040	2,170	2,480	2,660
	Rainier UGA	110	110	110	140	360	490
Tenino & UGA	Tenino	1,700	1,710	1,750	2,010	2,670	3,100
	Tenino UGA	20	20	20	20	80	90
Yelm & UGA	City Center	6,040	7,170	8,920	10,260	11,260	11,870
	Master Planned Community	730	1,090	3,650	6,730	8,650	10,110
	Yelm UGA	1,420	1,420	1,480	1,610	2,550	4,310
Grand Mound UGA		1,340	1,270	1,470	1,630	1,770	1,880
Rochester Sub-Area		8,780	9,010	9,230	9,530	9,850	10,270
Confederated Tribes of the Chehalis Reservation		70	80	90	110	130	160
Nisqually Indian Tribe		600	750	980	1,040	1,070	1,120
County Northeast	Budd/Deschutes Northeast	3,160	3,200	3,240	3,260	3,290	3,370
	Henderson Inlet North	7,440	7,660	8,510	8,730	8,900	9,080
County Cooper Point	Eld Inlet Cooper Point	3,640	3,770	3,870	3,980	4,080	4,160
	Budd/Deschutes Cooper Point	1,370	1,380	1,380	1,370	1,370	1,390
County Steamboat Island	Eld Inlet Steamboat Island	2,980	3,050	3,120	3,170	3,220	3,280
	Totten Inlet Steamboat Island	1,980	2,040	2,100	2,150	2,180	2,230
County Northwest	Black River North	2,390	2,460	2,680	2,850	3,010	3,130
	Budd/Deschutes Southwest	2,330	2,340	2,370	2,390	2,430	2,480
	Eld Inlet South	1,720	1,780	1,890	1,970	2,120	2,220
	Totten Inlet West	1,110	1,130	1,140	1,170	1,210	1,290
	Capitol Forest West	20	20	20	20	20	20
County Southwest	Black River West	1,460	1,490	1,540	1,590	1,650	1,750
	Black River South	1,430	1,430	1,460	1,500	1,540	1,640
	Chehalis West	820	830	840	1,020	1,220	1,360
County South Central	Black River East	7,190	7,370	7,750	8,160	8,600	9,000
	Chehalis North Rochester	380	390	400	400	400	430
	Chehalis East	2,650	2,810	3,030	3,360	3,690	3,970
	Skookumchuck River	1,580	1,600	1,640	1,820	2,010	2,250
County Southeast	Deschutes Middle	1,840	1,880	1,920	2,090	2,290	2,430
	Deschutes North Fort Lewis	6,340	6,780	7,230	7,550	7,910	8,110
	Deschutes South	3,340	3,400	3,620	3,780	3,940	4,050
	Nisqually South	3,570	3,770	4,440	4,740	5,050	5,130
	Nisqually Rural Yelm	7,900	8,120	8,560	8,910	9,280	9,620
County East	Henderson Inlet South	490	500	520	530	550	600
	Nisqually North Fort Lewis	2,710	2,750	2,810	2,830	2,870	2,990
	Nisqually Sub-Area	2,060	2,090	2,220	2,290	2,380	2,500

Appendix

Housing Projections, Vacancy Rates and Household Size

Table 21: Theoretical Thurston County Housing Demand Forecast (will be adjusted based on build-out factor in model.)

Thurston County Population Projections by Housing Type and Group Quarters

Type of Housing	2010	2015	2020	2025	2030	2035	2040
Single-family detached	178,810	189,960	212,240	231,990	251,460	268,980	287,210
Multifamily	41,190	44,170	50,020	55,570	61,300	66,360	71,800
Manufactured Home	28,060	27,980	28,660	28,980	28,800	27,820	26,580
Group Quarters	4,220	4,340	4,950	5,620	6,410	6,810	7,420
Total	252,290	266,450	295,860	322,170	347,970	369,970	393,020

Thurston County Occupied Housing Projections by Type

Type of Housing	2010	2015	2020	2025	2030	2035	2040
Single-family detached	66,720	71,320	80,430	88,210	96,010	102,560	109,510
Multifamily	21,650	23,910	27,660	31,310	35,260	38,640	42,390
Manufactured Home	12,280	12,330	12,300	12,290	12,030	11,250	10,310
Total	100,650	107,560	120,400	131,810	143,300	152,450	162,210

Thurston County Vacant and Occupied Housing Projections by Type

Type of Housing	2010	2015	2020	2025	2030	2035	2040
Single-family detached	71,320	75,890	84,490	92,670	100,850	107,740	115,040
Multifamily	23,690	25,470	29,040	32,870	37,030	40,570	44,510
Manufactured Home	13,170	13,100	13,040	13,030	12,750	11,930	10,930
Total	108,180	114,450	126,580	138,570	150,630	160,230	170,480
<i>Vacant Units</i>	<i>7,530</i>	<i>6,890</i>	<i>6,180</i>	<i>6,760</i>	<i>7,330</i>	<i>7,780</i>	<i>8,270</i>
<i>Vacancy Rate Assumption</i>	<i>7.0%</i>	<i>6.0%</i>	<i>4.9%</i>	<i>4.9%</i>	<i>4.9%</i>	<i>4.9%</i>	<i>4.8%</i>

Estimated Household Size for Housing Demand

Type of Housing	2010	2015	2020	2025	2030	2035	2040
Single-family detached	2.68	2.66	2.64	2.63	2.62	2.62	2.62
Multifamily	1.90	1.85	1.81	1.78	1.74	1.72	1.69
Manufactured Home	2.29	2.27	2.33	2.36	2.39	2.47	2.58
Total	2.46	2.44	2.42	2.40	2.38	2.38	2.38

Source: Thurston Regional Planning Council

Table 22: Historic Vacancy and Household Size Rates for Thurston County.

Unit Type	Household Population	Total Dwelling Units	Vacant Dwelling Units	Household Size (pop. per dwelling unit)	Vacancy Rate	Combined HH Size & Vacancy Rate
Single-family (detached) units						
Census 1990	107,722	40,478	2,206	2.81	5.4%	2.66
Census 2000	142,148	55,035	2,497	2.71	4.5%	2.58
ACS 2005-2009 Average	172,740	67,586	3,486	2.69	5.2%	2.56
Multifamily						
Census 1990	28,099	15,665	1,316	1.96	8.4%	1.79
Census 2000	36,355	20,262	1,663	1.95	8.2%	1.79
ACS 2005-2009 Average	41,715	22,499	1,987	2.03	8.8%	1.85
Manufactured Homes						
Census 1990	22,849	10,321	792	2.40	7.7%	2.21
Census 2000	25,443	11,355	867	2.43	7.6%	2.24
ACS 2005-2009 Average	21,798	9,989	560	2.31	5.6%	2.18
Total Dwelling Units						
Census 1990	158,670	66,464	4,314	2.55	6.5%	2.39
Census 2000	203,946	86,652	5,027	2.50	5.8%	2.35
ACS 2005-2009 Average	236,253	100,074	6,033	2.51	6.0%	2.36
Census 2010	248,035	108,182	7,532	2.46	7.0%	2.29

Source: US Census Bureau

For More Information

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