

# Employment Forecast Allocations

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*For Thurston County*



**Final Report  
Thurston Regional  
Planning Council  
November 2019**



**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, economic opportunity**, and other topics determined by the Council.
- C. **Assemble and analyze data** that support local and regional decision making
- D. Act as a **“convener”** to build regional **consensus** on issues through information and citizen involvement.
- E. Build **intergovernmental consensus** on regional plans, policies, and issues, and advocate local implementation.

**2019 MEMBERSHIP  
THURSTON REGIONAL PLANNING COUNCIL**

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City of Olympia	<b>Nathaniel Jones</b> , Councilmember
City of Rainier	<b>George Johnson</b> , Councilmember
City of Tenino	<b>David Watterson</b> , Councilmember
City of Tumwater	<b>Tom Oliva</b> , Councilmember
City of Yelm	<b>JW Foster</b> , Mayor
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Nisqually Indian Tribe	<b>Heidi Thomas</b> , Tribal Councilmember
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Thurston County	<b>Tye Menser</b> , County Commissioner
North Thurston Public Schools	<b>Chuck Namit</b> , School Board Member
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Tumwater School District	<b>Mel Murray</b> , Staff
Intercity Transit	<b>Karen Messmer</b> , Authority Member
LOTT Clean Water Alliance	<b>Cynthia Pratt</b> , Board Member
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Lacey Fire District #3	<b>Gene Dobry</b> , Commissioner
Puget Sound Regional Council	<b>Josh Brown</b> , Executive Director
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The Evergreen State College	<b>Jeanne Rynne</b> , Director of Facilities Services

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LOTT Clean Water Alliance

**Marc Daily**, Executive Director

## **Population and Employment Forecast**

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**2019**

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Andy Ryder	City of Lacey, Transportation Policy Board
Angela White	Olympia Master Builders
Bob Jacobs	Citizen Representative
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## **Acknowledgments**

The Thurston Regional Planning Council wishes to thank the many public agencies that have provided source data and information in this edition of the Population and Employment Forecast. In particular, we wish to thank the Washington Department of Employment Security, Labor Market and Economic Analysis Branch, the Washington Department of Enterprise Services, and the Washington Office of Financial Management.

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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 2017 land employment allocations to the city and planning area level/neighborhood level.

Overall, it's anticipated that:

- Olympia will continue to be the central city of the region, capturing regional growth shares for retail trade (Westside) and health services (Lilly Road and West Side) in particular. Olympia's downtown economy will continue to be tied to growth on the Capitol Campus. By the waterfront, Olympia will support a mix of smaller-scale retail shops and services supported by a growing downtown population.
- Lacey will continue to transition from a suburban community to a community with a strong job base. Employment growth will be influenced by Joint Base Lewis-McChord. Hawks Prairie will continue to attract manufacturing, wholesale trade, transportation and warehousing until it is built out. It is anticipated that the Gateway Center will emerge as an outlet shopping center or similarly-scaled retail center.
- Tumwater will continue to grow a retail and services base to support its population. The Littlerock Road area in particular will see strong growth. The industrial areas of Tumwater around the port and 93rd Ave interchange will continue to attract growth.
- Yelm will continue to grow a retail and services base to support its growing population. As the planned community of Thurston Highlands begins to develop, a neighborhood center will emerge to support the residential growth. This may lag the residential development, as businesses will need to be ensured that the rooftops are there to support their businesses before locating in the area.
- Tenino will continue to grow as residential growth continues. A proposed agricultural processing facility will make it a hub for the local agricultural industry.
- Rainier's economic growth will be dependent on available infrastructure such as sewer service and a focused center of activity.
- Bucoda's economic growth will be constrained by infrastructure needs and suitable land.
- Grand Mound's economic growth will be driven by investments by the Confederated Tribes of the Chehalis.

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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 will require major investments in the water, sewer, and transportation facilities needed to support our expanding population and the businesses and public facilities that serve it. As these investments are expensive and must be planned many years in advance, forecasts of future employment and population growth and its distribution are used to estimate where and when new facilities will be needed. For this reason, 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 (GMA), 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 growth management population projection made for the county by the office of financial management, the county and each city within the county shall include areas and densities sufficient to permit the urban growth that is projected to occur in the county or city for the succeeding twenty-year period...” RCW 36.70A.110(2)*

In 1992 Thurston County, in consultation with the cities and towns within its borders, adopted the Countywide 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.”*

This provision was reaffirmed in the 2015 update to the Countywide Planning Policies.

The Population and Employment Forecast is conducted in two phases – first at the county level, and then a further distribution to cities, towns, planning areas, neighborhoods, and traffic analysis zones. The forecast allocations – or “small-area population projections” – provide information to assist local governments in their planning efforts. Where employment locates within Thurston County is related to many factors. TRPC uses a detailed approach to allocate employment by individual industry. Employment is allocated based on existing patterns, trends, land supply, and available infrastructure.

The most recent countywide employment forecast was adopted by TRPC in March of 2018. This report documents the methodology used to allocate the employment forecast.

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# Base Year Estimates

## Overview

Before generating an employment forecast, TRPC must generate employment base year estimates. The updated forecast uses a base year of 2017. These estimates are available at the jurisdiction, planning area, and traffic analysis zone level, to assist with planning and GMA related activities. There is no one single source of employment for local jurisdictions. The multistep process to generate current employment estimates is as follows:

1. Obtain covered employment records from the Washington State Employment Security Department.
2. Locate work sites to a physical location.
3. Allocate out any firm or agency headquarters employment to suitable sites.
4. Estimate and allocate non-covered workers.

**Base Year Estimates**

Information on current employment doesn't come from one source. Using data from the Employment Security Department, a large part of the county's employment can be identified. For the remainder, reasonable assumptions must be used to estimate where jobs are located.

Base year employment estimates for jurisdictions can be found Appendix 1. More details on data sources and allocation methodology for the base year employment estimates can be found in Appendix 4.

## Employment Categories

Employment allocation we done using 22 different industries. Industries were consistent with the North American Industrial Classification System (NAICS) plus six industries breaking out government, public administration, and tribal enterprises. Knowing the employment industry is important when allocating since some industries are found only in specific areas, such as areas with industrial zoning, in urban centers, or with good transportation access. A general description of each industry used in the forecast is given below, NAICS codes show in parentheses.

- **Agriculture, Forestry and Fishing, Mining (11, 21):** Agriculture includes all types of farming, including mushrooms, poultry, alpacas, turf farms, fish farms, blueberries and other berries, and tree farms. Nurseries open to the public are included in retail trade, and not agriculture. Forestry and fishing includes logging, log-hauling companies, and reforestation. Mining is for the most part gravel or basalt mines.
- **Utilities (22):** This category includes both businesses involved in both energy and water utilities.
- **Construction (23):** This category includes firms associated with the residential and commercial construction industry, including contractors, electricians, air and HVAC, painting, drywall, windows, excavating, and fencing.
- **Manufacturing (31-33):** The manufacturing category includes firms that manufacture or process goods.
- **Wholesale Trade (42):** Wholesale trade includes firms that sell goods at wholesale rates, often to other businesses.

- **Retail Trade (44-45):** Retail Trade includes those firms that sell goods directly to consumers. It includes department stores, grocery stores, home improvement centers, and office supply stores, as well as other retailers.
- **Transportation and Warehousing (48-49):** This sector consists of firms that transport and distribute goods. It includes distribution centers, couriers and package delivery, moving companies, and those employed in trucking.
- **Information (51):** This sector includes firms that distribute information, such as newspapers, radio stations, movie theaters, telephone, cable and wireless technology companies.
- **Finance and Insurance (52):** This sector includes banks, credit unions, and insurance agencies.
- **Real Estate, Rental and Leasing (53):** This sector is varied, and it includes firms involved in renting or leasing apartments or other real estate, movie/video rental firms, equipment rental firms, mini-storage, and real estate firms.
- **Professional Services (54-56):** This category is a large and varied set of firms that provide services to other firms or individuals. It includes corporate offices, consultants, veterinarians, landscaping services, legal services, house cleaning and janitorial services, and engineering and architectural firms.
- **Education Services (61):** This category includes private (not public) education such as private four-year colleges (St. Martin's University), private K-12 schools, daycares, and pre-schools. It also includes gymnastics clubs and dance schools.
- **Health Care and Social Assistance (62):** This category includes hospitals, medical offices and clinics, retirement homes with medical staff, and dentists.
- **Arts, Entertainment and Recreation (71):** This category includes theaters and the Washington Center for the Performing Arts, bowling alleys, non-tribal casinos, fitness centers, private golf clubs, mini-golf, sailing clubs and private marinas, other clubs, museums, and zoos.
- **Accommodation and Food Services (72):** This category includes hotels and restaurants.
- **Other Services (81):** This is a broad category that includes associations such as the YMCA, clubs, automobile services, beauty services, and religious services (churches). This also includes in-home service providers such as nannies and home health care workers.
- **Government:** TRPC breaks out government into six categories, including: federal government, state government, state education (The Evergreen State College and South Puget Sound Community College), local government, and public school employment.

NAICS industry classification is self-reported by firms and similar businesses may classify themselves differently. Furthermore, while a single firm may engage in multiple businesses ventures, they only report one industry classification. NAICS industries are nevertheless useful for forecasting and allocating employment.

# Employment Forecast Allocations

## Overview

The countywide employment forecast is allocated to jurisdictions and planning areas to assist with local planning efforts. The forecast allocations are developed by employment sector using different approaches for each of the 22 employment industries. In general:

1. Assume current employment (2017) will remain in the future unless there is specific information on business relocation or closures.
2. Where specific information is available, use it. For instance, many local agencies have capital facilities plans. Rely on local knowledge from the Port of Olympia, area tribes, municipal planners, colleges and universities, Thurston County Economic Development Council, the state Dept. of Enterprise, school districts, fire districts, chambers of commerce, etc. to inform the forecast.
3. Use reasonable assumptions for future home-based employment. The forecast is for both full- and part-time jobs and therefore has a fairly high percentage of home-based employment.
4. New construction or redevelopment will occur in areas where zoning, transportation and market conditions make it feasible. Developable commercial and industrial lands were identified in the land capacity analysis process (*Population and Employment Land Supply Assumptions*).
5. Over the long term, it is assumed that infrastructure (local roads, sewer, stormwater, etc.) will be extended into some areas that are currently without infrastructure in the urban areas.
6. Analyze existing employment patterns to gain an understanding of changing land use and employment patterns.

### ***Employment Forecast Allocations***

Employment forecast allocations are completed by using a set of assumptions that vary by industry. For instance, where schools are likely to locate is very different than major retail centers.

Like the population forecast, the employment represents “average” conditions across periods of economic recession and growth. Major events, such as the Great Recession or natural disasters, could change the trajectory. For this reason, TRPC updates the forecast and reviews assumptions every three to five years.

Table 1 shows the current and forecasted employment for Thurston County for each of the 22 employment industries. The countywide employment forecast for 2045 was adopted by TRPC in March of 2018. The forecast allocations to cities, towns, tribes, and planning areas vary depending on employment sector. In general, the allocations are spread to various types of areas within the county based on existing employment patterns, population growth, transportation access, anticipated market conditions, and the developable and redevelopable land supply. Not all employment is allocated to areas zoned for mixed use, commercial, or industrial growth. Over 11 percent of Thurston County’s employment is estimated to be home-based in 2017 (Table 3). This includes people with home businesses or working from home the majority of their time. Other employment, including schools, churches, daycares, and assisted-living facilities can be located in residential areas as well as commercial or mixed use areas.

**Table 1: Thurston County Employment Forecast by Industry.**

<b>NAICS</b>	<b>Industry</b>	<b>2017</b>	<b>2045</b>	<b>Change</b>	<b>Avg. Annual Change</b>
	Agriculture, Forestry and Fishing,				
11-21	Mining	3,770	3,700	-70	-0.1%
22	Utilities	240	200	-40	-0.6%
23	Construction	7,420	8,600	1,180	0.5%
31-33	Manufacturing	4,340	5,100	760	0.6%
42	Wholesale Trade	3,190	5,300	2,110	1.8%
44-45	Retail Trade	15,940	22,100	6,160	1.2%
48-49	Transportation and Warehousing	3,300	3,800	500	0.5%
51	Information	1,550	1,600	50	0.1%
52	Finance and Insurance	4,580	7,500	2,920	1.8%
53	Real Estate, Rental and Leasing	5,800	7,800	2,000	1.1%
54-56	Professional Services	16,620	25,400	8,780	1.5%
61	Education Services	3,770	5,600	1,830	1.4%
62	Health Care and Social Assistance	17,260	25,500	8,240	1.4%
71	Arts, Entertainment and Recreation	1,710	4,700	2,990	3.7%
72	Accommodation and Food Services	9,830	12,900	3,070	1.0%
81	Other Services	8,560	21,100	12,540	3.3%
	Federal Government	1,680	1,900	220	0.4%
	State Government	23,820	30,400	6,580	0.9%
	State Education	1,420	1,800	380	0.9%
	Local and Tribal Government	6,070	7,700	1,630	0.8%
	Local Education	6,460	9,000	2,540	1.2%
	Tribal Enterprise	1,430	2,400	970	1.9%
	<b>Total</b>	<b>148,740</b>	<b>214,100</b>	<b>65,360</b>	<b>1.3%</b>

Note: Numbers may not add due to rounding.

# Private Employment

## Agriculture, Forestry and Fishing, Mining

There is no growth forecast for this industry. Existing employment was decreased slightly.

## Utilities

There is no growth forecast for this industry. Existing employment was decreased slightly.

## Construction

The construction industry is particularly sensitive to periods of economic growth and recession. Most jobs are found near areas of new development. Approximately 22 percent of the jobs in this sector are estimated to work from home (Table 3) The remainder of the growth is distributed between what is assumed to be residential construction sites (sites where residential growth was forecasted) and commercial and industrial construction sites (sites where employment in other sectors is forecasted).

## Manufacturing, Wholesale Trade, and Transportation and Warehousing

“Industrial” employment includes jobs in three industries:

- Manufacturing
- Wholesale Trade
- Transportation and Warehousing

In Thurston County today, jobs in these three industries are distributed:

- 47 percent are located in industrial zones
- 39 percent are located in cities or the unincorporated urban area
- 13 percent are located in rural areas

Many of the jobs in rural areas are resource-based (such as mining and forestry) with a manufacturing or transportation component. There is not expected to be much of an increase in these industries in rural areas.

About 1,000 new jobs were allocated to specific parcels with recent warehouse permits or other planned projects. These include:

- Uline warehouse, Trader Joe’s distribution center, Doosan Infracore manufacturing, and several spec-built warehouses in Lacey’s Hawks Prairie industrial area
- Gensco warehouse in Tumwater

### Industrial Growth

Industrial jobs, such as manufacturing, are an important component of Thurston County’s economy. The location of these jobs is usually influenced by a variety of factors including land supply, transportation access (roads, rail, water, airport), supporting infrastructure, and workforce. Tumwater has historically been the industrial center of our region. In recent years, Lacey’s share of jobs in these sectors has grown.

- General growth assumptions for the Port of Olympia.
- Potential new development at the former Tumwater Brewery site.

About 200 new jobs, all in the transportation and warehousing industry, will be home-based (Table 3). Home-based jobs include self-proprietors and people who report to work at a residential location. An example of this would be truck drivers. Home based jobs are allocated based on population.

Some industrial jobs locate to urban centers and corridors. About 600 new jobs were allocated to vacant and redevelopable land in these areas. This includes

- 10 percent of new manufacturing jobs,
- 25 percent of new wholesale trade jobs, and
- 10 percent of new transportation and warehousing jobs.

A small amount industrial jobs were allocated to south county communities. Most growth was to Tenino, where an agricultural processing facility has been proposed. Additional growth was allocated to industrial-zoned areas. Remaining industrial jobs were allocated proportionally to developable and redevelopable lands with industrial zoning. Industrial employment growth was focused in two main areas: Hawks Prairie in Lacey and the 93<sup>rd</sup> Ave Interchange–Olympia Airport area in Tumwater (Table 2).

Endangered species are a barrier to development on many industrial lands, including the Olympia Airport and west Tenino. The assumptions regarding endangered species are discussed on page 20.

**Table 2: New Industrial Employment by Urban Area**

<b>Urban Area / Industrial Area</b>	<b>Manufacturing</b>	<b>Wholesale Trade</b>	<b>Trans. and Warehousing</b>	<b>Total Industrial</b>
Bucoda	0	0	0	0
Lacey	240	1,180	100	1,520
... Hawks Prairie	190	950	20	1,160
Olympia	50	220	140	410
... Fones Road	10	10	0	20
... Port of Olympia	0	50	70	120
Rainier	0	0	0	0
Tenino	0	0	100	100
Tumwater	380	550	80	1,010
... 93rd Ave	190	210	20	420
... Mottman	30	30	0	60
... Olympia Airport	120	170	10	300
Yelm	50	130	40	220
Grand Mound	40	40	10	90
Tribal Reservation	0	0	0	0
Rural Unincorporated	10	0	30	40
<b>Total</b>	<b>760</b>	<b>2,110</b>	<b>500</b>	<b>3,380</b>

Note: Numbers may not add due to rounding

## Home-based Employment

Home-based employment is defined as people who use their home as a work place (primary or secondary job), leave from their home to varied sites on a regular basis, or who report to work at residential locations (construction, temporary agency workers). Home-based employment is currently estimated at over 11 percent of total employment, but varies by industry (Table 3).

For some industries, the percent of home-based workers was assumed to increase in the future. This is in response to new technologies that make it easier to work from home and connect with colleagues and clients remotely.

It is estimated that the percent of jobs that will be home-based will increase to 13 percent of total employment by 2045. This is consistent with research that shows home-based employment has increased steadily since 1997<sup>1</sup>. New home-based jobs are allocated per new dwelling unit.

**Table 3: Home-based employment estimates, 2017 and 2045**

NAICS Industry	2017			2045		
	Total	Home	Percent	Total	Home	Percent
Agriculture, Forestry, Fishing, Mining	3,770	0	0.0%	3,700	0	0.0%
Utilities	240	0	0.0%	200	0	0.0%
Construction	7,420	1,620	21.8%	8,600	1,880	21.8%
Manufacturing	4,340	0	0.0%	5,100	0	0.0%
Wholesale Trade	3,190	0	0.0%	5,300	0	0.0%
Retail Trade	15,940	0	0.0%	22,100	0	0.0%
Transportation and Warehousing	3,300	1,400	42.4%	3,800	1,610	42.3%
Information*	1,550	360	23.0%	1,600	370	23.1%
Finance and Insurance*	4,580	1,260	27.6%	7,500	2,230	29.7%
Real Estate, Rental and Leasing	5,800	2,710	46.7%	7,800	3,640	46.7%
Professional Services*	16,620	2,920	17.6%	25,400	4,980	19.6%
Education Services	3,770	870	23.2%	5,580	1,290	23.2%
Health Care and Social Assistance*	17,260	2,860	16.6%	25,520	4,420	17.3%
Arts, Entertainment and Recreation*	1,710	220	13.0%	4,700	690	14.7%
Accommodation and Food Services	9,830	0	0.0%	12,900	0	0.0%
Other Services*	8,560	2,520	29.5%	21,100	6,960	33.0%
Government	40,870	0	0.0%	53,200	0	0.0%
<b>Total</b>	<b>148,740</b>	<b>16,740</b>	<b>11.3%</b>	<b>214,100</b>	<b>28,070</b>	<b>13.1%</b>

\* Industry where percent home-based assumed to increase in 2045

<sup>1</sup> Home-based Workers in the United States: 2010 Household Economic Studies. Current Population Reports by Mateyka, P.J. and Rapino, M.A., October 2012. U.S. Dept. of Commerce, Economic Studies Administration.

### **Endangered Species Act Listings**

Four Thurston County species are listed under the Endangered Species Act: the Mazama pocket gopher, Taylor's checkerspot butterfly, Streaked horned lark, and Oregon spotted frog. Habitat for the Mazama pocket gopher – which is closely associated with prairie soils – is the most extensive throughout the County. It is found throughout many areas of south Thurston County and Tumwater.

Several jurisdictions – including Thurston County, Tumwater, and the Port of Olympia – are developing Habitat Conservation Plans (HCP). When completed and approved by the U.S. Fish and Wildlife Service, the HCPs will provide a streamlined process for mitigating the impacts of common development activities on listed species. Mitigation will likely be in the form of land conservation of key species habitat. As part of the land supply analysis, residential capacity on the soils most preferred by the Mazama pocket gopher which in the rural unincorporated County was reduced to account for land undevelopable due to mitigation.

Each HCP is unique and jurisdictions can choose which development-related impacts they want to include. Some activities related to employment growth may be outside the scope of the jurisdictions' HCPs. In this situation, property owners can develop their own HCP. An example is Kaufman Real Estate, LLC which developed an HCP covering activities on 13 of commercial and industrial properties.

Since most employment growth is in the urban areas (where there is limited habitat) or likely to be covered by a habitat conservation plan, no assumptions were taken limit where employment growth can occur. Since the forecast is updated every three to five years, these assumptions can be modified if required.

## Retail and Services

Retail and service employment make up three-quarters of all jobs in Thurston County. Retail and services includes jobs in ten industries

### Retail and Food

- Retail Trade
- Accommodation and Food Services

### Services

- Information
- Finance and Insurance
- Real Estate, Rental and Leasing
- Professional Services
- Education Services

### Services, continued

- Health Care and Social Assistance
- Arts, Entertainment and Recreation
- Other Services

Places where people travel to shop and eat tend to be clustered together in similar patterns in Thurston County. Much of the growth in these industries is related to Thurston County population growth, although overall the County attract retail spending by residents from neighboring counties.

TRPC distributes retail and service employment growth to four zones, each serving a distinct market. These zones – shown in Figure 1– are described below. While a helpful guide for allocating employment, there is a gradient between retail area types and the size of the market they serve. Table 4 shows the amount of employment growth projected for each area.

**Table 4: Retail and Service Employment Growth by Area**

Area		Retail and Food		Services		Total	
		2017	2045	2017	2045	2017	2045
Urban Center or Corridor	#	8,500	11,600	19,750	35,720	28,250	47,320
	%	33%	33%	32%	35%	65%	68%
Regional Retail Centers	#	12,050	17,530	12,670	26,690	24,720	44,220
	%	47%	51%	21%	26%	68%	77%
Neighborhood Center	#	350	530	2,650	3,780	3,000	4,310
	%	1%	2%	4%	4%	5%	6%
Other	#	4,880	5,330	26,200	35,410	31,080	40,740
	%	19%	15%	43%	35%	62%	50%
<b>Total</b>		<b>25,780</b>	<b>25,780</b>	<b>34,990</b>	<b>61,270</b>	<b>101,600</b>	<b>87,050</b>

Figure 1: Employment Zones

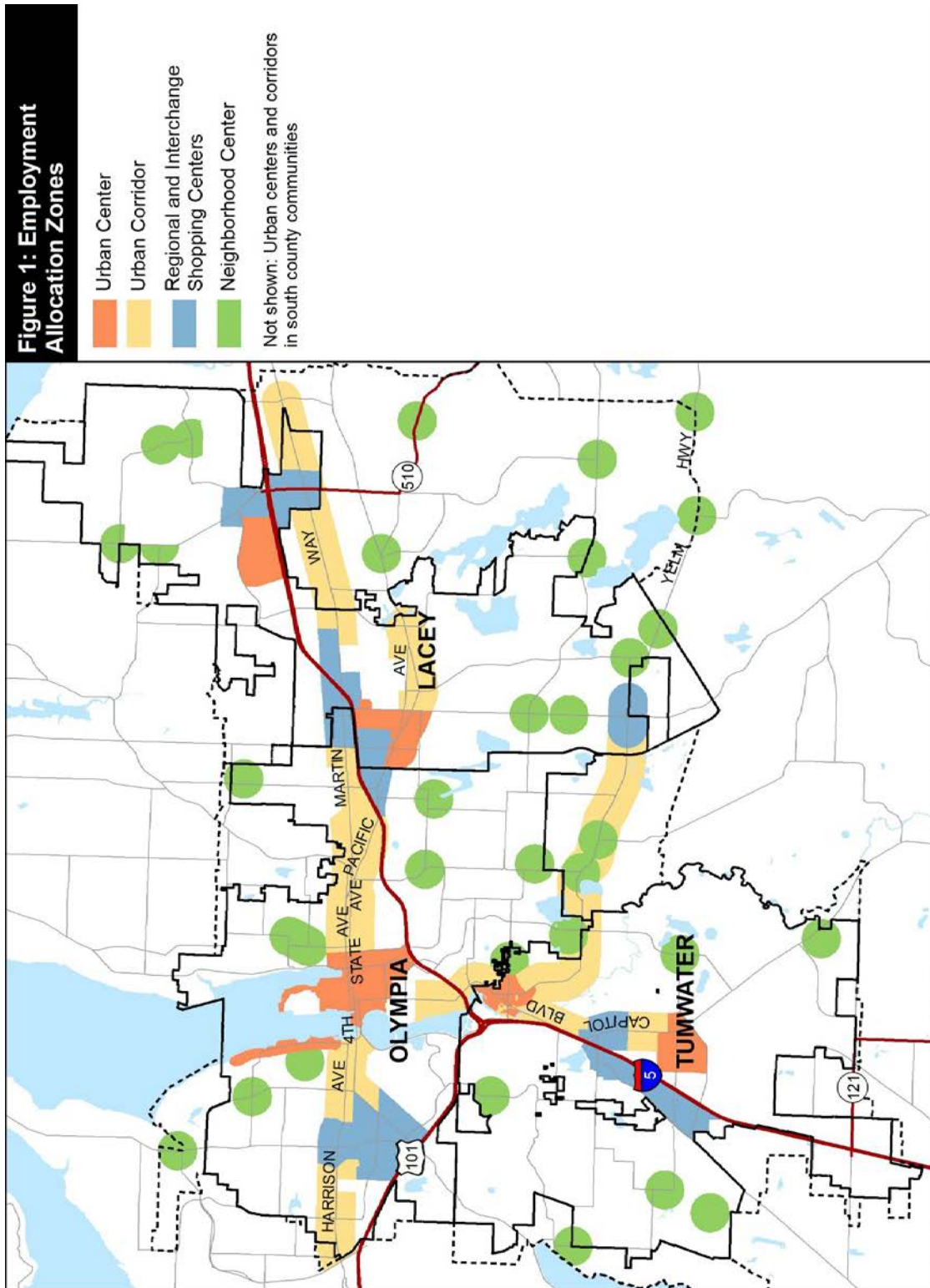
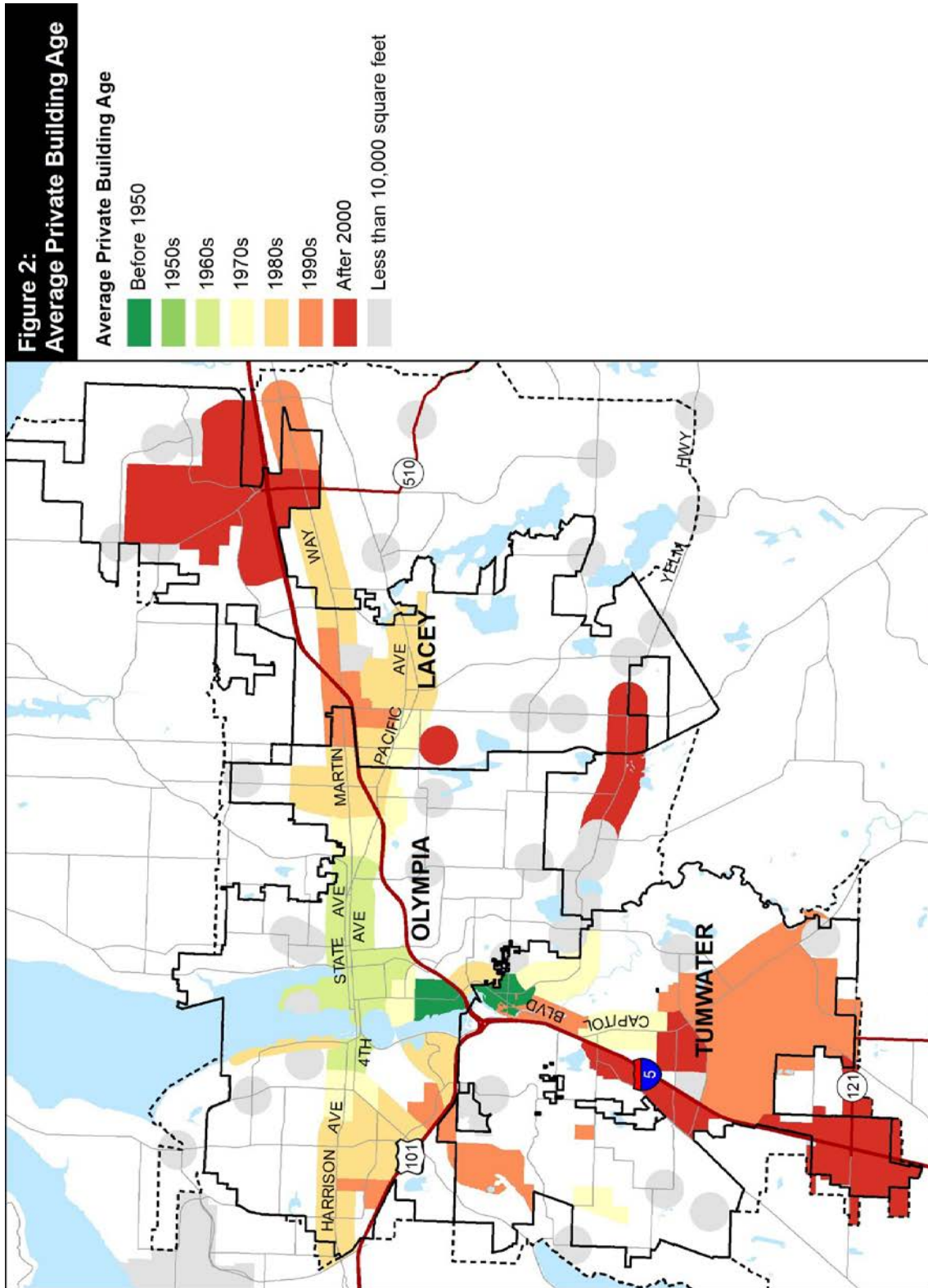


Figure 2: Average Private Building Age



## Urban Centers and Corridors

At the end of the 1950s, 65 percent of retail square footage was in urban and south county city and town centers. These areas included the downtowns of Olympia, Tumwater (by the Brewery), Tenino, Yelm, Bucoda, and Rainier. In second half of the 20<sup>th</sup> century, new retail construction slowed in these areas – ranging from two to eight percent of new retail space.

Urban corridors are the areas that linked the urban areas of Olympia, Lacey, and Tumwater, as well as the west side of Olympia. They are defined as a quarter mile on each side of Capitol Boulevard/Way, Martin Way, Pacific Way, and Harrison Avenue. These areas were developing by the 1950s, when they held around 22 percent of retail square footage. In the 1960s as automobile access to retail stores increased, they captured a larger share of growth – 32 percent. After that period, they saw a slow decline in growth shares – from around 19 percent in the 1970s to 12 percent in the last decade.

Employment in urban centers and corridors is projected to increase by over 19,000 jobs – from 32 percent to 35 percent of employment countywide (Table 3). This change is driven by changing demographic and social preferences. The growth in demand for urban-style housing and car-free lifestyles is in turn increasing demand for shopping opportunities close to housing. This is made evident by recent mixed-use development in downtown Olympia.

## Regional Retail Centers

As their name implies, regional retail centers attract customers from across the region. They are auto-oriented, generally with easy access to the highway system. Regional shopping centers, including malls, began to emerge in the 1960s. The first in Thurston County was South Sound Center in Lacey. The second was Capital Mall in west Olympia, which continues to function as a regional mall. Construction on this mall began in the late 70s through the 80s, with major additions in the 2000s and 2010s.

Freeway interchange shopping areas began to emerge in the late 1960s and 1970s. The percentage of retail development going into this scale of development has increased steadily over the decades. Originally auto-oriented strip malls, today these areas include larger commercial developments such as Tumwater’s Littlerock Road and the Hawks Prairie development in Lacey.

### National Trends

The movement from city centers to the suburbs occurred for both residential and commercial development over the last 50 years. Thurston County’s development patterns are typical of those seen throughout the United States. Nationally, more young adults are moving back to city centers and owning fewer cars. These trends are likely to lead to a change in how retail stores are designed and located.

### Health Care and Social Assistance

Medical services tend to locate near existing medical services. A large portion of health care and social assistance employment was allocated by hand to Thurston County’s two hospitals.

Employment growth was also allocated to two future retail centers: Lacey’s Gateway development and Yelm’s Thurston Highlands. Gateway is expected to be primarily an outlet-style retail center while Thurston Highlands will likely have a mix of retail, office, and service employment to serve Yelm’s growing population.

The percent of employment in regional retail centers – including freeway interchange shopping – is projected to increase by 20,000 jobs, from 28 percent to 33 percent of total employment (Table 4).

### **Neighborhood Centers**

National research suggests that a typical household supports approximately 70 square feet of retail space, 15 square feet of which could reasonably be neighborhood retail or services (r acre in a quarter-mile radius – it can support a small neighborhood retail center such as Southgate Center in Tumwater.

Some of the keys to supporting neighborhood centers are focusing the commercial areas into a walkable urban environment, making convenient connections to adjacent neighborhoods, paying attention to safety, attractiveness, a sense of place, and providing amenities such as parks. Larger mixed-use centers, such as those envisioned for “downtowns” would require more people to support them – either workers, residents, or a combination of both.

TRPC identified 32 existing or future neighborhood centers. A set amount of growth was allocated to each one depending on the amount of housing growth forecasted in the vicinity or the type of development expected. Neighborhood centers make up a small amount of the region’s retail and service employment – about 3 percent – but are nonetheless expected to increase by about 1,300 new jobs.

**Table 5: Supportable Square Feet of Retail per Household**

Store Type	Supportable sq. ft. per Household	
	Total Retail Space	Neighborhood Retail Space
Building Material	2.6	-
Hardware	0.5	0
Department/Variety	13.4	-
Food/Grocery	11.6	5.2
Auto supply	2.6	0.1
Gas Stations	5.5	-
Apparel	4.5	0.8
Shoe	1.3	0.2
Furniture	3.5	0.2
Home furnishings	1.6	0.1
Appliance	0.5	0
Radio/TV/Computer/Music	2.3	0.1
Eating Places	12.4	5.6
Drinking Places	1.5	0.7
Drug	3.1	1.4
Sporting Goods	1.4	0.1
Book	1.0	0.2
Hobby/Toy	1.0	0.2
Gift	1.0	0.2
Flower	0.5	0.1
<b>Total</b>	<b>71.8</b>	<b>15.1</b>

**Source:** Center for Economic Development, University of Wisconsin Extension and Property Counselors. “Creating Neighborhood Walkable Business Districts” Gregory Easton and John Owen, 2009.

**Overall Distribution**

Thurston County is a net attractor for the consumption of goods and services. Six percent of state taxable retail sales are collected in Thurston County despite it having only four percent of the population. This is likely due to commuters who bring home their paychecks and spend them, as well as having a regional mall that serves a population that extends outside of the county borders.

Retail and service employment is not distributed evenly among jurisdictions within Thurston County. People’s decisions on

**Regional Attractor**

Thurston County is a regional attractor for goods and services for the counties to the south and west (Lewis, Mason, Grays Harbor). Examples of facilities that serve a large service area are Capital Mall, the two local hospitals, and Cabela’s.

where to shop is based on a variety of factors, including where they live, where they work, and what they are shopping for.

Two data sources help to validate the allocation of retail and service employment. Table 6 shows retail and service employment compared to taxable retail sales. Where employment growth is projected compares favorably with where people spend money. Lacey, Olympia, Tumwater, and Yelm all attract a higher percentage of retail sales compared to their population, as they attract spending from residents in Bucoda, Rainier, Tenino, and the unincorporated county. Spending is also consistent with where employment is projected. Yelm is projected to have an increasing share of the county’s employment as its population grows large enough to be a regional hub.

**Table 6:** Retail/Service Employment Compared to Taxable Retail Sales

Urban Area	Taxable Retail Sales	Retail/Sales Employment	
		2017	2045
Bucoda	0.0%	0.1%	0.1%
Lacey and UGA	25.9%	27.0%	29.6%
Olympia and UGA	38.3%	42.9%	38.3%
Rainier and UGA	0.3%	0.3%	0.4%
Tenino and UGA	0.5%	0.6%	0.8%
Tumwater and UGA	14.5%	12.1%	12.7%
Yelm and UGA	4.0%	3.7%	7.6%
Grand Mound UGA	n/a	1.4%	1.2%
Chehalis Reservation	n/a	0.8%	0.7%
Nisqually Reservation	n/a	0.9%	0.9%
Unincorporated	16.5%	10.1%	7.6%
<b>Thurston County</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Notes: Taxable retail sales reported for incorporated area only.

Transportation data can also be used to validate the employment allocations. The 2013 Household Travel Survey showed that over 90 percent of shopping trips destined for Lacey, Olympia, or Tumwater (Table 7).

**Table 7:** Retail/Service Employment Compared to Retail Service Trip Destinations

Household UGA	Trip Destination (UGA)				Employment	
	Lacey	Olympia	Tumwater	Other	2017	2045
Lacey	74%	22%	2%	1%	27%	30%
Olympia	23%	61%	14%	1%	43%	38%
Tumwater	9%	30%	58%	2%	12%	13%
Other	23%	32%	24%	21%	18%	19%
<b>Total</b>	<b>34%</b>	<b>39%</b>	<b>20%</b>	<b>7%</b>	<b>100%</b>	<b>100%</b>

Note: Trip counts are from the 2013 Household Travel Survey. Includes shopping and eating-out trips by Thurston County households.

## **Attracting Retail Growth to Existing City Centers and Corridors**

Residents of Thurston County expressed a desire for more walkable urban environments in the Sustainable Thurston planning process. This includes areas where they can live, work, play, and shop, and that have a range of transportation choices, including frequent transit service. The best opportunities for these places are existing centers and corridors. To create these live–work–play–shop areas will require a full range of retail and services – including drug stores and grocery stores – within walking distance of places where people live. Yet much of growth in the retail and services continues to be located in suburban shopping centers predominately accessible by car.

### ***What Could Reverse This Trend?***

- Locating more housing near existing retail areas
- Transitioning suburban retail areas in centers and corridors to a more walkable urban form
- Focusing new development in existing commercial areas, rather than new shopping centers

### ***Households Support Neighborhood-Scale Retail***

National research suggests that a typical household supports approximately 70 square feet of retail space, 15 square feet of which could reasonably be neighborhood retail or services within walking distance. Neighborhood retail and services are generally things such as drug stores, small grocery stores, specialty stores such as bike stores, convenience stores, coffee shops and restaurants, and personal services such as nail and beauty salons.

A small neighborhood retail center – say 30,000 square feet or around the size of Southgate Center in Tumwater – could be supported by around 1,000 homes within a convenient walking distance of a quarter-mile, and another thousand households nearby. This is an overall residential density of 8 units per acre assuming the retail centers are distinct and separated. The keys are focusing the commercial areas into a walkable urban environment, making convenient connections to adjacent neighborhoods, paying attention to safety, attractiveness, and a sense of place, and providing amenities such as parks. Larger mixed-use centers, such as those envisioned for “downtowns” would require more people – either workers or residents – to support them.

### ***Strategies***

Local governments can help achieve a more walkable urban environment by investing in these areas, focusing on safety; improved transportation for walkers, cyclists, transit, and vehicles; aesthetics including urban design and street improvements; and amenities such as parks. These investments will support neighborhood-scale businesses and create an attractive, safe urban environment.

It will take a large range of strategies, from financing, incentives, investments, and public-private partnerships to reverse the trends of locating neighborhood-type retail and services in auto-oriented shopping plazas. Many of these strategies were identified in Sustainable Thurston. More information about that project can be found at [www.trpc.org/259](http://www.trpc.org/259).

### ***Baseline Forecast versus Vision***

The employment forecast project the trends under current conditions. The “Preferred Land Use Scenario” outlined in Sustainable Thurston is a vision for the future that would require changes to current zoning and development regulations.

## Bucoda, Rainier, Tenino, Grand Mound, and Rochester

Projecting employment growth in the south county communities is particularly challenging as one or two new businesses can significantly change the total employment. Projected employment growth by sector is shown in Table 8 with assumptions for each area described below.

- **Tenino**—An existing sewer system and well-developed downtown will allow for more employment growth in Tenino compared to Rainier and Bucoda. Plans are being considered for an agricultural processing facility in west Tenino.
- **Rainier**—A lack of a sewer system will inhibit employment growth in Rainier. Rainier’s proximity to Yelm means its residents will rely on Yelm for many of their shopping needs.
- **Rochester**—While Rochester has a grocery store, it has very little in the way of retail and service jobs compared to the overall population. Most are located in nearby Grand Mound that has urban sewer and water infrastructure and is nearby Interstate 5.
- **Grand Mound**—Growth in Grand Mound in recent years has been driven by investments by the Confederated Tribes of the Chehalis. Its proximity to Interstate 5, sewer system, and water system will allow for more robust employment growth.
- **Bucoda**—Bucoda is a smaller community that is struggling to keep storefronts full and retain population as the younger generation graduates from high school and moves out of town. Its small population and lack of sewer will lead to modest employment growth.

**Table 8: Employment Growth (2017-2045) in South County Communities**

Sector	Bucoda	Rainier	Tenino	Grand Mound	Rochester
Manufacturing, Wholesale Trade, Utilities	0	0	110	90	0
Construction, Natural Resources	0	10	10	10	0
Services	70	200	320	320	150
Retail, Food Services, Accommodation	20	40	210	110	30
Government	0	10	10	280	10
K-12 Education	0	50	10	0	70
<b>Total</b>	<b>90</b>	<b>310</b>	<b>660</b>	<b>810</b>	<b>260</b>

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# Public Employment

## Federal Government

Growth in federal government employment was allocated to existing sites such as post offices and some small federal agency departments. Employment on Joint Base Lewis-McChord is in the Pierce County portion of the base.

## State Government

As the state capitol, state government employment is a large employment sector in Olympia and Thurston County. Total state government employment growth in Thurston County is projected to be over 6,500, plus an additional 400 jobs at state colleges.

State government agency headquarters are located in the Capital Region of Olympia, Lacey, and Tumwater. The State has three campuses. The largest campus is around the State Capitol Building; there are satellite campuses in Lacey and Tumwater. The state, cities, Port of Olympia, and Intercity Transit have also worked together to designate “Preferred Development Areas” and “Preferred Leasing Areas” for state offices. Preferred Development Areas are areas where state ownership is preferred by local agencies. Preferred Leasing Areas are areas where state leasing is preferred by local agencies.

### State of Washington Capitol Master Plan

Policy 3.1: Preferred Development and Leasing Areas.

The state shall concentrate state offices in medium-to-high density locations that are well served by public transportation. To this end, the state will build to own in Preferred Development Areas (PDAs) and lease facilities in Preferred Leasing Areas (PLAs).

The State also has several major facilities outside of these core areas, including:

- The Evergreen State College, located in unincorporated Thurston County
- Maple Lane Correctional Facility, located in Grand Mound
- Cedar Creek Correctional Facility, located in southwest rural Thurston County

The State’s recent trend has been to consolidate agencies in state-owned office space. Examples include:

- The 1500 Jefferson Street Building on Capitol Campus – completed in 2011 – with around 238,000 square feet of office space. This resulted in a consolidation and relocation of several state agencies (General Administration, Personnel, Information, Printing, and portions of Office of Financial Management) into two new agencies: the Department of Enterprise Services and Consolidated Technology Services.
- The Helen Sommers building on the Capitol Campus – completed in 2017 – which houses State Patrol as well as several smaller agencies.
- Consolidation of several divisions of the Secretary of State’s Office into a new building planned for Tumwater

Several planned relocations were also accounted for:

- Relocation of the Utilities and Transportation Commission from leased office space in west Olympia to leased space in Lacey’s Woodland Square.
- Relocation of WSDOT Olympic Region from its Tumwater facility to a new state-owned facility in Lacey.

New employment – either public or private – was allocated to sites vacated by agency closures or relocations. Other major changes to state employment include a planned expansion of the Maple Lane Correctional Facility in Grand Mound and the opening of a new South Puget Sound Community College site on Capitol Blvd in Tumwater.

There are two public higher education institutions in Thurston County. State education employment was allocated to:

- The Evergreen State College Campus
- Three campuses of South Puget Sound Community College:
  - Existing Mottman Campus in Olympia
  - Existing Woodland Square campus in Lacey
  - Future Craft Brewing and Distilling Center in Tumwater

The projected distribution of State employment is shown in Table 9.

**Table 9: Location of State Employment within Thurston County, 1994 to 2012 and 2035 Forecast.**

Jurisdiction	1994	1998	2003 <sup>1</sup>	2008	2012	2017	2045
Lacey & UGA	2,620 13%	2,570 12%	3,550 16%	3,150 13%	2,396 10%	2,520 10%	3,630 11%
Olympia & UGA	12,300 62%	14,260 66%	12,040 53%	12,210 50%	12,096 53%	13,210 52%	16,680 52%
Tumwater & UGA	4,120 21%	3,720 17%	6,030 26%	7,970 32%	7,502 33%	8,500 34%	10,340 32%
Other Locations in Thurston County <sup>2</sup>	790 4%	1,200 6%	1,210 5%	1,210 5%	840 4%	1,010 4%	1,560 5%
<b>Total</b>	<b>19,830</b>	<b>21,750</b>	<b>22,830</b>	<b>24,540</b>	<b>22,834</b>	<b>25,200</b>	<b>32,200</b>

**Source:** Washington State Departments of Employment Security and General Administration; TRPC.

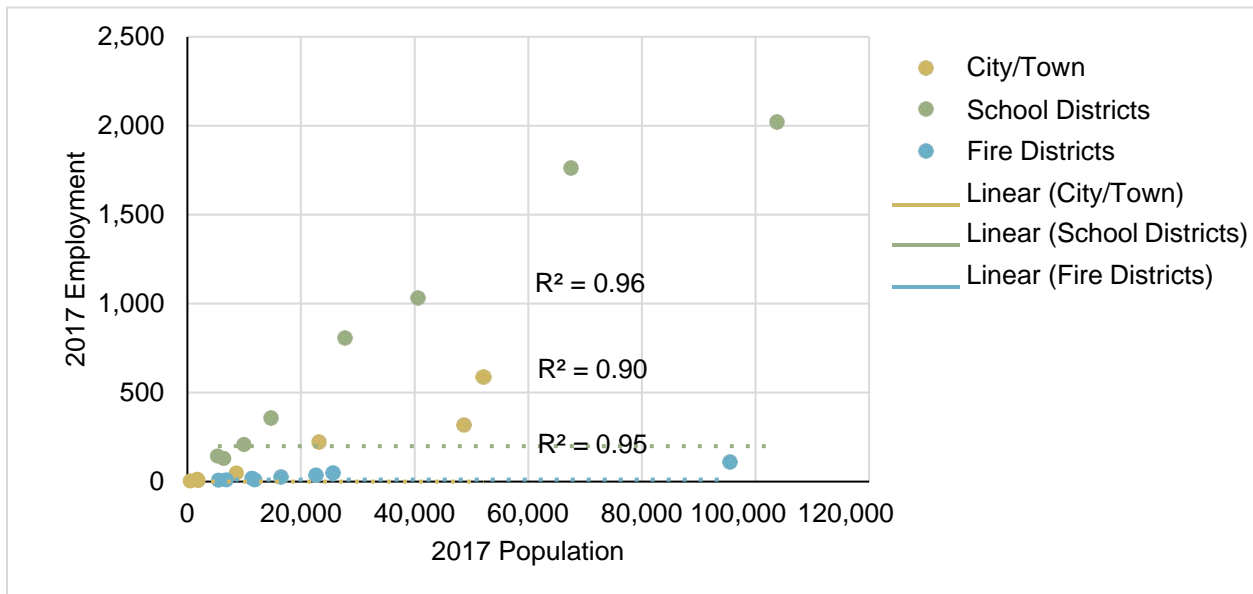
**Explanation:** Numbers may not add due to rounding. <sup>1</sup>2003 employment numbers allocated to 2005 locations.

<sup>2</sup>Includes The Evergreen State College; Maple Lane Facility was closed in 2012; 2045 forecast assumes the reuse of this facility.

## Local Government

The regional model forecasts local and tribal government employment as one category. However, there is a strong relationship between a jurisdiction or special tax purpose’s population (**Error! Reference source not found.**). This relationship allows employment projections to be derived from population growth within a city or district’s boundary. Figure 3 shows the employment growth assumptions for seven groups of local government employment.

**Figure 3: Relationship Between Population and Employment for Cities and Towns, School Districts, and Fire Districts**



**Table 10: Allocation methods for local government categories**

Schools Districts	Population growth in school district
Cities/Towns	Population growth in city/town, plus annexations
Thurston County	Countywide population growth
Fire Districts	Population growth in fire district
Libraries	Countywide population growth
Intercity Transit	Population growth in PTBA
Other Local Government	Countywide population growth

If specific information was available about where new employment would site, growth was allocated there. Otherwise growth was allocated to existing worksite locations. Notable changes to local government employment include:

- 19 new school sites
- Relocation of the Thurston County Courthouse to downtown Olympia
- Relocation of some Intercity Transit administrative staff to the Olympia Transit Center.

Employment growth by type of local government agency are shown in Table 11.

**Table 11: Local and Tribal Government Employment Forecast.**

<b>Sector</b>	<b>2017</b>	<b>2045</b>	<b>Growth</b>	<b>Annual Growth</b>
City	1,190	2,590	1,400	2.8%
County	1,110	1,730	620	1.6%
School Districts	12,280	14,180	1,900	0.5%
Fire District	260	410	150	1.6%
Library	180	270	90	1.5%
Other Local Government	1,170	1,840	670	1.6%
<b>Total Local Govn't Employment</b>	<b>16,190</b>	<b>21,020</b>	<b>4,830</b>	<b>0.9%</b>
Tribal Government	530	840	310	1.7%
Tribal Enterprise	1,430	2,400	970	1.9%
<b>Total Tribal Employment</b>	<b>1,960</b>	<b>3,240</b>	<b>1,280</b>	<b>1.8%</b>

## Tribal Government and Tribal Enterprise Forecasts

Tribal employment falls into two categories: government employment, including administration and services for members, and enterprise employment, which includes retail and service businesses ventures. TRPC met with tribal staff to project tribal employment in both forms. Tribal employment estimates are shown in Table 11.

For the Confederated Tribes of the Chehalis Reservation, a moderate amount of tribal enterprise employment was allocated to the tribe’s casino. Additional enterprise employment was allocated to tribe-owned property in Grand Mound to account for projects planned or under construction there. The Chehalis Tribe has no government employment in Thurston County; all of the tribe’s government administration staff are located in Grays Harbor County.

The Nisqually Indian Tribe is in the midst of expanding its services. Over the past decade the tribe has built a new tribal center and public safety building, invested in road improvements, and built tribal housing. It is expected that the tribe will continue to expand services over the next 25 years, including the construction of additional housing and a new tribal and elder care facility.

The Nisqually Tribe also recently completed an expansion of the Red Wing Casino. It is projected that there will be additional growth in enterprise employment at the casino or at new retail or service establishments on the reservation.

# Appendix 1: 2017 Employment by Urban Area

Industry	Tumwater										Rural	
	Bucoda	Lacey	Olympia	Rainier	Tenino	Yelm	Grand Mound	Chehalis Res.	Nisqually Res.	Unincorp.	Total	
Ag, Forestry and Fishing, Mining	0	530	150	20	20	340	130	30	60	0	2,520	3,800
Utilities	0	10	160	0	0	20	0	0	0	0	40	200
Construction	0	2,010	1,550	40	20	1,530	260	40	10	50	1,920	7,400
Manufacturing	0	840	1,310	10	20	1,760	10	40	0	0	360	4,300
Wholesale Trade	0	620	780	10	20	1,210	70	50	0	0	430	3,200
Retail Trade	10	4,700	6,640	20	130	2,480	910	250	0	0	800	15,900
Transportation and Warehousing	10	1,100	620	10	70	680	60	40	0	0	710	3,300
Information	0	350	810	0	20	110	90	10	0	0	160	1,600
Finance and Insurance	0	1,130	2,130	10	30	560	190	30	0	0	490	4,600
Real Estate, Rental and Leasing	10	1,860	1,960	30	20	690	190	10	0	10	1,020	5,800
Professional Services	20	4,900	6,480	80	160	2,130	440	90	0	10	2,310	16,600
Education Services	0	1,360	1,280	10	20	380	170	20	0	0	520	3,800
Health Care and Social Assistance	20	3,890	9,730	50	60	1,580	490	40	0	10	1,390	17,300
Arts, Entertainment and Recreation	0	470	550	0	10	410	50	10	0	0	210	1,700
Accommodation and Food Services	10	2,640	4,270	20	70	1,180	480	710	0	0	440	9,800
Other Services	10	2,200	3,520	40	30	1,020	240	60	0	20	1,430	8,600
Federal Government	0	400	990	10	10	150	50	0	0	0	60	1,700
State Government	0	2,480	12,680	0	0	8,500	0	0	0	0	160	23,800
State Education	0	40	530	0	0	0	0	0	0	0	850	1,400
Local and Tribal Government	0	730	2,800	10	30	1,390	140	0	0	510	450	6,100
Local Education	0	1,910	1,690	140	210	920	690	0	0	0	900	6,500
Tribal Enterprise	0	0	0	0	0	0	0	0	720	710	0	1,400
<b>Total</b>	<b>90</b>	<b>34,160</b>	<b>60,630</b>	<b>530</b>	<b>930</b>	<b>27,030</b>	<b>4,650</b>	<b>1,420</b>	<b>790</b>	<b>1,330</b>	<b>17,180</b>	<b>148,700</b>

Note: Urban area includes incorporated and unincorporated areas. Numbers may not add due to rounding. Adopted December 5, 2019

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## Appendix 2: 2045 Employment by Urban Area

Industry	Bucoda	Lacey	Olympia	Rainier	Tenino	Tumwater/Yelm	Grand Mound	Chehalis Res.	Nisqually Res.	Rural Unincorp.	Total
Ag., Forestry and Fishing, Mining	0	520	140	20	0	330	130	30	60	0	2,470
Utilities	0	10	130	0	0	20	0	0	0	0	40
Construction	10	2,370	1,910	40	30	1,730	400	50	10	60	1,990
Manufacturing	0	1,070	1,350	10	20	2,130	60	80	0	0	370
Wholesale Trade	0	1,800	980	10	30	1,760	200	90	0	0	430
Retail Trade	20	7,250	8,120	40	240	3,550	1,720	310	0	0	840
Transportation and Warehousing	10	1,210	760	10	170	750	100	40	0	0	740
Information	0	360	810	10	30	110	100	10	0	0	160
Finance and Insurance	10	2,190	2,920	30	70	950	650	40	0	0	630
Real Estate, Rental and Leasing	10	2,510	2,500	60	70	980	480	20	0	10	1,160
Professional Services	30	8,170	8,950	120	210	3,330	1,850	120	0	20	2,600
Education Services	0	1,810	2,290	20	30	500	320	20	0	0	580
Health Care and Social Assistance	20	6,250	13,230	80	120	2,540	1,580	70	0	20	1,610
Arts, Entertainment and Recreation	10	1,510	1,450	10	20	860	540	20	0	0	270
Accommodation and Food Services	20	3,780	5,040	40	170	1,710	920	760	0	0	470
Other Services	30	6,520	7,040	100	120	2,850	2,210	150	0	20	2,060
Federal Government	0	450	1,120	20	10	170	60	0	0	0	70
State Government	0	3,590	16,010	0	0	10,330	0	280	0	0	200
State Education	0	40	670	0	0	10	0	0	0	0	1,080
Local and Tribal Government	0	1,100	3,420	20	30	1,720	290	0	0	610	490
Local Education	0	2,580	2,140	190	220	1,440	930	0	0	0	1,520
Tribal Enterprise	0	100	0	0	0	0	0	140	940	1,190	30
<b>Total</b>	<b>180</b>	<b>55,200</b>	<b>81,000</b>	<b>830</b>	<b>1,590</b>	<b>37,760</b>	<b>12,540</b>	<b>2,220</b>	<b>1,020</b>	<b>1,940</b>	<b>19,810</b>
											<b>214,100</b>

Note: Urban area includes incorporated and unincorporated areas.  
 Numbers may not add due to rounding. Adopted December 5, 2019

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# Appendix 3: Comparison of 2045 Forecast to 2040 Forecast

Urban Area	Total Employment										Percent of Total Employment									
	Ind.	Const.	Services	Retail	Gov.	K12 Edu.	Total	Ind.	Const.	Services	Retail	Gov.	K12 Edu.	Total						
Bucoda	New	10	10	120	40	0	180	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.1%						
	Old	10	20	130	30	0	200	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.1%						
Lacey	New	4,090	2,890	29,430	11,020	5,180	55,200	28.4%	23.5%	29.0%	31.5%	12.4%	28.6%	25.8%						
	Old	3,510	3,810	24,190	9,970	5,390	49,870	28.3%	24.5%	26.6%	29.0%	14.6%	31.6%	25.0%						
Olympia	New	3,220	2,050	39,200	13,160	21,220	81,000	22.4%	16.7%	38.6%	37.6%	50.8%	23.7%	37.8%						
	Old	2,860	3,640	36,480	13,670	18,510	77,180	23.1%	23.4%	40.1%	39.8%	50.1%	21.1%	38.6%						
Rainier	New	30	60	430	80	30	830	0.2%	0.5%	0.4%	0.2%	0.1%	2.1%	0.4%						
	Old	40	70	350	90	30	770	0.3%	0.4%	0.4%	0.3%	0.1%	2.0%	0.4%						
Tenino	New	220	40	670	410	40	1,590	1.5%	0.3%	0.7%	1.2%	0.1%	2.4%	0.7%						
	Old	120	110	650	330	40	1,510	1.0%	0.7%	0.7%	1.0%	0.1%	2.7%	0.8%						
Turmwater	New	4,660	2,060	12,120	5,260	12,220	37,760	32.4%	16.7%	11.9%	15.0%	29.3%	16.0%	17.6%						
	Old	3,790	2,390	11,470	5,330	10,470	35,130	30.6%	15.3%	12.6%	15.5%	28.3%	17.7%	17.6%						
Yelm	New	370	520	7,730	2,640	350	12,540	2.6%	4.2%	7.6%	7.5%	0.8%	10.3%	5.9%						
	Old	440	1,150	6,300	2,990	190	12,170	3.6%	7.4%	6.9%	8.7%	0.5%	11.4%	6.1%						
Grand Mound	New	210	80	590	1,070	280	2,220	1.5%	0.6%	0.6%	3.1%	0.7%	0.0%	1.0%						
	Old	130	90	350	870	210	1,640	1.0%	0.6%	0.4%	2.5%	0.6%	0.0%	0.8%						
Chehalis	New	0	70	950	0	0	1,020	0.0%	0.6%	0.9%	0.0%	0.0%	0.0%	0.5%						
	Old	0	160	1,390	0	0	1,560	0.0%	1.0%	1.5%	0.0%	0.0%	0.0%	0.8%						
Nisqually	New	0	60	1,260	0	610	1,940	0.0%	0.5%	1.2%	0.0%	1.5%	0.0%	0.9%						
	Old	10	100	1,530	0	220	1,860	0.1%	0.6%	1.7%	0.0%	0.6%	0.0%	0.9%						
Rural	New	1,580	4,470	9,100	1,310	1,840	19,810	11.0%	36.3%	9.0%	3.7%	4.4%	16.9%	9.3%						
	Old	1,480	4,040	8,050	1,050	1,910	17,820	11.9%	25.9%	8.9%	3.1%	5.2%	13.5%	8.9%						
Total	New	14,390	12,310	101,600	34,990	41,770	214,080	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%						
	Old	12,390	15,580	90,890	34,330	36,980	199,710	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%						

Note: "New" forecast is for 2045. The "Old" forecast (adopted in 2015) is for 2040. Urban Area includes incorporated and unincorporated area. Employment sectors shown include the following industries:

- Ind Manufacturing, Wholesale Trade, and Utilities
- Const Construction, Agricultural, Forestry and Fishing, & Mining
- Services.....All services, except Accommodation and Food Services
- Retail.....Retail Trade and Accommodation and Food Services
- Gov.....Government, except K-12 Public School Employment
- K12 Edu.....K-12 Public School Employment

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# Appendix 4: Base Year Data Sources and Allocations

## Covered Employment and Total Employment

Employment records are available from two sources at the county level.

- **Covered Employment:** The Washington State Employment Securities Department maintains a database of worksites and employees for all employed persons covered by the Washington Employment Security Act or by Title 5, U.S.C. 85. Covered employment is approximately 68 percent of the workforce in Thurston County. An average of first quarter (January-February-March) 2017 covered employment was used for the base year.
- **Total Employment:** The U.S. Department of Commerce Bureau of Economic Analysis provides estimates of total employment by employment sector at the county level through the Regional Economic Information System (REIS) system. 2017 data – a twelve-month average – was used in for the employment allocations.

Examples of non-covered employment includes:

- Self-employed workers (sole proprietors, partnerships, tax-exempt cooperatives)
- Railroad employees
- Military employees
- Farm workers
- Casual labor
- Newspaper carriers
- Insurance and real estate agents receiving commissions
- Enrolled students working for a school
- Private schools and religious organizations (partially reported)
- Nonprofit organizations with fewer than four employees
- Certain family employment
- Certain construction, contractor, barber, hairdressing, and cosmetology services

Both covered and total employment are measured as average jobs over a specified time period They include both full and part-time jobs.

## Covered Employment

TRPC entered into a Memorandum of Understanding with the Washington State Employment Security Department (ESD) to utilize covered employment data as the base year data for the 2017 Population and Employment forecast. Records on number of employees by industry were provided to TRPC in a database format, with the firm name, address, and coordinates included for each record. Locations were then matched to a tax parcel.

For private firms with 10 or more employees or with no coordinates provided, the location provided by ESD was verified by hand. Care was taken to ensure that buildings of sufficient size were located on the site to accommodate the stated number of employees. If discrepancies occurred, records were researched and fixed individually. It should be noted that for some businesses such as employment agencies, where the agency headquarters is not the place of business for all employees, employees were assigned to suitable locations.

Employment at government sites is generally reported by the main address of the employer. TRPC used information from Commute Trip Reduction surveys, local jurisdictions, and the state Department of Enterprise Services to break down employment by site for each agency or jurisdiction. Sites were located to individual tax-parcels for increased accuracy.

Some firms did not have valid addresses. Their employees were allocated along with the non-covered employment.

## **Non-Covered Employment**

In order to estimate total employment, estimates of non-covered employment were developed and allocated to suitable locations.

Allocations of non-covered employees fell into three major categories:

- Home-based – Census data provided some information on the number of people who reported a journey to work of less than 5 minutes. These employees were assumed, for the most part, to be home-based employees. Assuming that the majority of home-based employees tend to be self-employed or sole-proprietors, and that many of the part-time jobs are held by home-based employees, a proportion of the allocated employees were assigned to residential areas.
- Worksite-based – Using the assumption that the proprietors would tend to be located near their employees, some employees were located to existing covered employment worksites of the same employment industry. The employees were allocated evenly to all sites, the assumption being that those sites that tend to report a small number of employees were likely to be owned by a local proprietor rather than a national chain.
- Other – for some industries, employees were allocated to other likely sites. In the mining sector for instance, all the mines in the county were located and a few employees assigned to each site. For the agriculture sector, employment was allocated to farm and timber lands. In the retail and services sectors, employees were assigned to small stores or offices (depending on the sector) where small businesses with sole proprietors are likely located (Table 12).

**Table 12: Allocation to Other sites.**

<b>NAICS Sector</b>	<b>Other Sites for Allocation of Non-Covered Employment</b>
Agriculture	Farms and nurseries
Forestry and Fishing	Forest lands and other natural resources sites
Mining	Mines
Utilities	Community water systems; other utility sites
Construction	Employment sites with over 10 employees – assume tenant improvement related activities
Wholesale Trade	Other 1: Storage/industrial buildings greater than 1,000 square feet
Retail Trade	Other 2: Offices, stores, services, and shopping centers, smaller proportion to storage/industrial buildings
Information	Other 2 as above
Finance and Insurance	Other 2 as above
Real Estate, Rental and Leasing	Apartments; Real Estate Offices
Professional Services	Other 2 as above
Education Services	Other 3: Offices, stores, services, shopping centers and churches
Arts, Entertainment and Recreation	Other 4: Recreation buildings including bowling alleys, theaters, horse arenas, and skating rinks, plus golf courses. Smaller proportion distributed to offices, shopping centers, and services
Other Services	Other 5: Churches