

AGENDA

Forecast Advisory Committee Meeting 5

Tuesday, October 15, 2019

1:00 p.m. – 2:30 p.m.

Thurston Regional Planning Council
Conference Room A, 1st Floor
2424 Heritage Court SW, Suite A
Olympia, WA 98502-6031

- 1. 1:00 – 1:10 Introductions**
10 mins
- 2. 1:10 – 1:20 Recap**
10 mins
- 3. 1:20 – 2:20 Overview of Employment Allocation Methodology and Results**
60 mins
- 4. 2:20 – 2:30 Next Steps**
10 mins



MEMBERS:

- City of Lacey
- City of Olympia
- City of Rainier
- City of Tenino
- City of Tumwater
- City of Yelm
- Confederated Tribes of the Chehalis Reservation
- Nisqually Indian Tribe
- Town of Bucoda
- Thurston County
- North Thurston Public Schools
- Olympia School District
- Tumwater School District
- Intercity Transit
- LOTT Clean Water Alliance
- Port of Olympia
- PUD No. 1 of Thurston County

ASSOCIATE MEMBERS:

- Lacey Fire District #3
- Puget Sound Regional Council
- The Evergreen State College
- Thurston Economic Development Council
- Timberland Regional Library

MEMORANDUM

TO: Population and Employment Forecast Advisory Committee

FROM: Michael Ambrogi, Senior GIS Analyst

DATE: October 14, 2019

SUBJECT: 2045 Employment Forecast Allocations

PURPOSE

Review draft employment forecast allocations for cities and towns in Thurston County.

Summary:

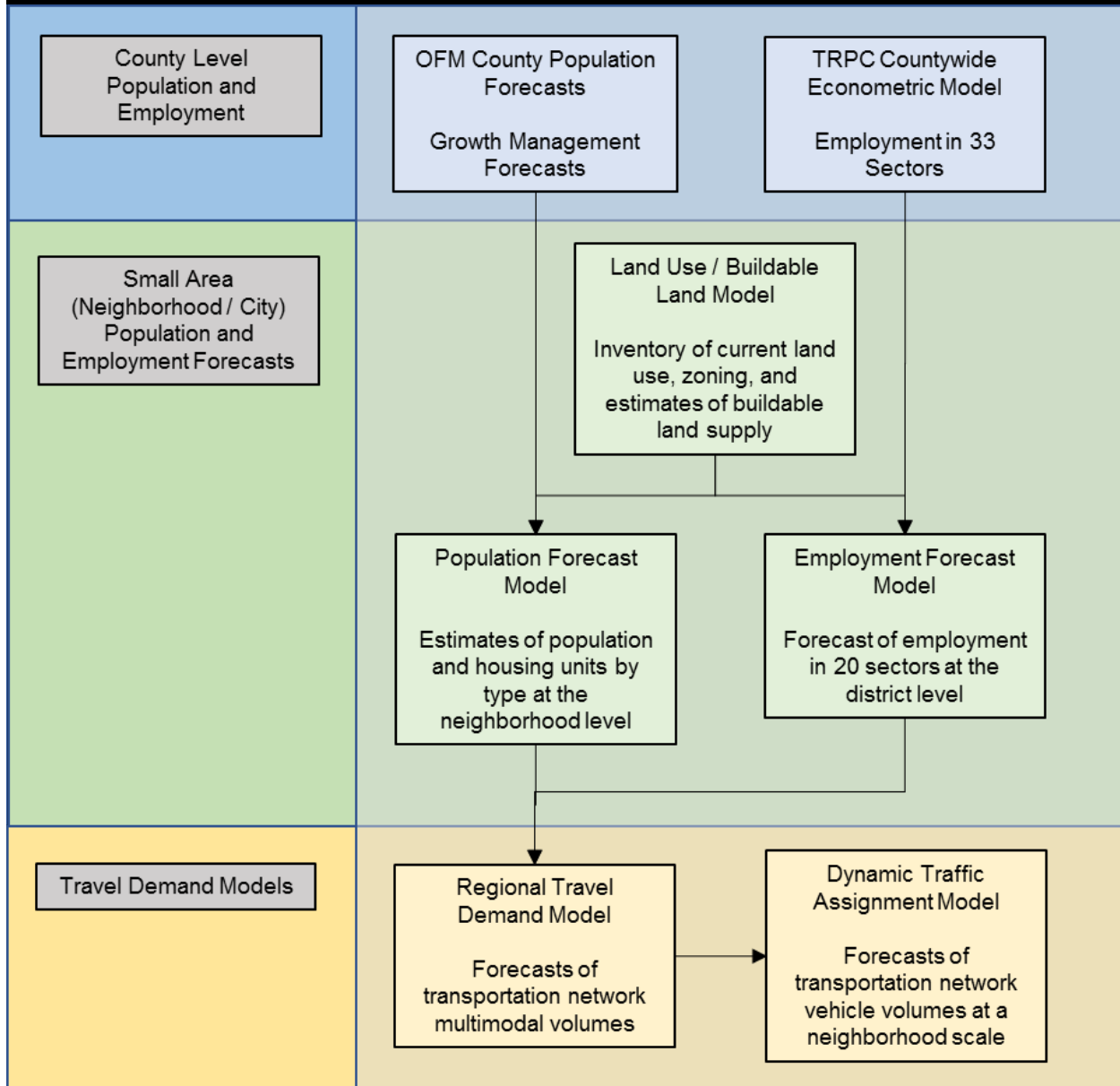
- TRPC is updating the population and employment forecast for Thurston County
- Council adopted a countywide employment forecast in March 2018.
- TRPC is currently updating small-area forecasts of employment, including forecast for urban areas and transportation analysis zones.
- 80 percent of employment growth between 2017 and 2045 is projected to be in the north county urban areas. 15 percent will be in the south-county communities. The remainder will be on tribal reservations or in the rural unincorporated county.
- 73 percent of employment will be in an urban center or corridor in 2045, up from 68 percent in 2017.



Marc Daily
Executive Director

2424 Heritage Court SW
Suite A
Olympia, WA 98502-6031
360-956-7575
360-956-7815 Fax
www.trpc.org

Figure 1: Overview of Population and Employment Forecast Update Process



BACKGROUND

TRPC's population forecast update is a three-step process:

1. Countywide Population Forecast: OFM presented the 2045 population forecast for Thurston County at the January 2018 Forecast Advisory Committee meeting. TRPC's Council adopted the population and employment forecast in March 2018.
2. Residential Capacity Model: TRPC updates its parcel-based residential capacity model, which estimates how many dwellings can be built and the developable area on each parcel.
3. Population and Employment Allocation: Estimate of where in the county population and employment growth will occur, based on the residential capacity estimates and recent trends.

The employment forecast adopted in March 2018 projects total employment in Thurston County will increase by about 1.3 percent per year, from 149,000 to 214,000 jobs. The largest industries in the county will continue to be services – notably education, health, and social services; and professional services – state government, and retail trade. The 2018 forecast differs from the previous forecast – adopted in 2015 – in a few ways. It increased the forecast for other services, wholesale trade, and health care and social services while decreasing the forecast for professional services and construction. The changes in the types of employment forecasted will affect where growth occurs within Thurston County.

This memo provides an overview of Step 3, the draft employment forecast for cities, towns, urban growth areas, and tribal reservations in Thurston County. The employment forecast allocations are the final step in the forecast process.

It should be noted that the employment forecast allocations are not a vision. They are a projection of existing trends, constrained by land supply, local plans, and development regulations. The forecast is best used as a tool for long range planning to better understand – and plan for – a likely future. Planning for the future also includes course corrections on a fairly regular basis.

The forecast model can be used as a tool to evaluate how the future may change if new strategies are implemented. In short, it can be used to evaluate the likely future (baseline forecast) with several alternative futures. The Sustainable Thurston planning process was an example of how the model was used to identify a preferred alternative to the baseline forecast, and the actions needed to achieve that vision.

The forecast should not be used to constrain decision making; it should be used to inform decision making.

EMPLOYMENT FORECAST SUMMARY

Overall, is 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.
- 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 would 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.

EMPLOYMENT ALLOCATION ASSUMPTIONS

TRPC has developed an Employment Allocation computer model to distribute employment growth to areas within the County.

The regional 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 sectors. In general:

1. Assume current employment (2017) will remain in the future unless there is specific information of relocation or business closure.
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.
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.

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.

Suggested Advisory Committee Discussion Point:

Are there any concerns with the overall assumptions?

EMPLOYMENT HIGHLIGHTS FOR SELECT SECTORS

Home-Based Employment

Home-based employment is currently estimated at 11 percent of total 2017 employment but varies by industry (Table 1). For certain industries, it was assumed that the home-based percentage would increase in 2045 as new technologies make it easier for people to work out of their homes. It is estimated that home-based employment will increase to around 13 percent of total employment by 2045. This is consistent with research that shows home-based employment has increased steadily since 1997¹. Home-based employment is allocated per dwelling unit.

Home-Based Employment

Home based employees are those who work out of their home or who report to work at residential locations. Examples include home health care workers, residential plumbers, or delivery services.

¹ 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, Economics and Statistics Administration.

Table 1: Home-Based Employment Estimates, 2017 and 2045

NAICS Industry	2017			2045		
	Total	Home	Percent	Total	Home	Percent
Agriculture, Forestry, Fishing, Mining	3,766	0	0.0%	3,700	0	0.0%
Utilities	240	0	0.0%	200	0	0.0%
Construction	7,423	1,620	21.8%	8,600	1,878	21.8%
Manufacturing	4,340	0	0.0%	5,100	0	0.0%
Wholesale Trade	3,187	0	0.0%	5,300	0	0.0%
Retail Trade	15,941	0	0.0%	22,100	0	0.0%
Transportation and Warehousing	3,296	1,396	42.4%	3,800	1,609	42.3%
Information*	1,550	356	23.0%	1,600	370	23.1%
Finance and Insurance*	4,576	1,261	27.6%	7,500	2,228	29.7%
Real Estate, Rental and Leasing	5,802	2,707	46.7%	7,800	3,639	46.7%
Professional Services*	16,620	2,924	17.6%	25,400	4,984	19.6%
Education Services	3,773	874	23.2%	5,579	1,292	23.2%
Health Care and Social Assistance*	17,259	2,858	16.6%	25,521	4,422	17.3%
Arts, Entertainment and Recreation*	1,705	222	13.0%	4,700	692	14.7%
Accommodation and Food Services	9,832	0	0.0%	12,900	0	0.0%
Other Services*	8,556	2,522	29.5%	21,100	6,958	33.0%
Government	40,869	0	0.0%	53,199	0	0.0%
Total	148,735	16,740	11.3%	214,099	28,072	13.1%

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

Suggested Advisory Committee Discussion Point:

Are there any concerns about the home-based employment assumptions?

Industrial Employment

Industrial jobs – including manufacturing, wholesale trade, and transportation and warehousing – 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.

In the short-term, industrial employment growth was allocated to sites where projects are in the pipeline or underway. Long-term growth was allocated primarily to developable or redevelopable lands with industrial zoning. Most industrial employment growth is in Hawk’s Prairie, Mottman Industrial Park, or near the 93rd Ave interchange.

Table 2: Industrial Employment Growth by Zone

City/UGA	Zone	Industrial Employment ¹			Developable Acres	
		2017	2045	Change	Vacant	Redev.
Bucoda	IND Industrial	0	0	0	0	0
Lacey	LI Light Industrial	1,070	2,200	1,130	310	120
Lacey	LI-C Light Industrial/Commercial	170	240	70	80	50
Olympia	I Industrial	10	130	120	100	0
Olympia	LI-C Light Industrial/Commercial	610	660	50	20	40
Rainier	IND Industrial	0	0	0	0	0
Tenino	I Industrial	0	10	10	10	0
Tumwater	ARI Airport Related Industry	720	750	30	10	0
Tumwater	HI Heavy Industrial	0	10	10	0	0
Tumwater	LI Light Industrial	2,380	3,200	820	870	200
Yelm	I Industrial	10	80	70	90	10
Yelm	LI Light Industrial	0	20	20	80	0
Grand Mound	LI Light Industrial	20	40	20	20	0
Grand Mound	PID Planned Industrial Park	40	120	80	100	10
County	RRI Rural Resource/Industrial	60	70	10	190	0
Non-industrial Zones ²		5,710	6,670	960	4,230	870
Total		10,800	14,200	3,400	6,110	1,300

Note: 1) "Industrial" includes manufacturing, wholesale trade, and transportation and warehousing. 2) Examples of industrial jobs that might occur in non-industrial zones include delivery services, taxi services, and residential moving services.

Suggested Advisory Committee Discussion Point:

Are any changes expected to where industrial growth is expected?

Retail Trade and Services

TRPC distributes retail and service employment growth in the urban areas to four zones, each serving a distinct market. These zones – shown in Figure 2 – 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.

Urban Centers and Corridors

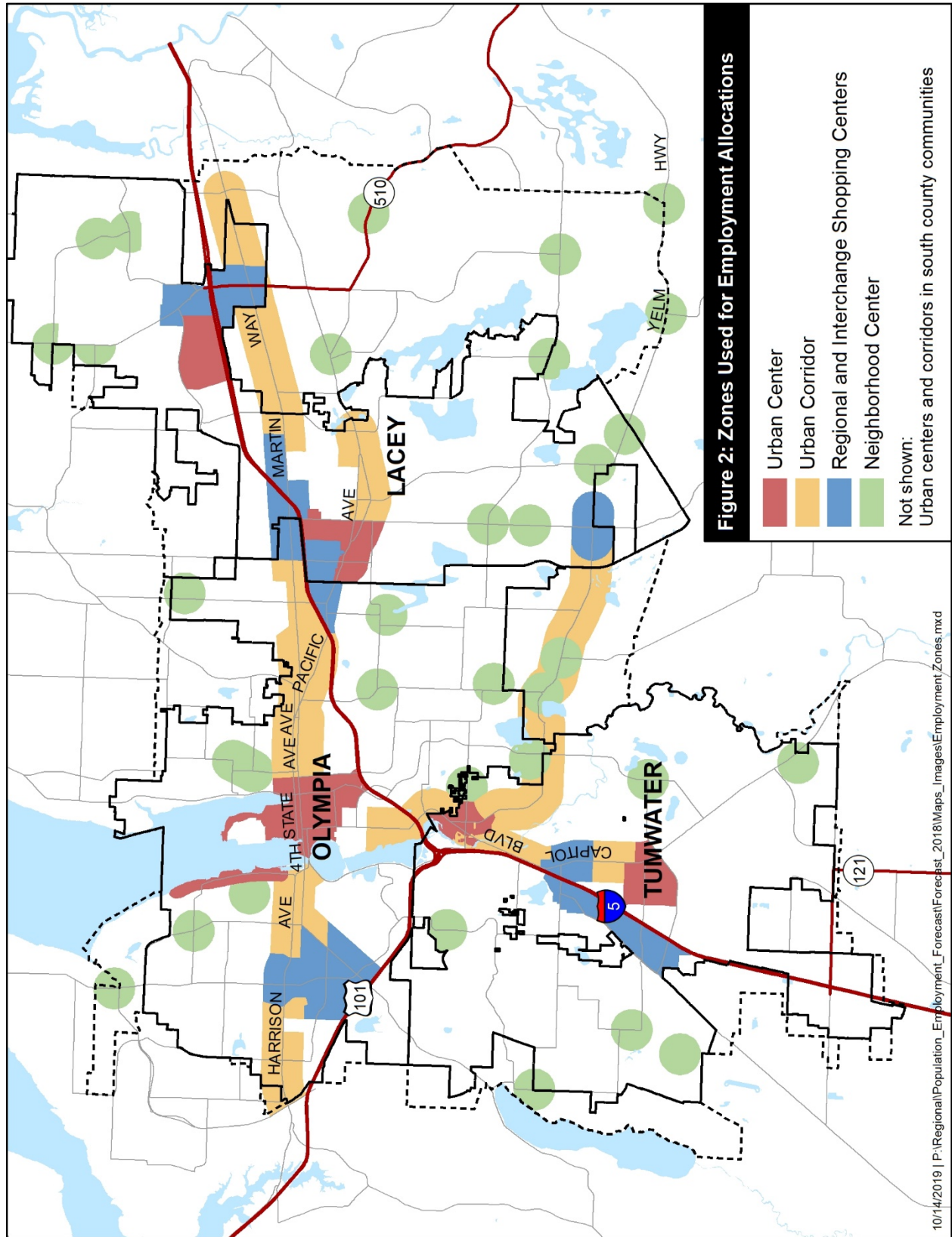
At the end of the 1950s, 65 percent of retail square footage was in urban and south county city and town centers. These areas included the downtowns of Olympia, Tumwater (by the Brewery), Tenino, Yelm, Bucoda, and Rainier. In subsequent decades, new retail construction slowed in these areas – ranging from two to eight percent of new retail space in the last 50 years.

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.

Table 3: Retail and Service Employment Growth

Area		Retail		Services		Retail & Services	
		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%	32%	35%
Regional Retail Centers	#	12,050	17,680	12,670	26,750	24,720	44,430
	%	47%	51%	21%	26%	28%	33%
Neighborhood Center	#	350	530	2,650	3,780	3,000	4,310
	%	1%	2%	4%	4%	3%	3%
Other	#	4,880	5,180	26,200	35,350	31,080	40,530
	%	19%	15%	43%	35%	36%	30%
Total		25,780	34,990	61,270	101,600	87,050	136,590



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.

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.

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 3).

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 (Table 4). When the housing density in a neighborhood is high enough – generally 1,000 units or eight units per 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.

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.

Table 4: 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
Total	71.8	15.1

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 sales are not evenly distributed among jurisdictions within Thurston County. Lacey, Olympia, Tumwater, and Yelm all attract retail sales from Bucoda, Rainier, Tenino, and the rural unincorporated county.

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.

Figure 2 shows taxable retail sale revenue compared to population. Table 5 compares retail sales and shopping trip destinations to the employment forecast.

Figure 2: 2018 Taxable Retail Sales and Population

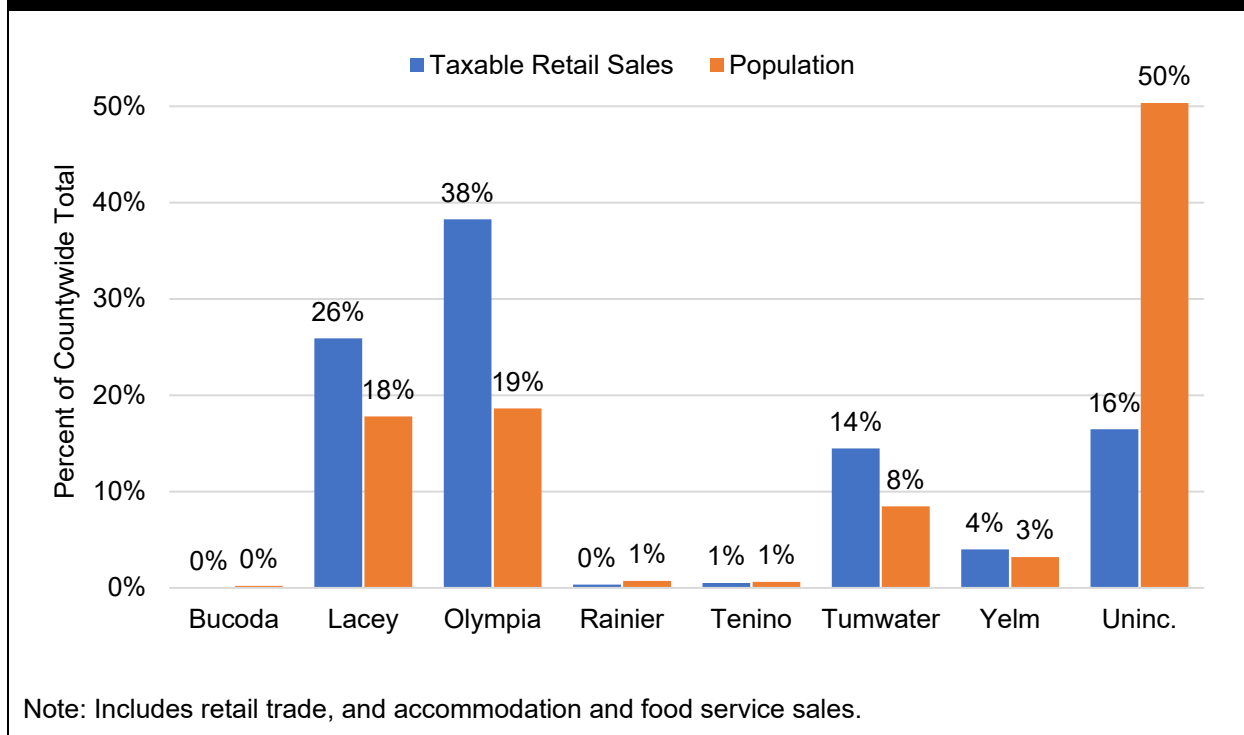


Table 5: Retail Sales, Trips, and Employment by UGA

Urban Area	Taxable Retail Sales ¹	Trips ²	Retail Jobs		Service Jobs	
			2017	2045	2017	2045
Bucoda	0.0%	-	0.1%	0.1%	0.1%	0.1%
Lacey	25.9%	34.2%	28.5%	31.2%	26.4%	28.9%
Olympia	38.3%	38.5%	42.3%	37.8%	43.2%	38.6%
Rainier	0.3%	0.0%	0.2%	0.2%	0.4%	0.4%
Tenino	0.5%	0.9%	0.8%	1.2%	0.6%	0.7%
Tumwater	14.5%	20.1%	14.2%	15.1%	11.2%	12.0%
Yelm	4.0%	2.7%	5.4%	7.6%	3.0%	7.6%
Grand Mound UGA	n/a	0.9%	3.7%	3.1%	0.4%	0.6%
Unincorporated	16.5%	2.8%	4.8%	3.8%	14.7%	11.1%
Thurston County	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Notes:

- 1) Taxable retail sales reported for incorporated area only.
- 2) From the 2013 Household Travel Survey. Includes shopping and eating-out trips by Thurston County households.

Suggested Advisory Committee Discussion Point:

Do you agree with the projected distribution of retail and service jobs between urban centers and corridors, regional retail centers, and neighborhood centers?

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 6 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.
- Growth in Grand Mound in recent years has been driven by investments by the Confederated Tribes of the Chehalis. Its proximity to Interstate 5 and sewer system will allow for more robust employment growth.
- 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.

Tribal Reservations

TRPC met with tribal staff to project employment on reservations (Table 6). A moderate amount of tribal services growth was projected for both tribes' casinos. Additional government growth was projected on the Nisqually reservation to account for new tribal services that are planned.

Table 6: Employment Growth (2017-2045) in South County Communities and Tribal Reservations

Sector	Bucoda	Rainier	Tenino	Grand Mound	Rochester	Chehalis	Nisqually
Manufacturing, Wholesale Trade, Utilities	0	0	110	90	0	0	0
Construction, Natural Resources	0	10	10	10	0	0	10
Services	70	200	320	320	150	220	500
Retail, Food Services, Accommodation	20	40	210	110	30	0	0
Government	0	10	10	280	10	0	100
K-12 Education	0	50	10	0	70	0	0
Total	90	310	670	810	260	220	610

Suggested Advisory Committee Discussion Point:

Are there any concerns about the assumptions for employment growth in south-county communities or tribal reservations?

Government Employment

State Government

With Olympia the State Capital, state government employment is a large employment sector in Thurston County. Total state agency employment growth in Thurston County is projected to be over 6,500 plus an additional 400 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 and Preferred Leasing areas for state offices. Preferred Development Areas (PDAs) are areas where state ownership is preferred by local agencies. Preferred Leasing Areas (PLAs) are areas where state leasing is preferred by local agencies.

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

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).

Source: <https://bit.ly/2VqNkVq>

- The Evergreen State College, located in unincorporated Thurston County,
- Maple Lane Correctional Facility, located in Grand Mound, and
- 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 state offices. 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.

County and Local Government

Employment growth at cities and towns, school districts, fire districts, and other local agency worksites is assumed to be proportional to the population growth of the district they serve. Where information was available, employment was allocated to specific sites identified by school districts for future schools. Notable changes in local government employment include:

- Relocation of the County Courthouse from west Olympia to Downtown Olympia. Private-sector employment was assumed to replace the vacated building.

Suggested Advisory Committee Discussion Point:

Are there any concerns about the allocation of state, county, or local government employment?

ENDANGERED SPECIES 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 is the most extensive throughout the County.

Several jurisdictions – including Thurston County, and Tumwater and the Port of Olympia – are developing Habitat Conservation Plans. When completed and approved by the U.S. Fish and Wildlife Service, the HCP will provide a process for mitigating the impacts of common development activities on listed species. Mitigation will likely be in the form of land conservation in key species habitat, which is mostly in the rural unincorporated County. Since most employment growth is in the urban areas, the employment forecast allocations were not adjusted to account for endangered species listings. Residential land capacity in the rural unincorporated County was reduced to account for mitigation.

The exception is the Port of Olympia facilities in Tumwater, which contain extensive Mazama pocket gopher habitat. There, the Port is already developing a joint HCP with the City of Tumwater to mitigate future impacts of development.

Some activities related to employment growth may be outside the scope of the jurisdictions' HCPs. Here, property owners would likely have to develop their own HCP. An example is Kaufman Real Estate, LLC which developed an HCP covering activities on 13 of commercial and industrial properties.

Suggested Advisory Committee Discussion Point:

Are there any concerns about the assumptions for endangered species?

NEXT STEPS

The employment forecast allocations will be presented to TRPC's Council on November 1, 2019 for first review. Council will tentatively adopt the forecast on December 6.

Table 7: 2017 Employment by Urban Area

Industry	Bucoda UGA	Lacey UGA	Olympia UGA	Rainier UGA	Tenino UGA	Tumwater UGA	Yelm UGA	Grand Mound UGA	Chehalis Res.	Nisqually Res.	Rural Unincorp.	Total
Agriculture, Forestry and Fishing, Mining	0	530	150	20	0	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
Total	90	34,160	60,630	530	930	27,030	4,650	1,420	790	1,330	17,180	148,700

Note: Urban area includes incorporated and unincorporated areas. Numbers may not add due to rounding.

Table 8: 2045 Employment by Urban Area

Industry	Bucoda UGA	Lacey UGA	Olympia UGA	Rainier UGA	Tenino UGA	Tumwater UGA	Yelm UGA	Grand Mound UGA	Chehalis Res.	Nisqually Res.	Rural Unincorp.	Total
Agriculture, Forestry and Fishing, Mining	0	520	140	20	0	330	130	30	60	0	2,470	3,700
Utilities	0	10	130	0	0	20	0	0	0	0	40	200
Construction	10	2,370	1,910	40	30	1,730	400	50	10	60	1,990	8,600
Manufacturing	0	1,070	1,350	10	20	2,130	60	80	0	0	370	5,100
Wholesale Trade	0	1,800	980	10	30	1,760	200	90	0	0	430	5,300
Retail Trade	20	7,180	8,160	40	240	3,560	1,740	310	0	0	840	22,100
Transportation and Warehousing	10	1,210	760	10	170	750	100	40	0	0	740	3,800
Information	0	360	810	10	30	110	100	10	0	0	160	1,600
Finance and Insurance	10	2,190	2,920	30	70	950	650	40	0	0	630	7,500
Real Estate, Rental and Leasing	10	2,510	2,500	60	70	980	480	20	0	10	1,160	7,800
Professional Services	30	8,170	8,950	120	210	3,330	1,850	120	0	20	2,600	25,400
Education Services	0	1,810	2,290	20	30	500	320	20	0	0	580	5,600
Health Care and Social Assistance	20	6,220	13,230	80	120	2,580	1,580	70	0	20	1,610	25,500
Arts, Entertainment and Recreation	10	1,490	1,460	10	20	860	550	20	0	0	270	4,700
Accommodation and Food Services	20	3,740	5,060	40	170	1,720	930	760	0	0	470	12,900
Other Services	30	6,470	7,070	100	120	2,860	2,220	150	0	20	2,060	21,100
Federal Government	0	450	1,120	20	10	170	60	0	0	0	70	1,900
State Government	0	3,590	16,010	0	0	10,330	0	280	0	0	200	30,400
State Education	0	40	670	0	0	10	0	0	0	0	1,080	1,800
Local and Tribal Government	0	1,100	3,420	20	30	1,720	290	0	0	610	490	7,700
Local Education	0	2,580	2,140	190	220	1,440	930	0	0	0	1,520	9,000
Tribal Enterprise	0	100	0	0	0	0	0	140	940	1,190	30	2,400
Total	180	54,990	81,080	830	1,590	37,840	12,580	2,220	1,020	1,940	19,810	214,100

Note: Urban area includes incorporated and unincorporated areas. Numbers may not add due to rounding.

Table 9: Comparison of 2045 Forecast to 2040 Forecast

Urban Area		Total Employment							Percent of Total Employment						
		Industrial	Const.	Services	Retail	Gov.	K12 Edu.	Total	Industrial	Const.	Services	Retail	Gov.	K12 Edu.	Total
Bucoda	New	10	10	120	40	0	0	180	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.1%
	Old	10	20	130	30	10	0	200	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.1%
Lacey	New	4,090	2,890	29,320	10,920	5,180	2,580	54,990	28.4%	23.5%	28.9%	31.2%	12.4%	28.6%	25.7%
	Old	3,510	3,810	24,190	9,970	5,390	3,020	49,870	28.3%	24.5%	26.6%	29.0%	14.6%	31.6%	25.0%
Olympia	New	3,220	2,050	39,230	13,210	21,220	2,140	81,080	22.4%	16.7%	38.6%	37.7%	50.8%	23.7%	37.9%
	Old	2,860	3,640	36,480	13,670	18,510	2,020	77,180	23.1%	23.4%	40.1%	39.8%	50.1%	21.1%	38.6%
Rainier	New	30	60	430	80	30	190	830	0.2%	0.5%	0.4%	0.2%	0.1%	2.1%	0.4%
	Old	40	70	350	90	30	190	770	0.3%	0.4%	0.4%	0.3%	0.1%	2.0%	0.4%
Tenino	New	220	40	670	410	40	220	1,590	1.5%	0.3%	0.7%	1.2%	0.1%	2.4%	0.7%
	Old	120	110	650	330	40	260	1,510	1.0%	0.7%	0.7%	1.0%	0.1%	2.7%	0.8%
Tumwater	New	4,660	2,060	12,180	5,290	12,220	1,440	37,840	32.4%	16.7%	12.0%	15.1%	29.3%	16.0%	17.7%
	Old	3,790	2,390	11,470	5,330	10,470	1,690	35,130	30.6%	15.3%	12.6%	15.5%	28.3%	17.7%	17.6%
Yelm	New	370	520	7,750	2,670	350	930	12,580	2.6%	4.2%	7.6%	7.6%	0.8%	10.3%	5.9%
	Old	440	1,150	6,300	2,990	190	1,090	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	0	2,220	1.5%	0.6%	0.6%	3.1%	0.7%	0.0%	1.0%
	Old	130	90	350	870	210	0	1,640	1.0%	0.6%	0.4%	2.5%	0.6%	0.0%	0.8%
Chehalis Res.	New	0	70	950	0	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	0	1,560	0.0%	1.0%	1.5%	0.0%	0.0%	0.0%	0.8%
Nisqually Res.	New	0	60	1,260	0	610	0	1,940	0.0%	0.5%	1.2%	0.0%	1.5%	0.0%	0.9%
	Old	10	100	1,530	0	220	0	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	1,520	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	1,290	17,820	11.9%	25.9%	8.9%	3.1%	5.2%	13.5%	8.9%
Total	New	14,390	12,310	101,600	35,000	41,770	9,020	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	9,560	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 was adopted in 2015 and extended the forecast horizon to 2040. Urban Area includes incorporated and unincorporated area. Employment sectors shown include:
Industrial..... Manufacturing, Wholesale Trade, and Utilities
Const..... Construction, Agricultural, Forestry and Fishing, and 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