Buildable Lands Report For Thurston County

2021

Thurston Regional Planning Council
June 2021

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TRPC's mission is to "Provide Visionary Leadership on Regional Plans, Policies, and Issues."
To Support this Mission:

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

2021 MEMBERSHIP
THURSTON REGIONAL PLANNING COUNCIL

Government Jurisdiction	Name of Representative
City of Lacey	Malcolm Miller, Councilmember
City of Olympia	Clark Gilman, Councilmember
City of Rainier	Dennis McVey, Councilmember
City of Tenino	Cutter Copeland, Councilmember
City of Tumwater	Debbie Sullivan, Councilmember
City of Yelm	JW Foster, Mayor
Confederated Tribes of the Chehalis Reservation	Amy Loudermilk, Staff
Nisqually Indian Tribe	David Iyall, Tribal Treasurer
Town of Bucoda	Alan Carr, Mayor
Thurston County	Gary Edwards, County Commissioner
North Thurston Public Schools	Melissa "Mel" Hartley, School Board Member
Olympia School District	Hilary Seidel, School Board Member
Tumwater School District	Mel Murray, Staff
Intercity Transit	Carolyn Cox, Authority Member
LOTT Clean Water Alliance	Cynthia Pratt, Board Member
Port of Olympia	EJ Zita, Port Commissioner
PUD No. 1 of Thurston County	Chris Stearns, PUD Commissioner
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Thurston County Economic Development Council	Michael Cade, Executive Director
Lacey Fire District #3	Gene Dobry, Commissioner
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Timberland Regional Library	Cheryl Heywood, Library Director
The Evergreen State College	Scott Morgan, Director of Sustainability
Thurston Conservation District	Helen Wheatley, Conservation District Board

Chair	Vice Chair	Secretary
JW Foster	Cynthia Pratt	Clark Gilman

Executive Director
Marc Daily

Buildable Lands Advisory Committee

Name	Organization
Bob Jacobs	Citizen Representative
Loretta Seppanen	Citizen Representative
Helen Wheatley	Citizen Representative
Ryan Andrews	City of Lacey
Tim Smith	City of Olympia
Jim Gibson	City of Rainier
Dan Penrose	City of Tenino
David Ginther	City of Tumwater
Grant Beck	City of Yelm
Amy Loudermilk	Confederated Tribes of the Chehalis Reservation
Rob LaFontaine, Mike Burnham	Intercity Transit
Jason Robertson	Jason Robertson & Co.
Tyle Zuchowski	LOTT Clean Water Alliance
Heidi Thomas	Nisqually Indian Tribe
Jason Gano, Erin Hall	Olympia Master Builders
Clarita Mattox	Port of Olympia
Zach Kosturos	Prime Locations
Maya Teeple	Thurston County
David Schaffert	Thurston County Chamber
Mark Kitabayashi	Thurston County Realtors
Gene Angel	Thurston Economic Development Council

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EXECUTIVE SUMMARY

Background

Since 1997, the Washington State Growth Management Act (GMA) has required the state's fastest growing counties to periodically review and evaluate development trends to ensure consistency with GMA, countywide planning policies, and comprehensive plans (RCW 36.70A.215). This evaluation is known as the "Buildable Lands Report." Thurston Regional Planning Council has issued four reports for Thurston County: in 2002, 2007, 2014, and this report, the 2021 Buildable Lands Report.

Growth Management Act Goals

The Buildable Lands legislation requires counties to answer two key questions regarding GMA's land use goals in their Buildable Lands Reports:

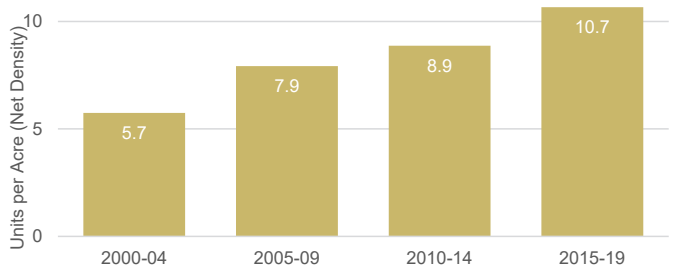
- **Are we achieving urban densities for new development in our urban areas?** The Thurston County Buildable Lands Report also evaluates densities in rural areas.
- **Is there sufficient land in our urban areas for 20 years of growth?** The report includes an evaluation of land supply for both residential and commercial/industrial development.

If the report finds that Thurston County is not meeting these goals, cities and the County are required to identify "reasonable measures" that would bring development trends into alignment with countywide planning policies and comprehensive plans.

Based on the findings of Volume I of this report (GMA Goals), Thurston County's development trends are consistent with GMA's land use goals and reasonable measures are not necessary.

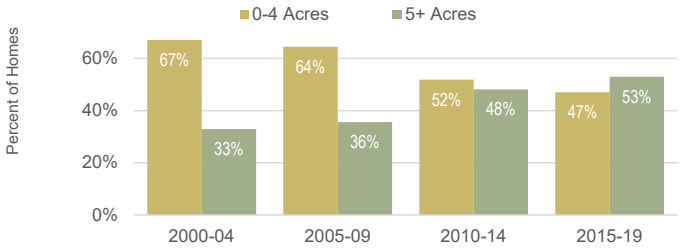
Are we achieving urban densities in our urban areas?

Yes. Achieved densities in urban areas are more than 4 housing units per acre and increasing.



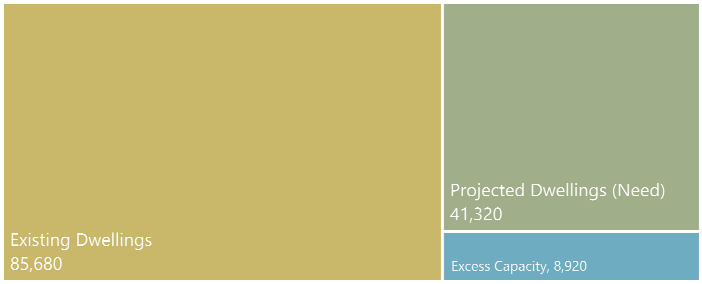
Are we achieving rural densities in our rural areas?

Yes. More rural homes are built on larger lots compared to when GMA was passed.



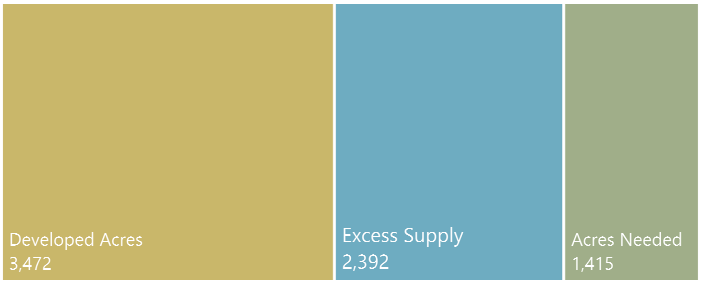
Is there sufficient capacity in our urban areas for 20 years of population growth?

Yes. Capacity — including a reasonable market factor — exceeds supply by 18 percent.



Is there sufficient land in our urban areas for 20 years of commercial/industrial growth?

Yes. There is sufficient vacant and redevelopable land for commercial and industrial development.



Regional Goals

In 2013, Thurston Regional Planning Council adopted *Creating Places — Preserving Spaces: A Sustainable Development Plan for the Thurston Region* (Sustainable Thurston). The plan was the culmination of a two-year effort to envision how the region will "look, function, and feel" in 2035.

Sustainable Thurston included twelve priority goals, two of which address land use and development patterns in urban and rural areas:

- **Create vibrant centers, corridors, and neighborhoods while accommodating growth.**
  Target: By 2035, 72 percent of all (new and existing) households in our cities, towns, and unincorporated urban growth areas will be within a half-mile (comparable to a 20-minute walk) of an urban center, corridor, or neighborhood center with access to goods and services to meet some of their daily needs.

- **Preserve environmentally sensitive lands, farmlands, forest lands, prairies, and rural lands and develop compact urban areas.**
  Target: Between 2010 and 2035, no more than five percent of new housing will locate in the rural areas, and 95 percent will be within cities, towns, unincorporated urban growth areas, and tribal reservations. Rural areas are defined as outside of the cities, towns, unincorporated urban growth areas, and tribal reservations.

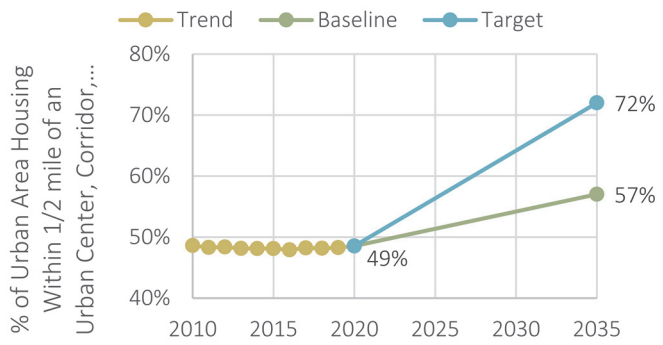
While Sustainable Thurston falls outside of GMA's planning framework — and failing to meet its goals does not require Thurston County jurisdictions to identify and adopt reasonable measures — our analysis shows that we are not on track to meet two of the land use targets associated with the Sustainable Thurston Priority goals.

Because the region is not on track to meet the more ambitious targets identified in Sustainable Thurston (Volume II), the report includes recommended strategies for the cities and county to include as part of their periodic comprehensive plan updates due in 2025.

Meeting the Sustainable Thurston targets will require changes to expected development patterns in both the urban and rural areas. We will both need to accommodate more growth in urban areas and limit conversion of natural resource lands in rural areas. The recommendations recognize this interdependence and include strategies for both urban and rural areas. The Thurston region will benefit from its long history of collaborative, multijurisdictional planning to achieve this shared vision.

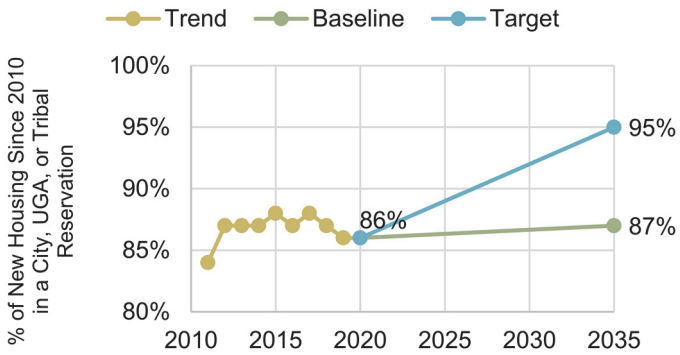
Are we on track to concentrate 72 percent of urban area housing within city centers, corridors, and neighborhoods?

No. The proportion of development in urban centers and corridors is projected to increase substantially over the next fifteen years, but not enough to meet the target under current regulations.



Are we on track to see no more than five percent of new housing locate in rural areas between 2010 and 2035?

No. While the majority of new development will continue to be in urban areas, approximately 13 percent of new housing is projected to locate in rural areas under current trends.



INTRODUCTION

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1. BUILDABLE LANDS OVERVIEW

Since the late 1970s, Thurston Regional Planning Council (TRPC) has provided estimates of the buildable land supply in Thurston County. During this time, Thurston County has been one of the fastest growing counties in Washington State. Understanding the land supply gives indications on where projected growth can and is likely to locate, and how much land is set aside for other uses such as environmental protection, parks and recreation, agriculture, and forestry.

In 1990 the state Growth Management Act (GMA) was passed, creating the current framework for planning in Washington State. GMA requires local cities, towns, and counties to develop detailed plans — called Comprehensive Plans — on how they will accommodate growth. Comprehensive Plans must be consistent with a common policy framework, called the Countywide Planning Policies, adopted by each county. Thurston County's Countywide Planning Policies, adopted in 1992 and amended in 2002 and 2015, lay out how Thurston County is to grow as a region.

The state legislature added a review and evaluation provision to the GMA in 1997. It affects seven western Washington counties (Clark, King, Kitsap, Pierce, Snohomish, and Thurston, with Whatcom added in 2017) and the cities and towns within them. The affected counties are required to establish a review and evaluation program, commonly referred to as the "Buildable Lands Program." Each county's program has five components:

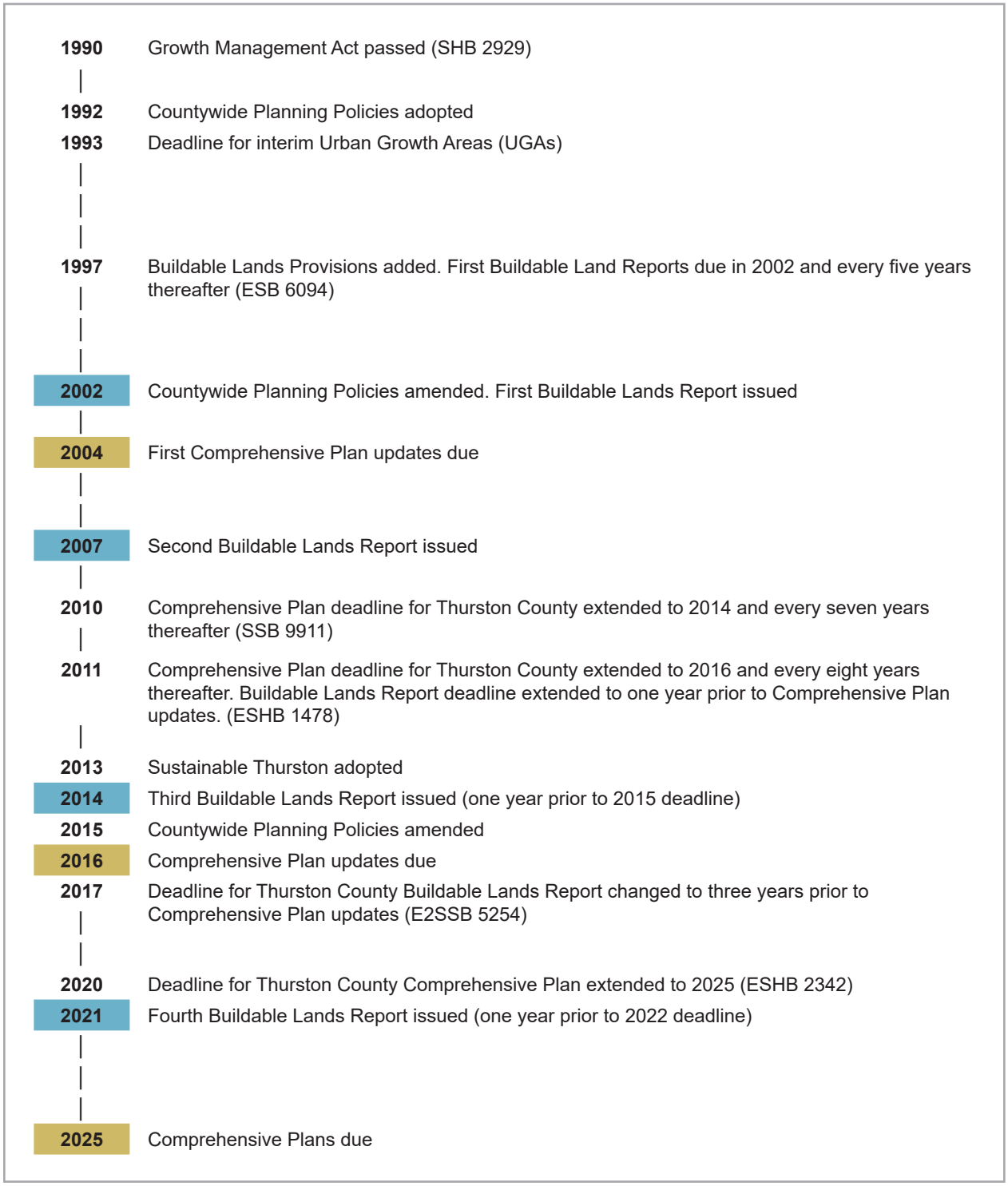
- **A Framework for Program Implementation and Administration.** Thurston County's Countywide Planning Policies identify who is responsible for program administration and how disputes are resolved.
- **Comprehensive Plans and Development Regulations.** City, town, and county development regulations must be consistent with their Comprehensive Plans, which in turn must be consistent with the Countywide Planning Policies.
- **Annual Data Collection.** Thurston Regional Planning Council collects data from jurisdictions on an annual basis to support the Buildable Lands Program.
- **Data Evaluation.** In Thurston County, Thurston Regional Planning Council is responsible for reviewing land supply and achieved densities — known as the Buildable Lands Report — to ensure that the urban areas are large enough to accommodate 20 years of projected growth and that adopted targets are being achieved.
- **Reasonable Measures.** In Thurston County, the County and cities are responsible for implementing reasonable measures to reduce the differences between actual growth patterns and targets contained in comprehensive plans and countywide planning policies.

Thurston Regional Planning Council was asked to develop the Buildable Lands Report for Thurston County based on its long history of monitoring land supply. Three reports have been issued to date: in 2002, 2007, and 2014. This report — the fourth — is due to the Dept. of Commerce no later than June 30, 2022. This Buildable Lands Report will inform updates to city and county Comprehensive Plans due in 2025.

The Buildable Lands Report must answer three key growth-related questions. The first is whether residential development in the urban growth areas is occurring at the densities envisioned in local Comprehensive Plans. The second is whether there is an adequate supply of land in the urban growth areas for the projected population growth. The third is whether there is adequate supply of land in the urban growth areas for the projected employment growth. The Thurston County Buildable Lands Report also provides information on rural growth patterns.

In addition, the Buildable Lands Report identifies reasonable measures, or actions, to reduce the difference between actual growth patterns and targets contained in local comprehensive plans or the countywide planning policies.

Figure 1-1: Growth Management Act Timeline in Thurston County



Methodology and Data Sources

The Growth Management Act gives counties wide discretion in how they evaluate buildable land supply. Thurston County's methodology is documented as part of TRPC's population and employment update (www.trpc.org/236). Both the forecast update and land supply evaluation rely on a number of data sources.

Data Sources

Annual Data Collection

- Residential and commercial building permits from Bucoda, Lacey, Olympia, Rainier, Tenino, Yelm, Thurston County, the Confederated Tribes of the Chehalis Reservation, and the Nisqually Indian Tribe
- Approved subdivisions (long plats) from the Thurston County Auditor's office
- Residential projects in the development pipeline (application stages) from Bucoda, Lacey, Olympia, Rainier, Tenino, Thurston County, Yelm, the Confederated Tribes of the Chehalis Reservation, and the Nisqually Indian Tribe
- Building and land valuations from the Thurston County Assessor's office
- Parcels and GIS data layers from the Thurston Geodata Center
- Annexations

Other Sources of Data

- Covered employment from the Washington Employment Security Department
- Decennial Census and American Community Survey data from the U.S. Census Bureau
- Aerial photography
- Zoning, jurisdictional boundaries, and planning areas from local jurisdictions
- Critical Area designations from local jurisdictions

Population and Employment Forecast

- Thurston Regional Planning Council

Planning Horizon

The Buildable Lands Report is required to determine if there is sufficient land suitable for development to accommodate 20 years of projected population and employment growth. This report uses a 2040 planning horizon, with a 2020 baseline.

Uncertainties

The Buildable Lands Report — like TRPC's population and employment forecasts — represents average conditions. Average conditions include normal economic cycles, but not major downturns such as the Great Recession or Great Depression. They also exclude major natural disasters, such as an earthquake or the COVID-19 pandemic. TRPC will continue to monitor the effects of the pandemic on Thurston County's economy and housing market and update its forecasts as needed.

COVID-19

The data included in the 2021 Buildable Lands Report was compiled prior to the COVID-19 pandemic. TRPC will monitor the effects of the pandemic on land supply in future updates to the Population and Employment Forecast and Buildable Lands Report.

Related Goals and Policies

Related Growth Management Act (GMA) Goals

1 Urban growth. Encourage development in urban areas where adequate public facilities and services exist or can be provided in an efficient manner.

2 Reduce sprawl. Reduce the inappropriate conversion of undeveloped land into sprawling, low-density development.

Related Countywide Planning Policies

2. 1 Urban growth within Thurston County will occur only in designated urban growth areas. The urban growth areas will be periodically reviewed.

3. 1 Concentrate development in urban growth areas and protect rural areas […].

11.1a The State Office of Financial Management (OFM) growth management planning population projections will be used as the range of population to be accommodated for the coming 20 years.

11.1b Within the overall framework of the OFM population projections for the County, Thurston Regional Planning Council will develop countywide and smaller area population projections, pursuant to RCW 36.70A.110 and based on current adopted plans, zoning and environmental regulations and buildout trends.

11.1c A review and evaluation program pursuant to RCW 36.70A.215 ("Buildable Lands Program") will be established. The evaluation and subsequent updates required under the Buildable Lands Program will follow timelines in the RCWs, subject to availability of State funding. This evaluation may be combined with the review and evaluation of county and city comprehensive land use plans and development regulations required by RCW 36.70A.130(1), and the review of urban growth areas required by RCW36.70A.130(3).

Recent Changes Not Reflected in Report

The Buildable Lands Report is based on data collected as part of TRPC's Population and Employment forecast, completed in 2019. The forecast is based on the jurisdictions' plans and regulations in place as of 2017. Appendix I provides a summary of changes to TRPC's land use model to account for development between 2017 and 2020 that were not included in this analysis.

In addition, the following plans or regulations were completed after the forecast was completed. All could affect the amount of developable land in Thurston County but due to their timing, their potential impacts — if any — are not evaluated in this report.

- **Watershed Planning:** Thurston County is working on watershed plans to mitigate the impacts of future permit exempt-well withdrawals as part of the 2018 Streamflow Restoration Act. The plans are expected to reduce some of the uncertainty around rural water availability at the time the forecast was completed. Water availability is discussed in more detail on page 61.
- **Habitat Conservation Plans:** Several Habitat Conservation Plans (HCPs) are underway to address future impacts of development on threatened and endangered species in Thurston County, including the Thurston County HCP and Bush Prairie HCP (Page 45).
- **Middle-Density Housing Amendments:** The state Growth Management Hearings Board issued an order of invalidity on the City of Olympia's "Missing Middle" housing ordinance after the forecast was completed. Since then, the Cities of Lacey, Olympia, and Tumwater have updated their housing regulations to allow for a wider range of middle-density housing types, such as duplexes, triplexes, cottage housing, and accessory dwellings.
- **Rural Accessory Dwelling Units:** Thurston County adopted regulation allowing for accessory dwelling units in the rural unincorporated County. Family member units are still allowed.
- **Climate Change Action:** Thurston County and the Cities of Lacey, Olympia, and Tumwater completed the *Thurston County Climate Mitigation Plan*. The plan includes housing and land use strategies – among others – that would reduce the region's greenhouse gas emissions.

Future updates to TRPC's forecast and to the Buildable Lands report will address the impacts of these recent changes — if any — on buildable land in Thurston County.

Thurston County Land Use

Thurston County is approximately 730 square miles in area, including lakes and other land-locked water bodies. About 13 percent of total land area is in an urban area – either an incorporated city or town or an unincorporated urban growth area. Under GMA, these urban areas are designated for most of Thurston County's future development. Five square miles are under the jurisdiction of the Confederated Tribes of the Chehalis Reservation or the Nisqually Indian Reservation. The two Tribes determine the amount and type of development within their lands. The remaining 629 acres are in the rural unincorporated county. These areas are designated for natural resource use (timber and farmland) and low-density residential development.

Thurston County will continue to see new development over the next 20 years. How much, the type, and where it occurs will depend on the current land use, zoning, environmental constraints, and market factors. Table 1-1 shows the types of development that can be expected across five areas in Thurston County.

Table 1-1: General Land Use Categories in Thurston County

	Percent of Land Area		
Type of Area	**Urban**	**Rural / Tribal**	**Typical Development Pattern**
Residential Zoning Single-family, multifamily, manufactured home	42%	17%	Primarily Residential Vacant and Infill Development
Mixed-use Zoning Downtowns, centers, and corridors	11%	0%	Commercial or Residential Vacant, Infill, and Redevelopment
Nonresidential Zoning Commercial, industrial, government, or institutional	13%	5%	Commercial or Industrial Vacant, Infill, and Redevelopment
Natural Resource Lands[1] Farm or timberland, including lands with cultivated or pasture land covers	9%	41%	Residential or Natural Resource Vacant and Infill Development
Critical Areas Critical areas and their buffers, excluding waterbodies	26%	37%	Development allowed only in limited instances

[1]Includes land in LTA, LTF, or NA zones, parcels in a current use tax program, and areas with cultivated or pasture land covers from the 2016 NOAA C-CAP imagery.

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VOLUME I

GROWTH MANAGEMENT ACT GOALS

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2. ACHIEVED RESIDENTIAL DENSITIES

Are urban densities being achieved in urban growth areas?

Description

Achieved residential density is the measure of how many homes, condos, or apartment complexes have been built per acre of land. While the Growth Management Act does not specify a minimum density, Thurston County has historically used four or more dwellings per net acre as a rule of thumb for urban densities.

Why is this Important?

The south Puget Sound is one of the fastest growing areas in the state. In 2000, 20 years ago, approximately 207,000 people were living in Thurston County. By 2020, the Office of Financial Management estimated this number had risen to over 291,000. This is a gain of around 84,000 people. We're expecting another 79,000 people by 2040, or within the next 20 years. Our growth rate is high because of our stable economy, high quality of life, and lower cost of living compared to the central Puget Sound region.

As of 2018, there were an estimated 157,300 jobs in Thurston County. Another 39,000 are expected by 2040. These jobs will attract workers and their families. We're also expecting an increasing number of people to move to Thurston County to commute to jobs in the central Puget Sound region, and to large job centers such as Joint Base Lewis-McChord. In addition, Thurston County is a destination for retirees seeking lower costs of living compared to other western Washington and west coast counties. Finally, Thurston County's colleges and university attract students from outside the area.

This means that one quarter of the jobs and housing that will exist in 2040 will be created between now and then, having a tremendous impact on our built environment.

Monitoring achieved density tells us how compact or spread out our communities are growing and if we are using land, as a resource, wisely. Compact urban growth — and limited sprawl — is a goal of the Growth Management Act and Thurston County's Countywide Planning Policies. Our community has placed a value on compact urban growth because it:

- Makes more efficient use of public investments in urban areas such as water, sewer, roads, and transit service
- Reduces the amount of impervious surface and runoff pollution for each new dwelling
- Limits development pressure on farmland, timberlands, and critical habitat in rural areas
- Increases the number of people who have access to transit services and decreases the distances people need to travel for work, school, and other trips

Increasing the density of new development will help achieve our community's vision of concentrating new development in the urban areas and creating neighborhoods where people can live, work, shop, learn, and play without a car. It will also help achieve our goals of preserving natural resources and rural character in the remainder of the county.

How is it Measured?

Achieved residential density is measured by comparing the number of new single-family homes and apartments against lot size. Achieved density is calculated using the net density of new development. Public roads, open space, and critical areas and buffers are removed from the land area calculations.

KEY DEFINITIONS

Net Density measures the number of homes over the total area of the subdivision or development, after subtracting for critical areas and buffers, open space, and rights-of-way.

This is what we call "Achieved Residential Density."

Gross Density measures the number of homes over the total area of the subdivision or development.

Findings

Urban densities are being achieved in Thurston County's Urban Growth Areas.

- Overall, Thurston County urban areas are achieving urban densities greater than the rule of thumb threshold of four dwelling units per acre.
- With the exception of Grand Mound, which saw a small number of new homes permitted, all Thurston County urban areas with sewer service are achieving urban densities. For health code reasons, densities must be lower than four units per acre when sewer service is not available.
- Achieved densities are higher within incorporated city limits than the unincorporated urban growth area.

The achieved density in the unincorporated urban growth areas of Yelm, Tenino, and Rainier were not measured, as these areas are not zoned for urban growth. The assumption is that once these areas are annexed, they will be rezoned for urban densities. The current 1 unit per 5-acre zoning acts as a placeholder until that time.

Figure 2-1: Achieved Density in Thurston County's Urban Areas

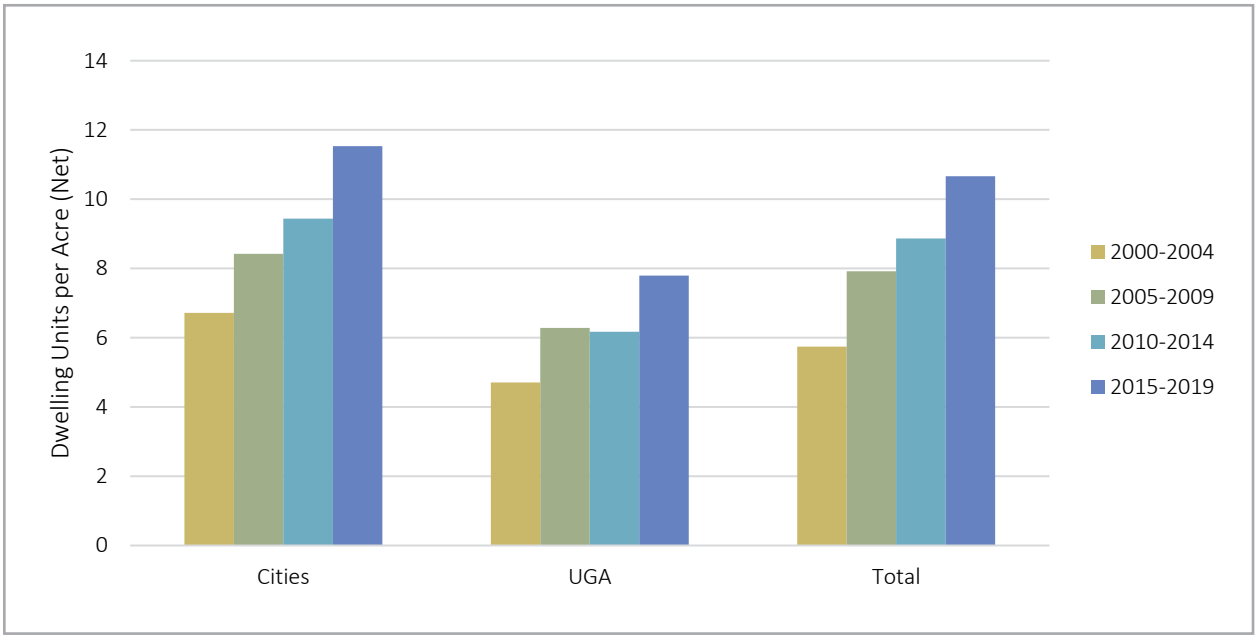
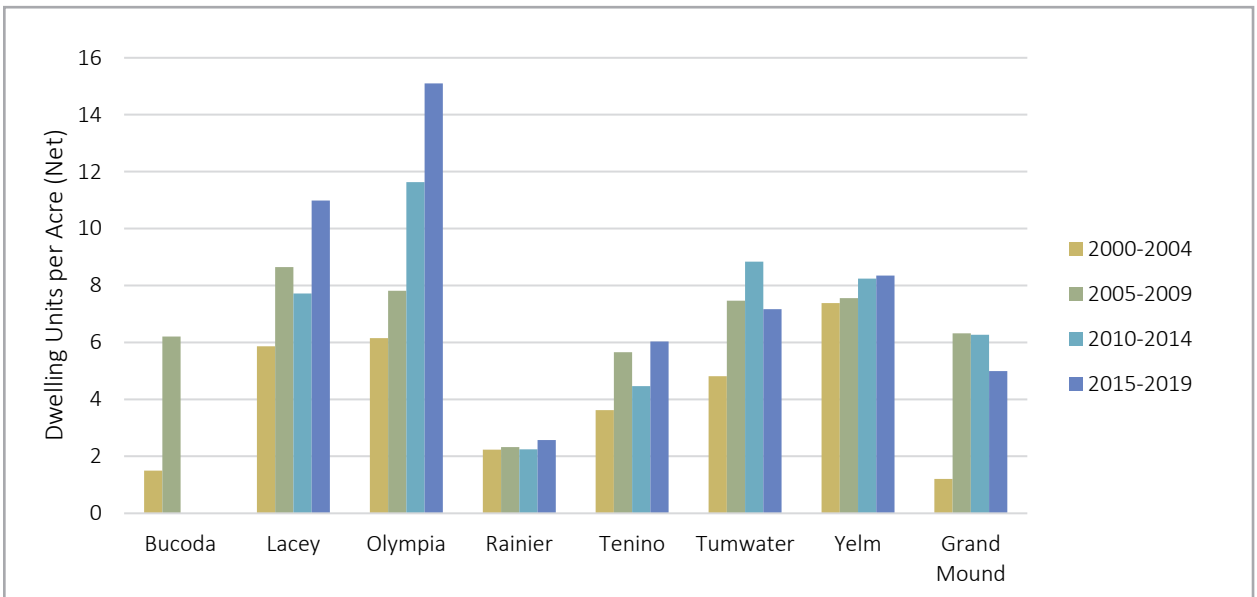


Figure 2-2: Achieved Density in Thurston County's Urban Areas, City Limits and Adjacent Growth Areas*



*Note: *Does not include the unincorporated growth areas of Yelm, Tenino, and Rainier as they are zoned for 1 unit per 5 acres until annexation into the adjacent city. There were no new dwellings in Bucoda for the 2010-2019 time period.*

What does this Mean?

After the Growth Management Act passed in 1990, all Thurston County jurisdictions adopted Comprehensive Plans and updated zoning and development regulations as needed. Since that time, all areas with urban zoning and sewer infrastructure have seen an increase in achieved residential density, meaning they are using land supply more efficiently.

Between 2010 and 2019, an average of 10 acres developed for every 100 new homes, compared to 14 acres during the previous decade. Not only has less land been consumed for the same number of homes, but less public infrastructure is needed to support the more compact growth. This means fewer miles of roads, stormwater, water, and sewer pipes needed to be built and maintained, and services such as transit become more efficient to provide. Compact growth also leaves more land for parks, open space, and rural uses.

Table 2-1: Achieved Densities in Thurston County Urban Areas, 2000-2019

		Approved Dwellings Units				Dwellings per Acre			
		2000-04	2005-09	2010-14	2015-19	2000-04	2005-09	2010-14	2015-19
Lacey	City	1,038	3,862	1,238	2,269	8.8	9.7	8.2	12.0
	UGA	1,192	935	406	832	4.5	6.0	6.6	9.0
	Total	2,230	4,797	1,644	3,101	5.9	8.6	7.7	11.0
Olympia	City	788	928	1,829	1,770	6.6	7.9	12.9	17.7
	UGA	825	498	149	173	5.7	7.7	5.3	6.0
	Total	1,613	1,426	1,978	1,943	6.2	7.8	11.6	15.1
Tumwater	City	662	1,093	832	464	5.5	7.8	8.8	8.0
	UGA	20	6	0	8	1.0	0.8	—	1.0
	Total	682	1,099	832	472	4.8	7.5	8.8	7.2
Bucoda	City	7	10	0	0	1.5	6.2	—	—
Rainier	City	37	97	55	90	2.2	2.3	2.2	2.6
Tenino	City	46	17	7	40	3.6	5.7	4.5	6.0
Yelm	City	520	846	417	375	7.4	7.6	8.2	8.3
Grand Mound	UGA	9	122	53	11	1.2	6.3	6.3	5.0
Total Cities		**3,098**	**6,853**	**4,378**	**5,008**	**6.7**	**8.4**	**9.4**	**11.5**
Total UGAs		**2,046**	**1,561**	**608**	**1,024**	**4.7**	**6.3**	**6.2**	**7.8**
Total Urban Areas		**5,144**	**8,414**	**4,986**	**6,034**	**5.7**	**7.9**	**8.9**	**10.6**

Note: Excludes the unincorporated urban growth areas of Rainier, Tenino, and Yelm since they are zoned at rural densities until annexed. All estimates are for current city and UGA boundaries.

Density by Type of Unit

While achieved densities in the urban areas have increased overall, the change has varied by type of dwelling unit. Apartments (buildings with five or more units) have achieved the biggest increase in density, from about 16.7 units per acre in the 2000-2004 time period to over 25 units per acre since 2015. Trends for other types of multifamily homes have been less conclusive. This includes duplexes, triplexes, fourplexes, townhomes (attached single-family homes), and condominiums (owner-occupied multifamily units), which combined made up less than eight percent of new housing since 2000. Density for single-family homes increased over the 2000-2014 time period but declined slightly since then.

Densities for multifamily homes are about 2.8 times greater than single-family homes, on average.

With changing demographics, we expect an increase in demand for multifamily homes compared to single-family homes. Over a third of new units permitted since 2010 have been multifamily, compared to about 15 percent in the previous decade. Two expanding age cohorts are driving this demand: baby boomers and millennials. As baby boomers age, some trade in large homes and suburban lots for the convenience of city living. In addition, an increasing proportion of their children — the millennial generation — are delaying marriage and starting families. At an age when previous generations were moving into larger, family-sized homes, they are seeking smaller homes in walkable, urban neighborhoods. All of this is likely to continue to lead to an increase in achieved residential densities over time. As a result, it is likely that residential densities will continue to increase over time.

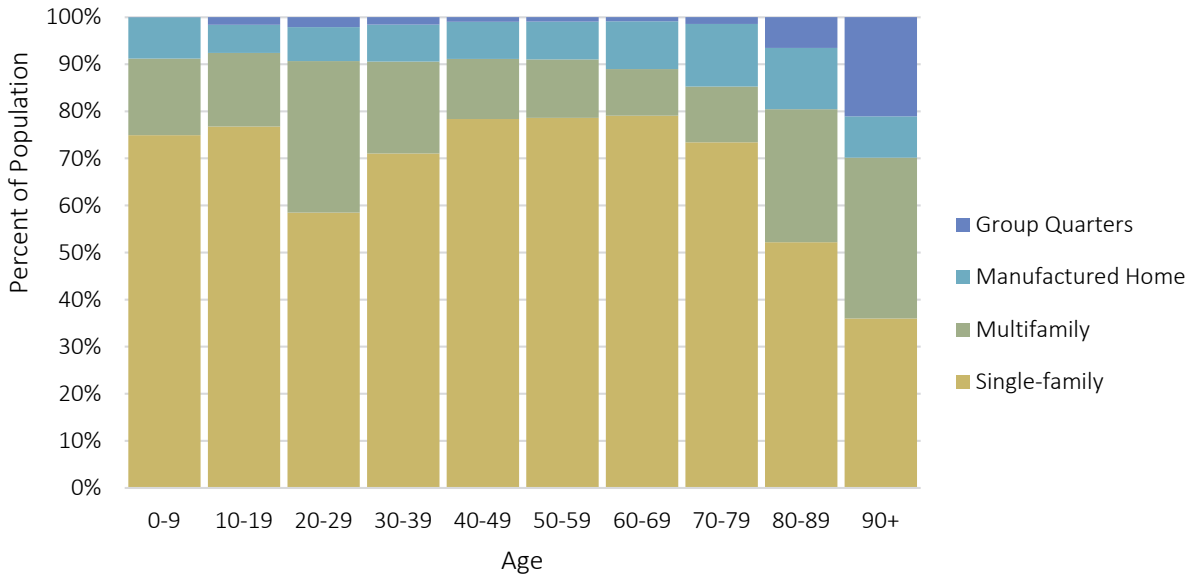
Multifamily Housing

Multifamily housing can take a variety of forms, such as apartments, duplexes, and triplexes. Multifamily housing can be rented or owned. Most owner-occupied multifamily homes in Thurston County are townhomes or condominiums.

Table 2-2: Achieved Densities in Thurston County Urban Areas by Type of Building, 2000-2019

	Approved Dwellings Units				Dwellings per Acre			
	2000-04	2005-09	2010-14	2015-19	2000-04	2005-09	2010-14	2015-19
Single-family	4,079	6,478	3,601	3,100	5.0	6.9	7.5	7.0
Duplexes - Fourplexes	159	120	51	56	9.9	9.0	9.3	6.7
Townhomes	117	448	140	66	10.0	15.3	14.2	13.4
Condominiums	8	214	0	25	8.1	20.3	—	6.1
Apartments	781	1,154	1,194	2,787	17.1	16.7	17.7	25.8
Total	**5,144**	**8,414**	**4,986**	**6,034**	**5.7**	**7.9**	**8.9**	**10.6**

Figure 2-3: Percent of Thurston County Population in Housing Types by Age



Source: U.S. Census Bureau: 2013-2017 ACS PUMS. "Group quarters" includes skilled nursing facilities, college dormitories, correctional facilities, and other group housing.

Density in Urban Corridors and Infill Areas

Urban corridors and infill areas (Figure 2-4) are the heart of Thurston County's cities. "Urban corridors" include the land within a quarter mile of frequent — 15-minute or less — transit routes. "Infill areas" are neighborhoods that were already urban in nature by the 1970s.

Urban corridors have some of the highest densities in Thurston County. Higher density along these corridors decreases trip length since people live closer to the businesses and services they patronize. It also decreases vehicle miles traveled since their proximity to transit gives residents a viable alternative to driving. The dramatic increase in achieved density in urban corridors is in part due to over 600 new dwellings in downtown Olympia.

Achieved residential density in infill areas tends to be lower than along urban corridors, though slightly higher than in urban areas as a whole.

Like the shifting trends for single-family and multifamily homes, changing demographics are likely to lead to an increase in demand for housing in urban corridors and infill areas.

KEY DEFINITIONS

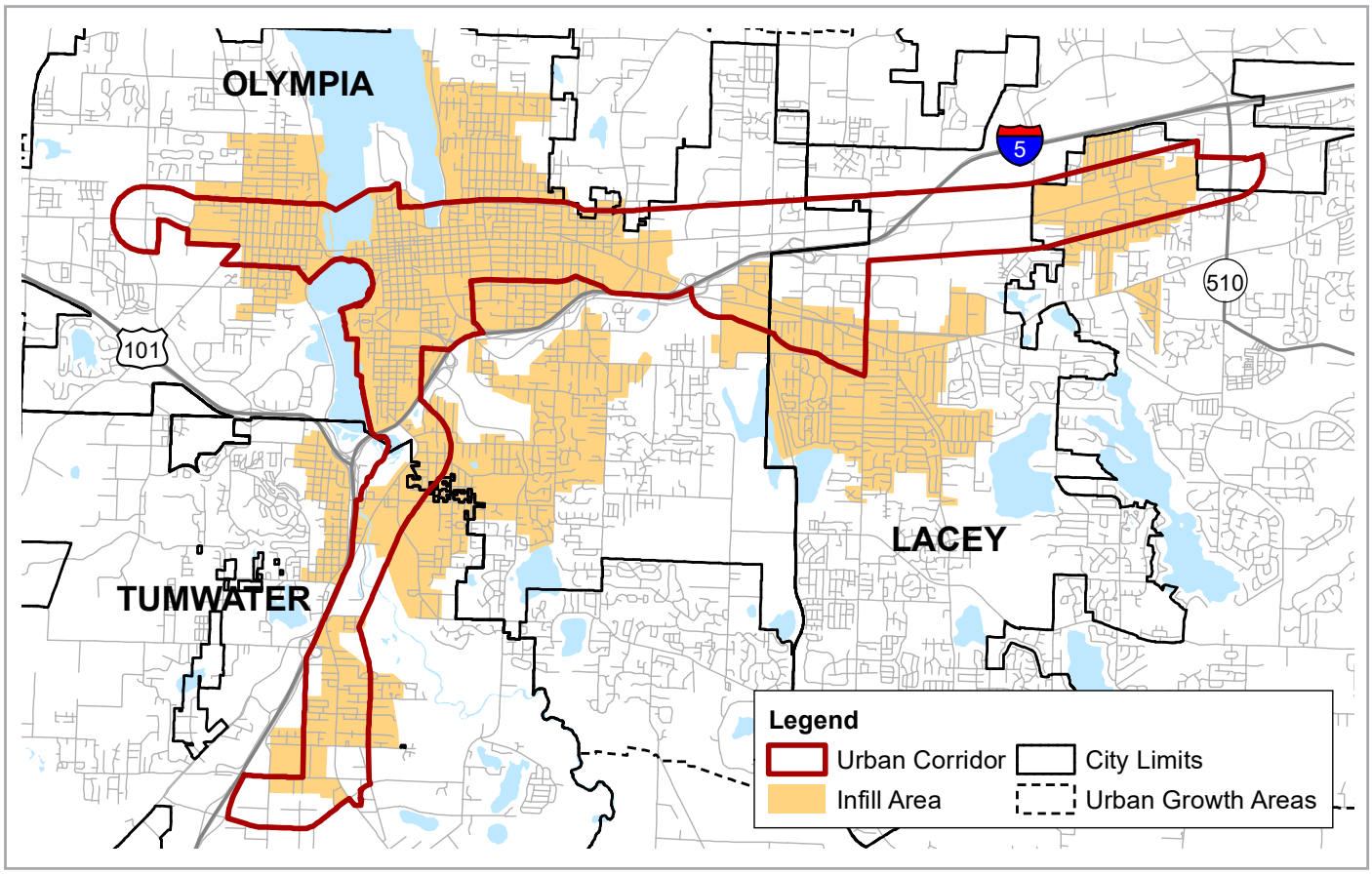
Urban Corridors are the areas within a half mile of frequent transit routes (generally fifteen minute headways or less).

Infill Neighborhoods include the regions older neighborhoods — those that were already urban in nature by the 1970s.

Table 2-3: Achieved Densities in Urban Corridors and Infill Areas

	Approved Dwellings Units				Dwellings per Acre			
	2000-04	2005-09	2010-14	2015-19	2000-04	2005-09	2010-14	2015-19
Urban Corridors	149	310	218	827	12.7	20.2	18.0	70.4
Infill Areas	372	476	249	822	6.8	8.7	14.4	32.9
Urban Area Total	**5,155**	**8,430**	**4,992**	**6,041**	**5.6**	**7.7**	**8.7**	**10.4**

Figure 2-4: Olympia, Lacey, and Tumwater Infill Areas and Urban Corridors



EXAMPLES OF MULTIFAMILY DENSITIES

Annie's Artist Flats
Net/Gross Density: 140 units per acre

Completed in 2019, this market-rate apartment building in downtown Olympia is in an urban corridor, less than 300 feet from an Intercity Transit bus route.

Photo Credit: The Olympian (https://bit.ly/33nWVA1)

6 Wood Apartments
Net/Gross Density: 50 units per acre

This 101-unit apartment building in Lacey's Woodland Square district was completed in 2007. It is adjacent to Lacey's Intercity Transit Center and South Puget Sound Community College's Lacey Campus.

Photo Credit: Apartments.com (https://bit.ly/3b2qfyQ)

536 14th Ave SE
Net/Gross Density: 25 units per acre

This triplex — constructed in 1912 — is an example of how a multifamily building can fit in with the scale and character of a predominantly single-family neighborhood.

Photo Credit: Thurston Regional Planning Council

808 Grant Street
Net/Gross Density: 10 units per acres

This duplex on Tumwater Hill is an example of infill development: a new, middle-density development within an existing neighborhood.

Photo Credit: Google Maps (https://goo.gl/maps/yS2U7U3VmqFXu9JE8)

EXAMPLES OF SINGLE-FAMILY DENSITIES

Campus Reserve
Net Density: 12 units per acre
Gross Density: 7 units per acre

This 79-unit subdivision in Lacey's High Density Residential zone was platted in 2015. Thirty-five percent of the subdivision's area is dedicated to roads, open space set-asides, stormwater treatment, and other common uses.

Photo Credit: Thurston County GeoData (2018)

Whitmore Glen
Net Density: 7.5 units per acre
Gross Density: 4.5 units per acre

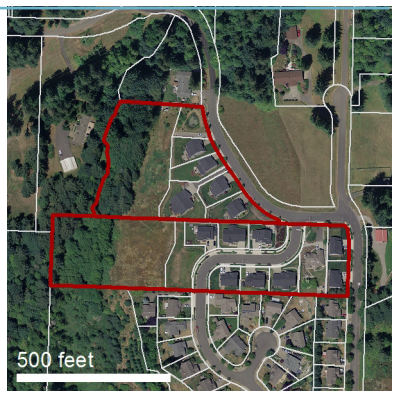
This 82-unit subdivision in Olympia's Residential 6-12 zone was platted in 2010. Forty percent of the subdivision's area is dedicated to roads, open space set-asides, stormwater treatment, and other common uses.

Photo Credit: Thurston County GeoData (2018)

Chapparel Landing
Net Density: 4 units per acre
Gross Density: 1.5 unit per acre

Since GMA was passed, low-density subdivisions in urban areas — like this one adjacent to Percival Creek in Tumwater — are generally allowed only in zones where natural resource protection is a priority.

Photo Credit: Thurston County GeoData (2018)



Silver Hawk
Net Density: 1.5 units per acre
Gross Density: 1 unit per acre

This rural Thurston County subdivision — platted in 2016 — was originally approved under higher-density zoning designation than the one unit per five acres density currently allowed. Zoning changes adopted after GMA was passed eliminated two, one, and half unit per acre zones in rural Thurston County except in areas previously platted at those densities (known as LAMIRDs, limited areas of more intense rural development).

Photo Credit: Thurston County GeoData (2018)

What Does the Future Hold?

Since the Growth Management Act, comprehensive plans, zoning, and development regulations were adopted in the early 1990s, there has been a steady increase in achieved density in the urban areas. Initially, this resulted from increased density in single-family subdivisions. Since 2010, however, multifamily housing has become increasingly important. 2016 marked the first year that more multifamily units were permitted than single-family units in the urban areas.

Multifamily housing as a percent of new units has increased since 1990 (Figure 2-5). Since 2010, multifamily housing has driven the increase in achieved densities across urban areas. Demographic changes (such as those discussed on page 26) are increasing demand for multifamily housing. At the same time, the capacity for single-family development is decreasing. The tightening housing market is also making infill and redevelopment — in urban centers and corridors — economically feasible where it was not before. As a result of these factors, Thurston Regional Planning Council's forecast projects this trend of increased multifamily development to continue over the next 20 years.

Figure 2-5: Multifamily Dwellings, as a Percent of New Units, Urban Areas

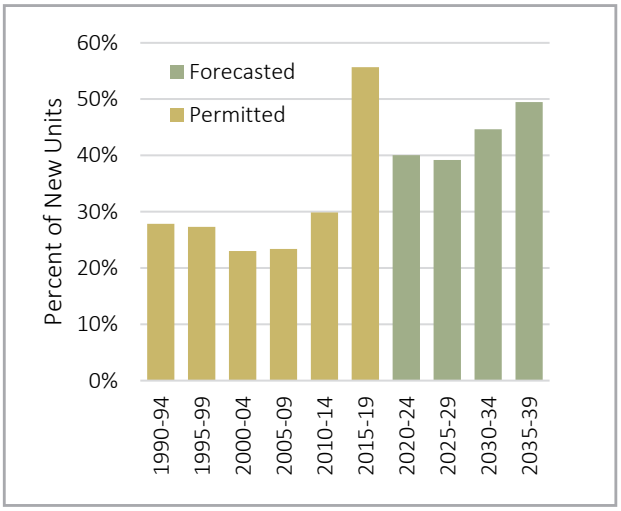
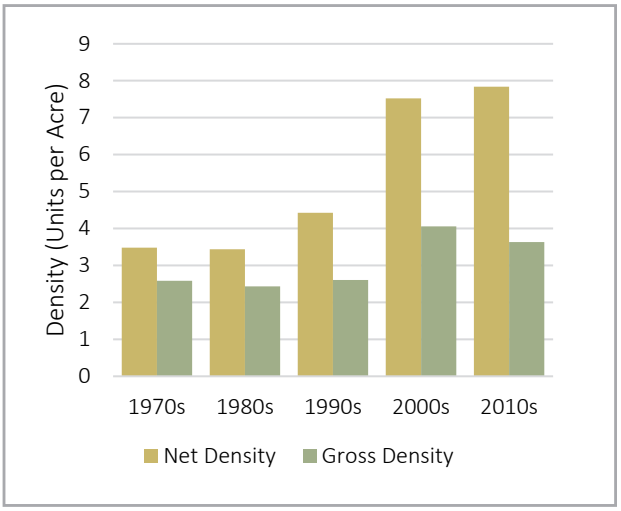


Figure 2-6: Density of Residential Subdivisions, Urban Area



In the single-family housing market, the amount of vacant land in the urban areas with limited environmental and topological constraints is decreasing. This trend is apparent when comparing gross and net density over time (Figure 2-6). Gross density — which includes the area of rights-of-way, common areas, and critical areas — is markedly lower than net density in the past two decades. This indicates that recent subdivisions contain more critical areas than in the past. Development on parcels with environmental constraints is more costly and, while a tightening housing market has made it economically feasible to develop on these parcels, it also increases the cost of construction.

Table 2-4: Density of Residential Subdivisions

Urban Growth Area		1970s	1980s	1990s	2000s	2010s
Bucoda	Net	—	—	1.2	—	—
	Gross	—	—	1.2	—	—
Lacey & UGA	Net	4.1	3.6	5.1	7.9	8.1
	Gross	2.9	2.6	3.1	4.3	3.6
Olympia & UGA	Net	3.8	4.0	5.0	8.3	8.5
	Gross	2.5	2.7	2.4	3.6	4.6
Rainier & UGA	Net	3.5	2.9	1.8	2.5	2.7
	Gross	2.3	2.1	1.5	1.9	2.0
Tenino & UGA	Net	5.0	—	4.6	—	5.4
	Gross	3.7	—	3.2	—	4.2
Tumwater & UGA	Net	2.1	2.9	3.0	7.8	8.3
	Gross	1.6	1.9	1.9	4.0	3.2
Yelm & UGA	Net	3.3	1.8	5.5	7.5	8.2
	Gross	2.7	1.7	3.8	4.4	4.2
Grand Mound UGA	Net	—	—	—	5.9	2.6
	Gross	—	—	—	4.1	1.5
Urban Areas	**Net**	**3.7**	**3.5**	**4.5**	**7.6**	**8.0**
	Gross	**2.6**	**2.4**	**2.7**	**4.1**	**3.6**

Urban Density and Sewers

For health reasons, new septic systems are not allowed on parcels smaller than 12,500 square feet, or about 0.3 acres (WAC 246-272A-0320). Even larger lot sizes may be required depending on soils and other conditions. Therefore, the high-density development required in urban areas under GMA requires the extension of sewer to new development.

Housing Forecast

TRPC's housing forecast assumes that infrastructure — including sewer, water, and roads — will be extended to new development as it is built. This is consistent with most large new subdivisions built in the urban areas over the past 30 years.

Of Thurston County's cities and towns, Bucoda and Rainier are the only two without sewer service. TRPC's forecast assumes that systems will be built there in 2040 and 2035, respectively. Development is expected to continue at low densities until sewer service is available.

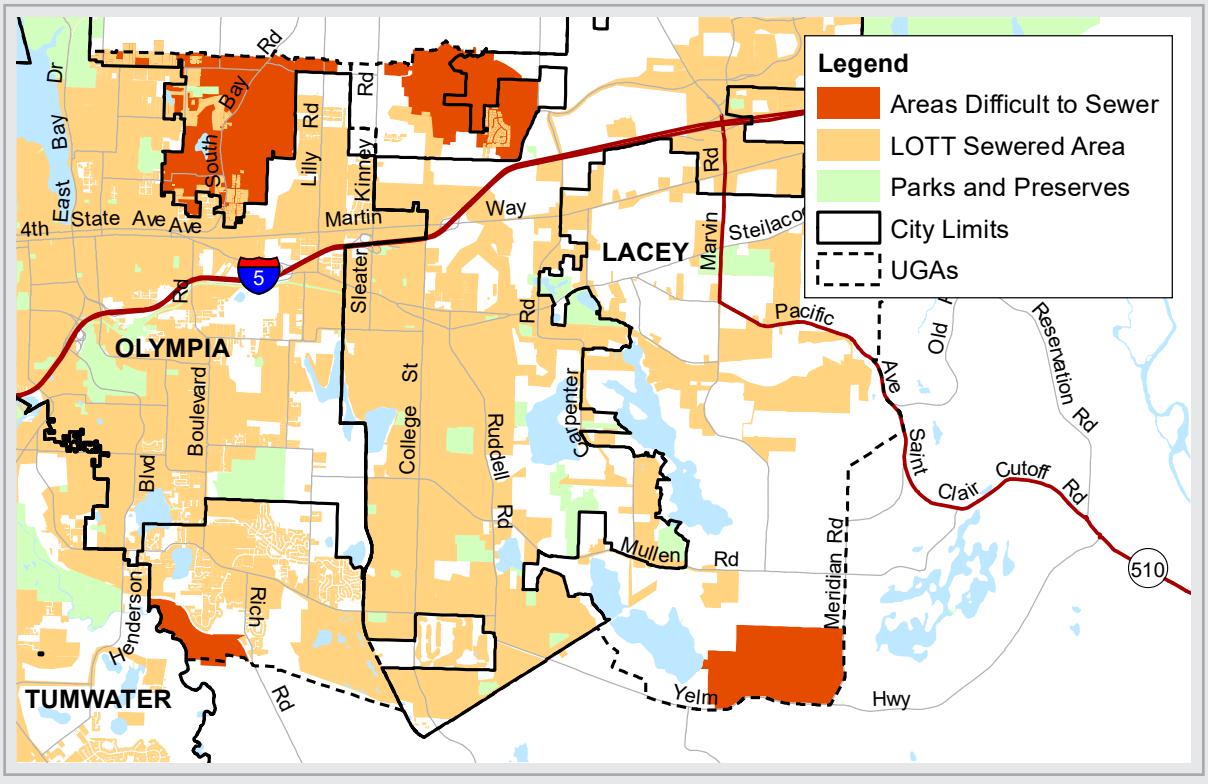
Difficult to Sewer Areas

Jurisdiction staff identified four areas where it will be difficult to extend sewer service due to the areas' topologies or because the area is separated from existing service areas by neighborhoods built out on septic service (Figure 2-7). In the housing forecast, these are the last areas where growth is allocated. An additional area – Tumwater UGA along Black Lake – is also often recognized although it did not receive special consideration in the land capacity model.

In most instances, the cities have recognized that sewer is a barrier in these areas and zoned them for densities appropriate for septic. As a result, these areas account for only about four percent of future urban-area housing capacity (seven percent including the Black Lake area).

Many of these areas contain farmland or land suitable for farming. Their importance for a local food systems should be considered when evaluating policy options, such as downzoning or removal from the urban areas.

Figure 2-7: Difficult to Sewer Areas



3. RESIDENTIAL LAND SUPPLY

Is Thurston County's urban residential land supply sufficient to accommodate projected housing and population growth to the year 2040?

Description

Residential land supply is the amount of vacant, partially used, and redevelopable (underutilized) land that — under current land use rules and regulations — can be developed for homes, apartments, condominiums, and other types of living arrangements including dormitories and senior living facilities.

Why is this Important?

Counties planning under the Growth Management Act (GMA) are required to designate urban growth areas "within which urban growth shall be encouraged and outside of which growth can occur only if it is not urban in nature." Urban growth areas must "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).

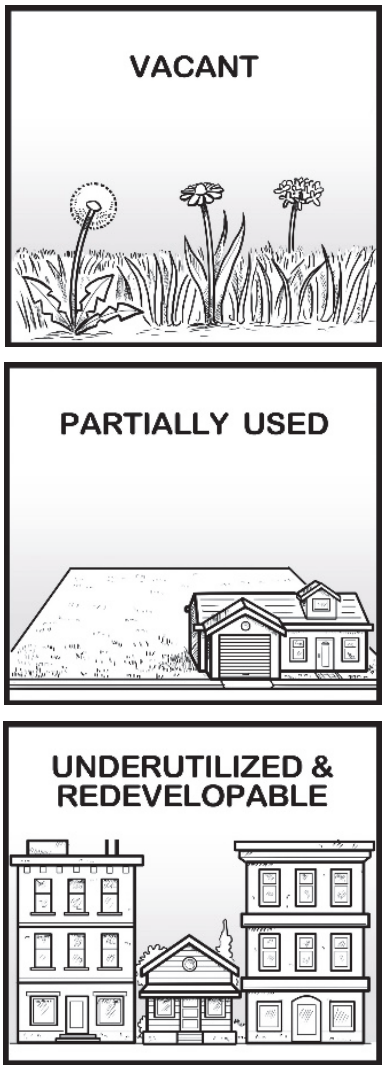
An evaluation of residential capacity as part of the Buildable Lands Report will show if the size and zoning of the urban areas is sufficient for 20 years of housing growth, and if that growth is consistent with city and county comprehensive plans.

How is it Measured?

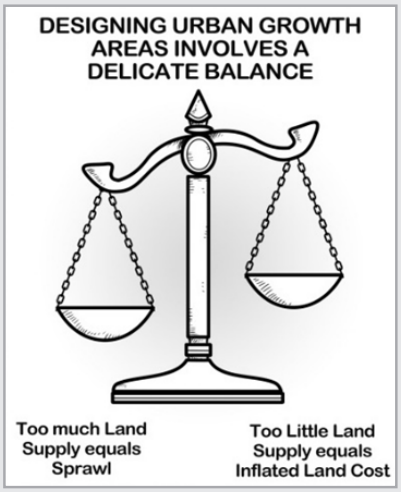
Residential capacity — or the number of homes that could be built in the urban areas — is compared to the amount of housing forecasted for urban areas over the next 20 years. Capacity for new homes should exceed demand by about 10 to 25 percent for a healthy housing market.

TRPC used models to estimate both residential capacity and housing forecasts. A technical advisory committee comprised of jurisdiction staff, representatives from the development and real estate communities, Thurston County citizens, and other representatives reviewed the forecast and land supply assumptions. The advisory committee provides feedback on whether the model assumptions are valid and the results consistent with their experience.

Potential Candidates for Redevelopment



Urban Growth Area Sizing



The Urban Growth Area size is a balance: too large a boundary encourages urban sprawl while too little supply leads to inflated land costs.

Thurston County's first urban growth boundary agreement was established in 1983 for the north county areas and revised in 1988. In the early 1990s, growth boundaries were established countywide. Since that time the urban growth boundaries have been adjusted slightly. Overall, the area designated for urban growth has been reduced by over 1,000 acres, or around 1.7 percent in the last 20 years. The most significant reductions were in Tenino and the Salmon Creek part of Tumwater, both in the 2000s.

Even with the reduction in land area, the urban growth areas established over 30 years ago are still large enough to accommodate 20 more years of growth. This indicates they were too large when originally established. This occurred for several reasons:

- Residential densities have increased over time, meaning land has been used more efficiently than originally anticipated (see Chapter 2: Achieved Residential Densities).
- A patchwork of urban and vacant land existed outside the city limits at the time. For the areas with urban land use patterns to be annexed, the UGA boundaries were drawn around them, capturing significant vacant land in the process.

There was a lack of clarity on what an appropriate-sized UGA boundary should be at the time.

Urban Growth Area Review

GMA requires counties to review the urban growth areas every eight years as part of the periodic comprehensive plan updates (RCW 36.70A.130).

Counties are directed to review the growth area to ensure there is not only adequate land supply to accommodate projected growth (the Buildable Lands Program) but must also ensure that the land supply does not exceed the area necessary to accommodate projected growth. The data developed as part of the Buildable Lands program assists with this review.

The urban growth area review is also an opportunity to review the suitability of the urban areas for development. The review may find that some areas within the Urban Growth Boundary are less suitable for high density development, for example, due to environmental constraints. On the other hand, some areas outside of the Urban Growth Boundary may be more suitable for urban development, perhaps due to their proximity to existing urban services.

Residential Capacity

Land supply is calculated as part of Thurston Regional Planning Council's Population and Employment Forecast Update[1]. Residential land supply was measured by first taking an inventory of all the land, buildings, and other types of uses on the ground in 2017. This creates an inventory categorizing parcels into these categories:

- Water Bodies
- Parks, Preserves, & Open Space
- Natural Resources (Public and Private)
- Roads, Railroads, & Rights of Way
- Government/Institutional
- Utilities
- Residential
- Commercial/Industrial
- Mixed Use
- Undeveloped Land

Estimates of potential residential development capacity are used for general planning purposes only based on regional data sets. Actual development capacity at a site-specific level is determined through the regulatory process at local jurisdictions.

Next, TRPC applied a series of assumptions to the residential, commercial, industrial, mixed-use, and undeveloped land to determine how and if the land can be developed in the future. These assumptions range from things like how many homes per acre can be placed on a piece of land, when a piece of land can be considered fully developed or partially-used, how much of the land is likely to be developed for commercial or industrial uses, and how much to take out of the land supply for environmentally sensitive areas. These assumptions are based on the policies and regulations adopted by local cities and towns and Thurston County.

Environmentally sensitive areas and their associated buffers are removed from the available land supply.

Parks, schools, and churches are often located in residential areas. An assumption is made on how much land will be needed for these uses. Residential capacity is reduced by five percent in urban areas and one percent in rural areas to account for future parks, schools, or other nonresidential uses in residential zones.

[1]Methodology is available in *Population and Employment Land Supply Assumptions* (https://www.trpc.org/236).

Calibration

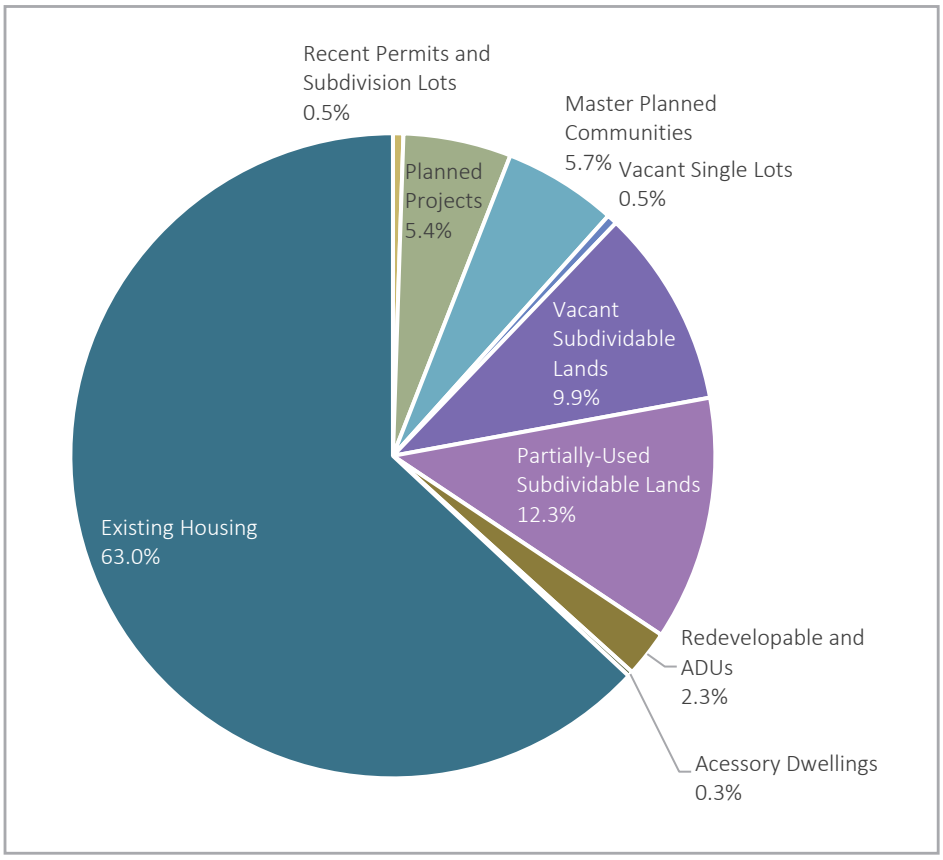
The land supply model is calibrated to a database of planned projects (over 130 projects representing almost 6,000 residential units). The model is calibrated by jurisdiction and zoning category. The calibration reports are available as part of the Population and Employment Forecast land supply documentation

Types of Capacity

Potential residential development comes in many shapes and forms in Thurston County. Examples are shown on Pages 39. Potential capacity is the number of residential units (single-family homes, apartments, condominiums, duplexes, manufactured homes, etc.) that could potentially be developed on any given piece of land in Thurston County under 2017 land use regulations, after accounting for land set aside for critical areas. It is an estimate under "average" conditions.

There are many pieces of land in Thurston County that are already developed or are not suitable for residential development. These lands are not considered to have potential residential development capacity. In addition, there are some types of residential development capacity that are estimated on an areawide basis based on past trends, such as accessory dwelling units and family member units.

Figure 3-1: Estimates of Capacity for Dwellings by Type, Thurston County Urban Areas



EXAMPLES OF RESIDENTIAL CAPACITY

Recently Permitted
Lots under construction at the time the land use inventory was developed.

A permit for a single-family home was issued on this parcel in May 2017. Construction will begin shortly.

Subdivision Lots
Empty lots in subdivision approved since 1970.

These 19 parcels were platted as part of the Chestnut Village subdivision. Building permits have not been issued but are expected soon.

Planned Projects
Residential development applications submitted to local jurisdictions that are in the process of being reviewed.

An application for a 118-lot subdivision on these two lots called "The Hutch" has been submitted to the City of Yelm for approval. Once approved, the plat will be recorded with the County auditor.

Master Planned Communities
On many of the larger pieces of urban buildable land in Thurston County, cities and developers work together to develop a master plan, to combine opportunities for employment, parks, and housing, and in many cases, schools.

The Mill Pond Subdivision in Olympia is an example of a mixed-use master planned community. Phase 1 has been completed.

Vacant Single Lots
Vacant lots not platted through the subdivision process. Many of these are in the rural county.

The four parcels shown here are not part of a recent plat. They have capacity of one single-family home each. While two adjacent parcels have been developed, they have not.

Redevelopment
Wen an existing use is removed or renovated to make way for a more intensive use in a commercial or mixed-use zoning district. In general, this occurs where buildings have a low value compared to the land value. The new use does not have to be similar to the original use of the property.

This building in downtown Olympia was redeveloped as a mixed-use building with 19 apartments and multiple businesses.

Family Member Units
A second residence permitted on a lot with an existing home, with the caveat that the second residence must be used by a family member. They are intended to be temporary structures, usually manufactured homes. Family member units are permissible in rural Thurston County.

This family member unit in rural Thurston County was permitted in 2016.

Vacant Subdividable Land
Vacant land has no commercial, industrial, or residential structures on it at the present time but has capacity of multiple single-family homes or a multifamily structure.

This vacant lot has capacity for an estimated 65 units. It could be developed as single-family homes, multifamily units, or a combination of both.

Accessory Dwellings
A small second residence permitted on a lot with an existing home. It may or may not be attached to the primary residence.

This accessory dwelling in Lacey was added in 2014. It is attached to the primary dwelling.

Partially-used Subdividable Land
Land has an existing structure. Under current zoning it could potentially be subdivided to support multiple single-family homes or support multifamily development. The existing structure may either be preserved or demolished.

This 2-acre lot has an existing home. Under current zoning it could accommodate additional units.

Market Factor

At the parcel level, a percent of the residential capacity is reserved to account for the amount of land not expected to be available for development over the 20-year planning period. The percent reserved, commonly referred to as the "market factor," takes into account that not all property owners are interested in selling or developing their property over the next 20 years.

E2SSB 5254 introduced new considerations around market factors, including allowing their use in evaluating capacity in the urban areas.

As part of the Population and Employment Forecast update, Thurston Regional Planning Council conducted a survey of owners of developable land in the urban areas to gauge their interest in developing their property to validate market factor assumptions[2]. The survey found that 33 percent of owners were "unlikely" or "very unlikely" to develop their property over the next 20 years but that willingness varied by type of property. Owners reported being less interested in developing properties with an existing home, and more interested in developing properties that could be subdivided. Results were used to develop parcel-level market factor assumptions used in the land supply model (Table 3-1).

Uncertainty was a major theme in survey responses. Many respondents indicated they may not be alive in 20 years and did not know their children's plans for the property after it was inherited.

Table 3-1: Market Factors Applied to Land Capacity Model

	Market Factor	
Capacity Type	**Partially Developed**	**Vacant**
One Unit	40%	20%
Short Plat	30%	15%
Long Plat	20%	10%
Mixed Use	10%	10%

[2]Survey methodology and results are available in *Buildable Lands Property Owner Survey* (https://www.trpc.org/236).

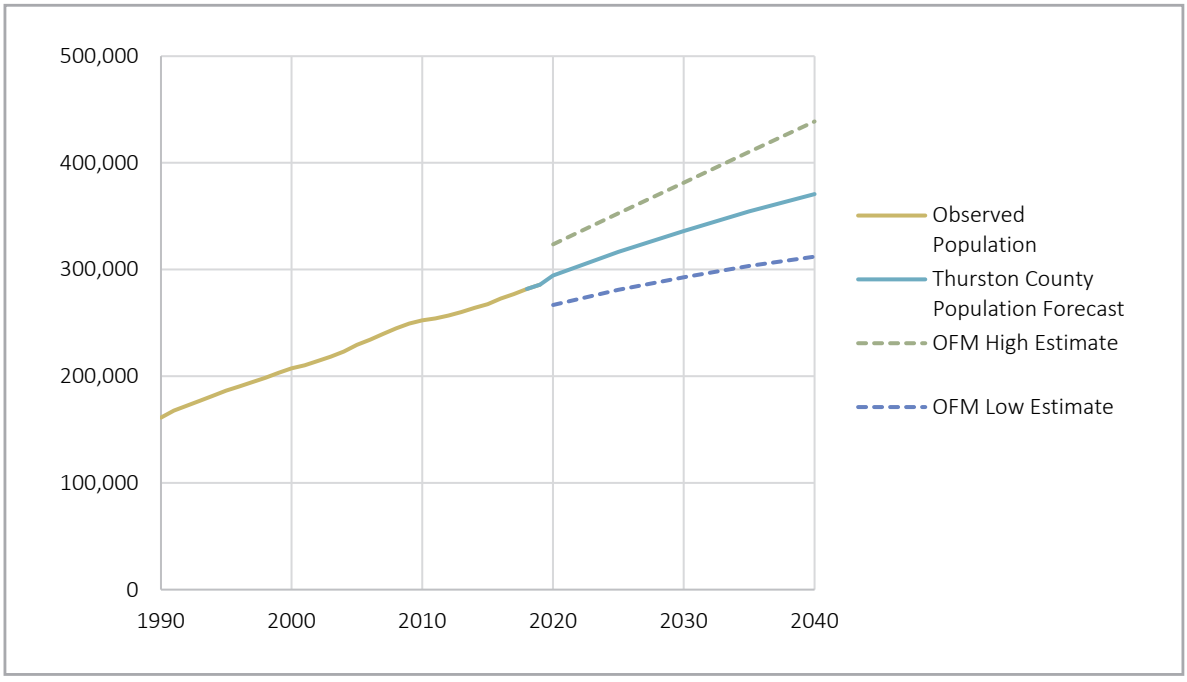
Housing Forecast

Land supply is compared to the projected 20-year need for housing. The projection is based on countywide population forecasts from the Office of Financial Management (OFM) and urban areas forecast by TRPC.

OFM develops population projections for Washington, issuing a low, medium ("most likely"), and high projection for each county. Figure 3-2 shows the projections for Thurston County. RCW 36.70A.110 and 36.70A.115 require that city and county comprehensive plans be consistent with population projections developed by OFM.

TRPC's housing projection for 2040 is based on OFM's medium projection for Thurston County. Using OFM's population projection and TRPC's land capacity analysis, TRPC develops a projection of how much housing growth is expected for each urban growth area within Thurston County (Table 3-2). Documentation for TRPC's urban-area housing projections are available in *Population Forecast Allocations*.[3]

Figure 3-2: Thurston County Population Forecast Compared to Office of Financial Management's Low-to-High Range



[3]Documentation available in *Population Forecast Allocations* (https://www.trpc.org/236).

Table 3-2: Total Dwelling Unit Forecast by Jurisdiction

Jurisdiction		2020	2025	2030	2035	2040	2045
Bucoda	Total	250	280	310	330	360	380
Lacey	City	22,200	23,660	24,470	25,190	25,800	26,340
	UGA	14,630	18,760	20,490	21,760	23,070	24,390
	Total	36,820	42,420	44,960	46,950	48,870	50,730
Olympia	City	25,550	29,210	32,120	34,630	36,580	38,280
	UGA	4,970	5,510	5,690	5,890	6,290	6,740
	Total	30,520	34,720	37,810	40,520	42,870	45,020
Rainier	City	860	1,010	1,130	1,210	1,380	1,420
	UGA	50	50	60	60	60	80
	Total	910	1,060	1,190	1,270	1,440	1,500
Tenino	City	780	920	1,060	1,180	1,270	1,300
	UGA	10	10	10	10	10	10
	Total	780	930	1,070	1,190	1,280	1,310
Tumwater	City	10,760	13,200	14,620	15,870	16,820	17,390
	UGA	1,390	2,360	3,110	3,650	4,000	4,070
	Total	12,150	15,560	17,730	19,520	20,820	21,460
Yelm	City	3,290	5,300	7,090	8,690	10,070	10,950
	UGA	530	550	560	570	570	670
	Total	3,820	5,850	7,650	9,260	10,640	11,620
Grand Mound UGA		430	510	600	670	720	730
Chehalis Reservation		20	20	20	20	20	20
Nisqually Reservation		260	310	320	320	330	330
Total Cities		**63,670**	**73,580**	**80,800**	**87,100**	**92,280**	**96,060**
Total UGAs (1)		**22,010**	**27,750**	**30,520**	**32,610**	**34,720**	**36,690**
Total Reservations (2)		**280**	**330**	**340**	**340**	**350**	**350**
Rural Unincorporated (3)		**35,320**	**37,360**	**39,050**	**40,480**	**41,710**	**42,680**
Thurston County Total		**121,300**	**139,000**	**150,700**	**160,500**	**169,000**	**175,800**

Notes:

1. *Urban Growth Area (UGA): Unincorporated area designated to be annexed into city limits over 20 years' time to accommodate urban growth.*
2. *Tribal Reservations: Estimate is for Thurston County portion of reservation only.*
3. *Rural Unincorporated County is the portion of the unincorporated county that lies outside UGA and Reservation boundaries*

Findings

The urban areas contain sufficient land to accommodate the projected population growth. Based on adopted policies in Thurston County as of 2017, the evaluation shows that:

- There is sufficient land supply to accommodate projected population growth to the year 2040 in Thurston County's urban areas (cities plus the unincorporated Urban Growth Areas), and
- Each urban area in Thurston County has designated sufficient land supply to accommodate its projected population growth to the year 2040.

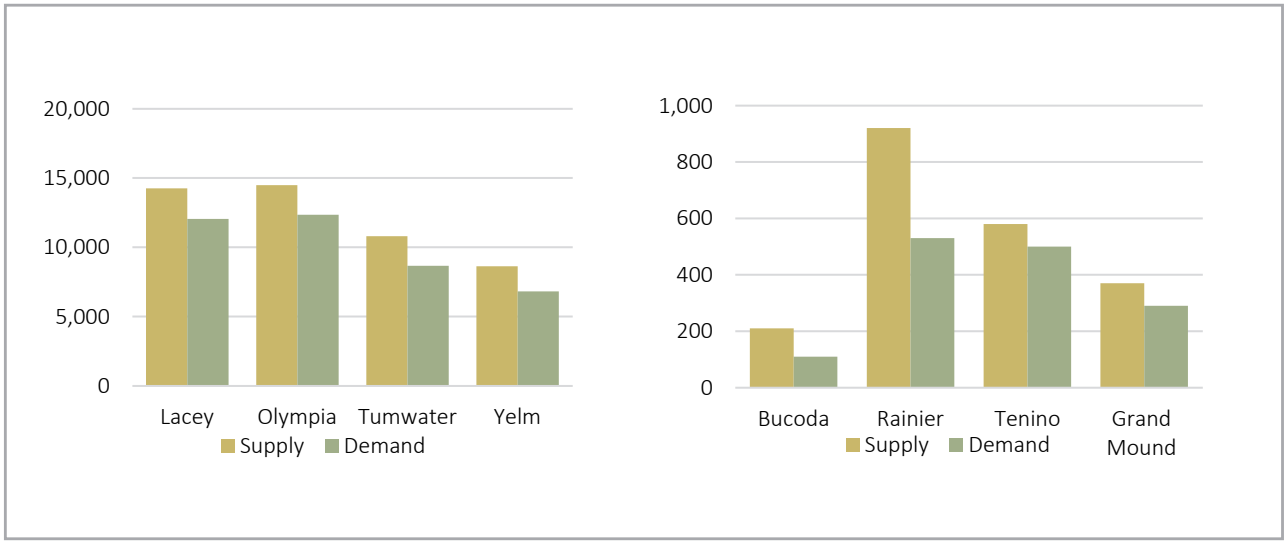
Questions remain as to how much of the residential land supply will be available for development due to federal endangered species listings (Page 45), the availability of water (Page 61), and the difficulty of extending sewer service to some parts of the Urban Growth Areas (Page 34).

Table 3-3: Residential Supply Versus Demand

Urban Growth Area	2020 Dwelling Units	2040 Dwelling Units	Future Demand 2020-2040	Future Supply[1] 2020-Plus	Excess Capacity[2]	Percent Excess Capacity[3]
Bucoda	250	360	110	210	100	48%
Lacey	36,820	48,870	12,050	14,250	2,200	15%
Olympia	30,520	42,870	12,350	14,480	2,130	15%
Rainier	910	1,440	530	920	390	42%
Tenino	780	1,280	500	580	80	14%
Tumwater	12,150	20,820	8,670	10,800	2,130	20%
Yelm	3,820	10,640	6,820	8,630	1,810	21%
Grand Mound UGA	430	720	290	370	80	22%
Total Urban Areas	**85,680**	**127,000**	**41,320**	**50,240**	**8,920**	**18%**

Note:
1. "Future Supply" includes capacity reserved for the market factor plus any additional unused capacity.
2. "Excess Capacity" is the difference between future demand and future supply. It includes capacity not available due to market conditions.
3. "Percent Excess Capacity" is excess capacity as a percent of future supply. A value between 10 and 25 percent across the urban areas is considered reasonable for a healthy housing market.

Figure 3-3: Supply vs. Demand for Dwelling Units in Thurston County Urban Areas



Endangered Species

Thurston County is home to four species recently listed under the Endangered Species Act whose habitat overlaps substantially with developable land:

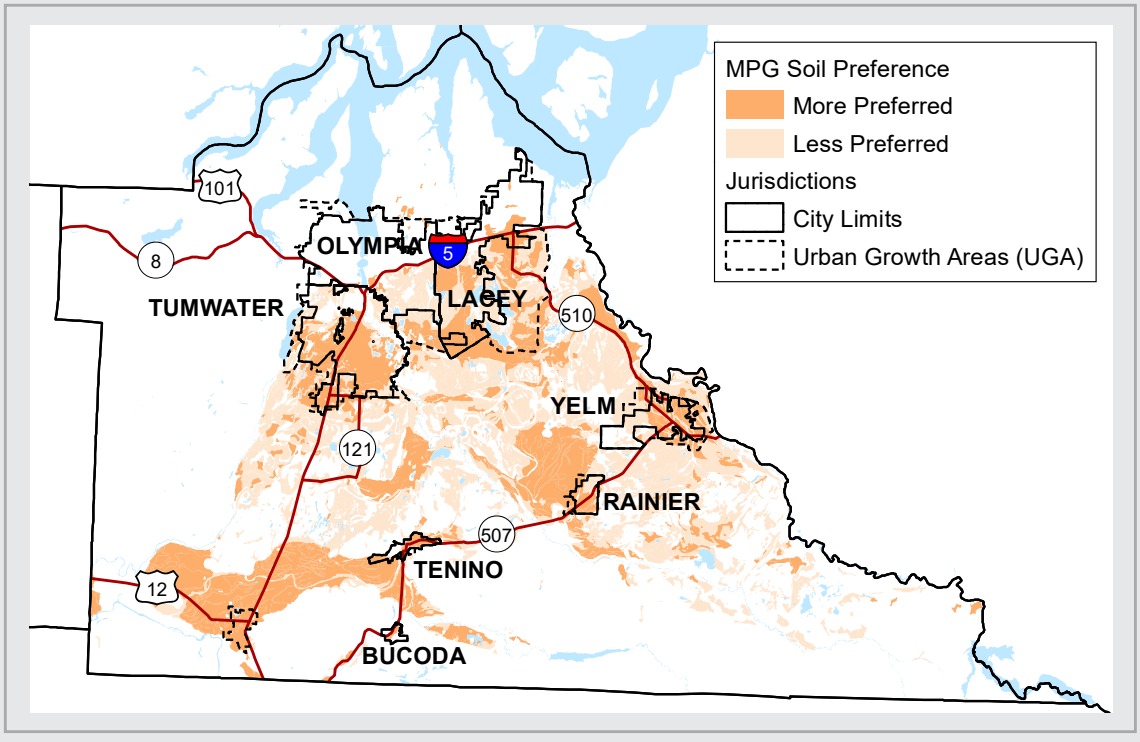
- Mazama pocket gopher, Threatened (2014)
- Oregon spotted frog, Threatened (2014)
- Taylor's checkerspot butterfly, Endangered (2013)
- Streaked horned lark, Endangered (2013)

Several jurisdictions — including Thurston County, Tumwater (in partnership with the Port of Olympia), Yelm, and Joint Base Lewis-McChord — are developing Habitat Conservation Plans that will provide property owners affected by the listings with options for mitigating the impacts of future development. One of these options is anticipated to be a program where a property owner would pay into a fund that would be used to purchase habitat for conservation. The conserved land would offset impacts of development by affected property owners.

Three of the listed species — the Mazama pocket gopher, Taylor's checkerspot butterfly, and Streaked horned lark — are primarily found in prairie habitats. Thurston County, in conjunction with U.S. Fish and Wildlife, identified groups of soils preferred by pocket gophers, the species with the most extensive range (Figure 3-4).

To estimate the effects of mitigation on capacity in the unincorporated County, TRPC added ten percent of the "more preferred" soil area to each parcel's critical area acreage. Only the "more preferred" soils were included, as these are the properties most likely to be preserved as mitigation sites and remain undeveloped.

Figure 3-4: Mazama Pocket Gopher Soil Preferences



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4. COMMERCIAL & INDUSTRIAL LAND SUPPLY

Is Thurston County's urban commercial and industrial land supply sufficient to accommodate projected job growth to the year 2040?

Description

TRPC projects that around 35,800 net new jobs will be created in Thurston County between 2020 and 2040. This means that almost 20 percent of the jobs in 2040 will be created between now and then. Where these jobs locate, the sorts of building they are in, and the surrounding infrastructure that is built to support them will help shape our future community.

Why is this Important?

This analysis takes a broad look at the inventory of commercial and industrial land to support employment. Adequate land supply is necessary for commercial and industrial economic development. The Thurston County Economic Alliance identified "Develop, update and market inventories of available industrial and commercial land and sites in all Thurston communities" as one of their strategic initiatives[4].

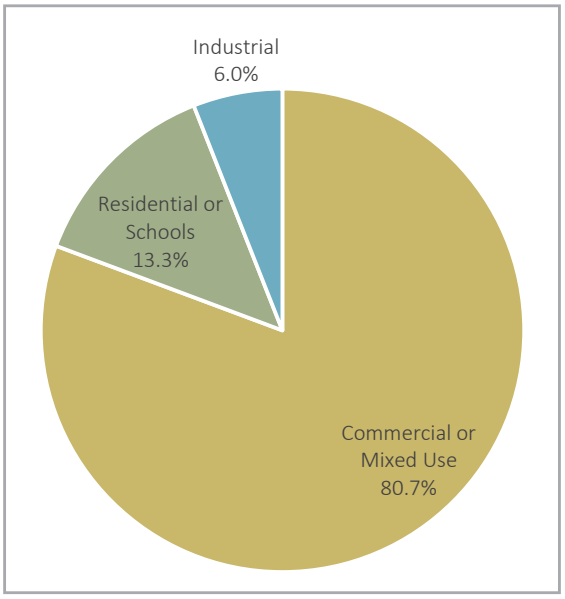
Where Will New Jobs Locate?

New jobs will locate in all parts of the county, but around 95 percent will locate in the urban areas. Rural jobs tend to be home-based — such as teleworkers, home health care workers, or residential construction contractors — or natural resource-based, such as forestry and agriculture.

Within the urban areas, 80 percent of new jobs are expected to locate in areas zoned for commercial uses, including mixed-use zoning districts. These include jobs in shopping areas, doctor and dentist offices, other professional offices, and other types of services. Most state and local government employment is also in commercial and mixed-use zones. Some light-industrial types of jobs locate in these areas, including mini-storage facilities.

[4] *Thurston County Economic Development Strategic Plan* (2017). Available at https://thurstonedc.com/tea.

Figure 4-1: 2020-2040 Employment Growth by Type of Zone, Thurston County Urban Areas



Five percent of new jobs are expected in areas zoned predominately for industrial uses. The majority of these jobs are in manufacturing and warehousing but also include compatible businesses such as recreation (batting cages, dance, and gymnastics studios) that utilize warehouse-style buildings.

The remaining 14 percent will locate in areas zoned for residential uses where many of these jobs are for self-employed people and those working in home-based businesses. Other employment sites near residential neighborhoods include schools, churches, nursing homes, and apartment complex managers.

Table 4-1: 2020-2040 Employment Growth by Type of Zone, Thurston County Urban Areas

	Type of Zone			
Urban Area	**Commercial or Mixed Use**	**Industrial**	**Residential & Schools**	**Total**
Bucoda	10	0	40	50
Grand Mound UGA	190	90	30	310
Lacey	8,870	970	1,610	11,450
Olympia	10,150	110	1,150	11,410
Rainier	70	0	80	160
Tenino	240	20	150	410
Tumwater	4,090	760	1,060	5,900
Yelm	3,740	70	400	4,210
Total	**27,350**	**2,030**	**4,520**	**33,900**

Source: TRPC Employment Forecast

How Much Land is Needed?

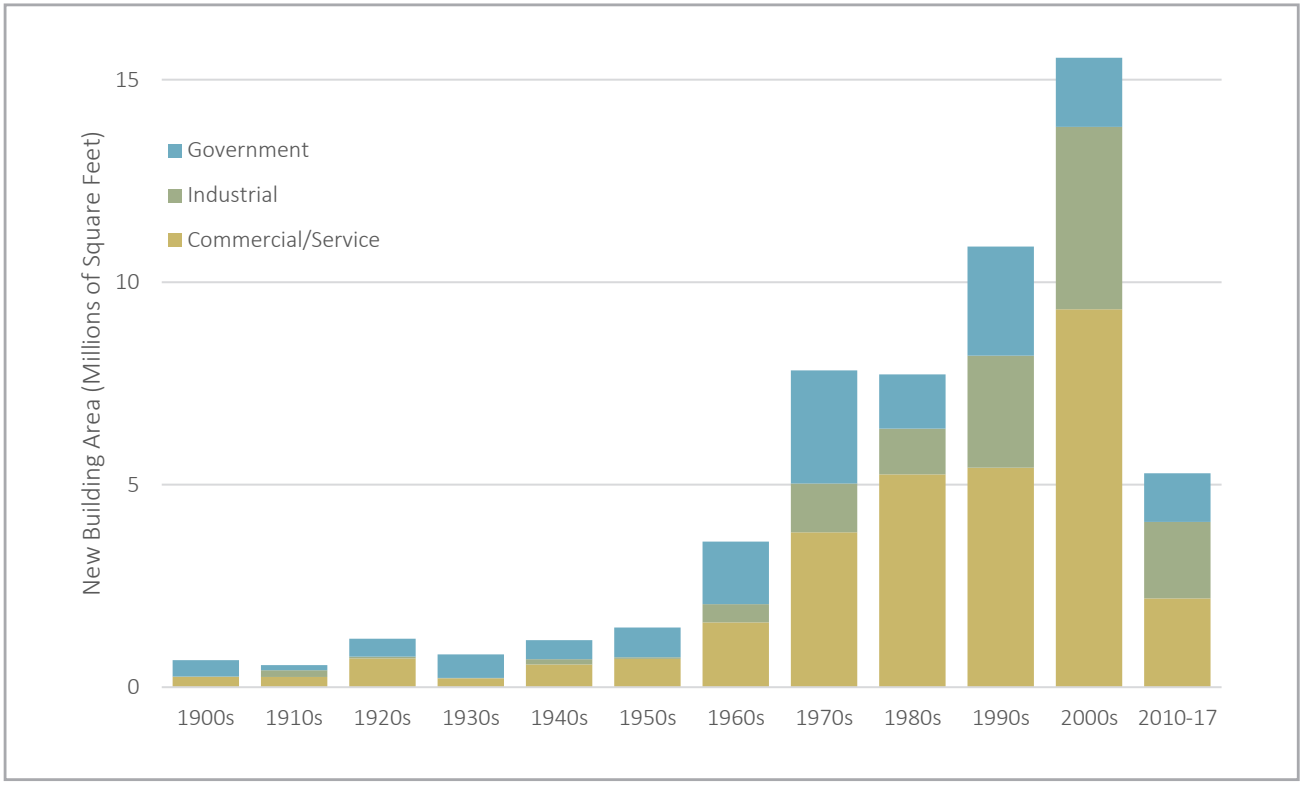
Since 1990, over 30 million square feet of commercial, industrial, and public-sector building space have been built in Thurston County's urban areas (Figure 4-2). Countywide employment grew by about 70,000 jobs over the same time period.

Accommodating the 30,000 new commercial and industrial jobs alone forecasted for 2020 to 2040 will require an estimated 15 million square feet of building area. Each business has unique building space needs dependent on the industry, location, and number of employees. Two factors are helpful to project the amount of land needed for this growth in employment and building space: the floor-to-area ratio and the building area per employee. These two factors inform how much building space is needed per employee, and the density of building development on the parcel.

COVID-19 AND COMMERCIAL SPACE

The ongoing COVID-19 pandemic has dramatically changed where people work, how they shop, and the businesses they patronize. TRPC's projections were developed before the pandemic, so its long-term effects on the need for commercial and industrial building space will need to be monitored.

Figure 4-2: Commercial, Industrial, and Government Building Area Construction By Decade, Thurston County Urban Area



Floor-to-Area Ratio

The floor-to-area ratio is a measure of a building's total square feet to parcel area. This factor looks at how much total land area commercial and industrial buildings require. In addition to the building footprint, space is needed for parking, stormwater ponds, and landscaping. Commercial buildings tend to have a higher floor-to-area ratio, often more than double that of industrial buildings. Typical ratios in Thurston County range from 3,500 to 14,000 square feet per acre but vary widely by industry (Figure 4-3).

Floor-to-area ratios also vary significantly by location. Where land prices are higher and vacant land is harder to find, land is generally developed more intensively so the investment will pencil out. For this reason, downtown business districts tend to have higher ratios — observed by more multistory buildings and structured parking — compared to suburban and auto-oriented commercial areas.

Lacey Woodland Square

48,000 square feet per acre

Downtown Tenino

33,000 square feet per acre

Tumwater Airport Industrial

2,000 square feet per acre

Photo Credits: Google Maps

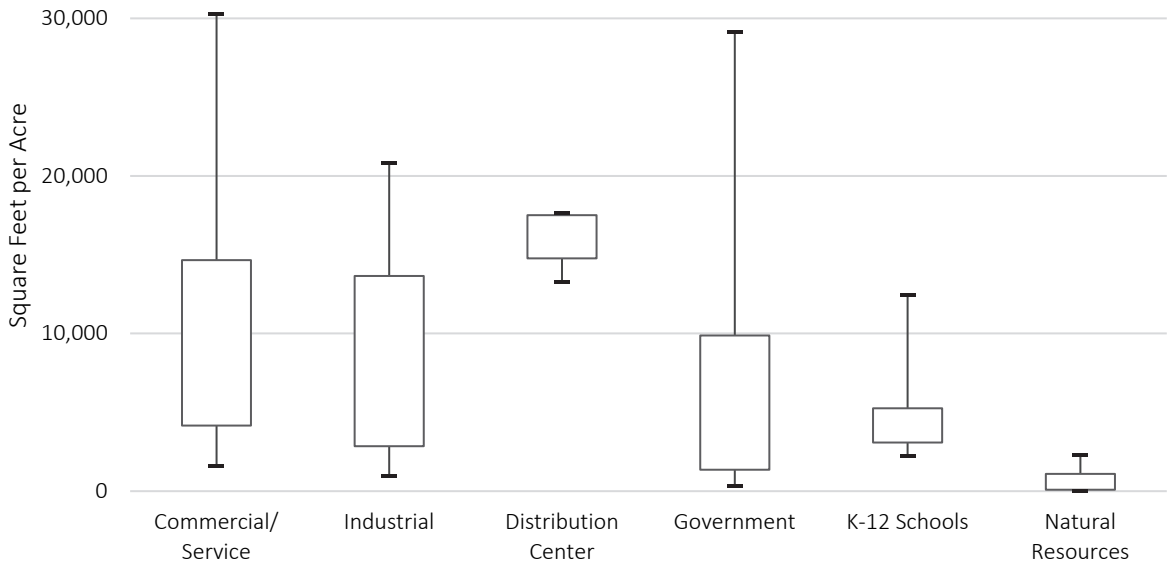
Building Area per Employee

Thurston County's urban areas contain an average of 570 square feet of building area for every employee. Space requirements are higher for industrial buildings: 1,470 square feet per employee compared to 430 for commercial building space. These figures do not include schools, churches, and other buildings used for community gathering spaces. Figure 4-4 shows the range of values found today for different building types. The high variability in space requirements makes it challenging to project future building space requirements.

Infrastructure

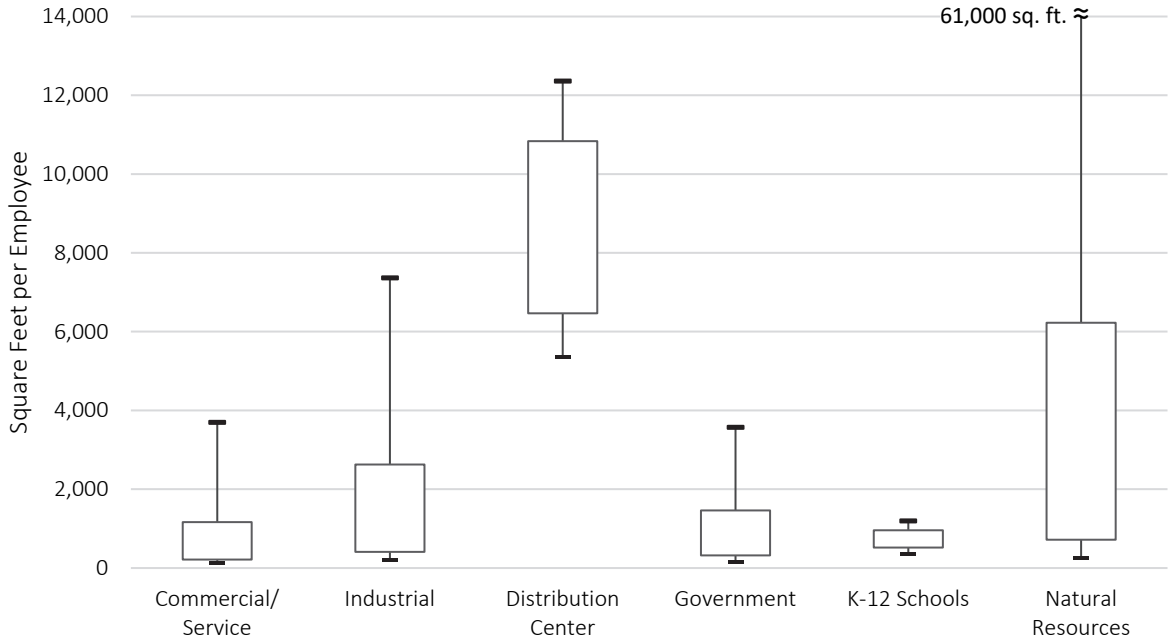
The analysis assumes that infrastructure — such as roads and utilities — will be built or extended as necessary as land is developed.

Figure 4-3: Floor-to-Area Ratio of Buildings for Select Industries



Note: Box and whisker plots show 10th, 25th, 75th, and 90th percentiles. Half of all buildings have a floor-to-area ratio that falls within the box; 80 percent within the whiskers. Excludes buildings with no employment data

Figure 4-4: Building Floor Area (Square Feet) per Employee for Select Industries



Note: Box and whisker plots show 10th, 25th, 75th, and 90th percentiles. Half of all buildings have an employee-to-square foot ratio that falls within the box; 80 percent within the whiskers. Excludes buildings with no employment data.

Table 4-2: Building and Employment Density, TRPC Commercial/Industrial Building Inventory Buildings Constructed Through 2017

Jurisdiction	Urban Corridor	Total Building Floor Area (square feet)	Developed Area (acres)	Floor Area / Dev. Area (sq. ft / acre)	Floor Area / Employee (sq. ft. / job)	Employee / Dev. Area (jobs / acre)
Commercial Buildings						
Bucoda & UGA	No	19,600	1	23,000	720	31.9
Grand Mound UGA	No	713,300	80	8,900	750	11.9
Lacey & UGA	Yes	3,179,900	281	11,300	440	25.6
	No	4,626,400	524	8,800	530	16.5
Olympia & UGA	Yes	5,827,900	290	20,100	320	62.2
	No	6,215,500	565	11,000	460	24.1
Rainier & UGA	No	76,000	21	3,600	700	5.1
Tenino & UGA	No	184,400	14	12,900	480	27.0
Tumwater & UGA	Yes	1,285,700	60	21,400	270	78.6
	No	3,421,800	407	8,400	550	15.3
Yelm & UGA	No	1,307,100	157	8,300	530	15.7
Urban Corridor		**10,293,500**	**631**	**16,300**	**340**	**47.5**
North Urban, remainder		**14,263,700**	**1,495**	**9,500**	**500**	**19.0**
South Urban		**2,300,300**	**274**	**8,400**	**580**	**14.4**
Total/Average		**26,857,600**	**2,400**	**11,200**	**430**	**26.0**
Industrial Buildings						
Bucoda & UGA	No	1,200	0	3,000	740	4.0
Grand Mound UGA	No	153,800	26	5,900	1,250	4.7
Lacey & UGA	No	7,561,800	580	13,000	630	15.9
Olympia & UGA	No	1,132,000	73	15,500	760	31.9
Rainier & UGA	No	8,000	3	3,000	550	5.5
Tenino & UGA	No	37,900	6	6,800	640	10.7
Tumwater & UGA	No	4,634,500	345	13,400	13,910	11.5
Yelm & UGA	No	238,100	40	6,000	1,930	3.1
Urban Corridor		**0**	**0**	**–**	**–**	**–**
North Urban, remainder		**13,328,300**	**998**	**13,400**	**1,480**	**9.0**
South Urban		**439,100**	**74**	**5,900**	**1,400**	**4.3**
Total/Average		**13,767,333**	**1,072**	**12,800**	**1,470**	**8.7**

Note: Inventory of buildings permitted up to the end of 2019. Excludes schools, churches, colleges, jails, libraries, the airport, hospitals, city halls, Port of Olympia property, golf courses, recreation parcels, horse arenas, reservoirs, and tanks. Does include the Capitol Campus.

Findings

The evaluation shows that there is enough vacant, partially developed, and redevelopable land to support the employment growth forecast to the year 2040 for urban areas in Thurston County.

The supply varies by jurisdiction. Each jurisdiction has a vision — articulated in their comprehensive plans — for how they plan to grow. Olympia, for instance, contains very little vacant industrial land compared to Tumwater and Lacey. Taking the three cities together, there is ample space for attracting manufacturing or warehousing jobs. While all three cities have sufficient space for jobs in the commercial sector, redevelopment is likely to occur more often in Olympia as there is less vacant land. Reuse of empty buildings and redevelopment of underutilized parcels is considered in the land supply analysis, especially in the core urban areas and along major transit corridors where redevelopment is more likely to occur.

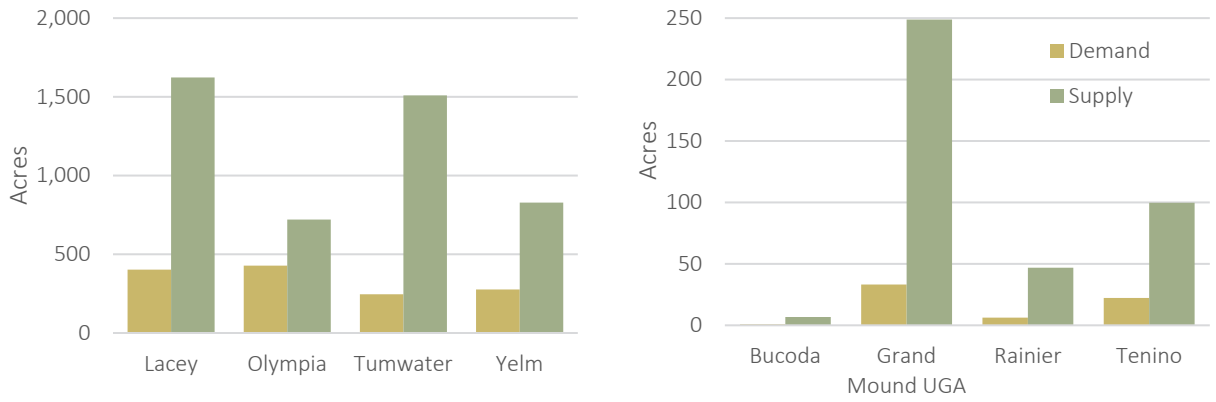
Yelm has seen steady job growth over the last few decades and has designated adequate land supply to accommodate future growth.

Rainier's long-range plans include annexing parts of their unincorporated growth area and rezoning it to commercial or industrial uses.

Questions remain as to how much of the commercial and industrial land supply will be available for development due to federal endangered species listings, especially in west Tenino and Port of Olympia property in Tumwater (See Page 45).

Forecasting future need for industrial and commercial land is much more complex than residential forecasts. A robust land supply requires a full range of options for potential businesses — from unimproved land, to land with infrastructure already available, to existing and vacant buildings.

Figure 4-5: Commercial and Industrial Land Supply Compared to Minimum Land Demand, Thurston County Urban Areas



Note: These are "average" conditions. Land may be used more intensively depending on market factors and type of commercial / industrial growth. Supply includes vacant, partially developed, and redevelopable land.

Table 4-3: Estimated Land Needed to Accommodate Employment Growth in Commercial per Mixed Use, and Industrial Zones

	Acres to Accommodate Employment Growth		
Urban Area	**Commercial or Mixed Use**	**Industrial**	**Total**
Bucoda	1	0	1
Grand Mound UGA	13	20	33
Lacey	295	107	402
Olympia	415	12	428
Rainier	5	1	6
Tenino	17	6	22
Tumwater	162	84	246
Yelm	260	16	276
Total	**1,168**	**247**	**1,415**

Note: Acres of land needed is equal to employment growth times the average employees per developed acre in Table 4-2. This is the minimum need for available commercial/industrial land supply to accommodate future growth and does not take into account the need for special uses that may arise such as a new airport or major distribution center.

Table 4-4: **Acres of Land Available in Commercial, Mixed Use, and Industrial Zones**

Urban Area		Comm. or Mixed-Use Zones	Industrial Zones	Total	Other
Bucoda	Vacant.	6	0	6	
	Redevelopable	1	0	1	
Grand Mound UGA	Vacant	93	122	216	
	Redevelopable	15	18	33	
Lacey	Vacant	799	369	1,168	
	Redevelopable	285	170	455	
Olympia	Vacant	254	102	357	Additional land on Port of Olympia property
	Redevelopable	326	38	363	
Rainier	Vacant	39	1	40	
	Redevelopable	7	0	7	
Tenino	Vacant	84	5	89	Additional land in master planned community
	Redevelopable	9	2	11	
Tumwater	Vacant	297	887	1,184	Additional 1M sq. ft. on Port of Olympia property
	Redevelopable	122	203	325	
Yelm	Vacant	578	169	747	Additional 0.65-1.5M sq. ft. in master planned community
	Redevelopable	73	8	81	
Total	**Vacant**	**2,151**	**1,656**	**3,806**	
	Redevelopable	**837**	**437**	**1,275**	

Note: "Vacant" includes partially developed parcels with buildable, undeveloped area. Table excludes properties owned by schools, churches, college and universities, and other local government.

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5. RURAL LANDS

What are the development trends in Thurston County's rural lands?

Description

Rural lands are those lands outside of the designated cities, urban growth areas and tribal reservations. Of the 730 square miles that comprise Thurston County, 87 percent are designated as rural lands.

Why is this Important?

Under GMA, counties are required to identify lands not designated for urban development (rural lands) as well as natural resource lands (e.g. long-term agriculture, long-term forestry, and mineral lands). Rural lands must allow for a variety of densities and uses, and counties must plan for development in these areas that is consistent with rural character.

Rural Development Trends

Just over 31 percent of Thurston County's households live in the rural areas. In the last three decades, the percent of new housing units locating in rural areas per year has decreased from a high of 50 percent in 2000 to 14 percent in 2014. Some of the reasons for this decline in the rural proportion of new housing units include:

- Endangered species listings (Page 45) and critical area ordinances have reduced developable land while protecting environmentally sensitive areas.
- Uncertainty around wells and drinking water availability (Page 61).
- Zoning changes after 1990 — such as the Rural Resource Residential 1/5 and Long-Term Agriculture zones — intended to conserve rural resource lands by increasing minimum lot sizes for new parcels.
- Changes in rural cluster zoning ordinances leading to removal of incentives for smaller lots on subdivision that include a resource parcel.
- Growing desirability of urban living, including housing near transit and shops and restaurants

Based on recent trends and changes in demographics that will likely lead to further increase in the percent of people seeking to locate in urban neighborhoods close to jobs and services, TRPC forecasts that 14 percent of future dwelling units will locate in rural areas between 2020 and 2040.

It is important that these trends continue to be monitored as shifts are possible. The current COVID-19 pandemic has shown that shifts can often occur faster than anticipated. It remains to be seen if the sudden rise in teleworking will change where people choose to live over the long term, and if demand shifts from urban to rural areas. Water also has the potential to shift the supply and demand of housing. If water availability becomes a barrier to new development, housing growth will shift to jurisdictions and watersheds with availability. The Buildable Lands Report serves as a baseline from which these potential shifts — and others — can be assessed.

Rural Lot Sizes

In the past ten years, almost 1,800 rural lots were developed. About 40 percent of that development has been on small lots, or lots less than two acres in size. These lots are generally found in areas designated as "Limited Areas of More Intensive Rural Development" (LAMIRDs). LAMIRDs are areas where a pattern of denser development predated adoption of the Growth Management Act in 1990. While larger parcels within these areas can be subdivided into lots of similar size to those around them, new LAMIRDs cannot be created and the boundaries of existing LAMIRDs generally cannot be expanded. Many other small lots in rural Thurston County were subdivided prior to adoption of the Growth Management Act.

About 20 percent of development activity over the past decade has occurred on lots that are around five acres in size.

Figure 5-1: Percent of New Housing Units in Rural Unincorporated County

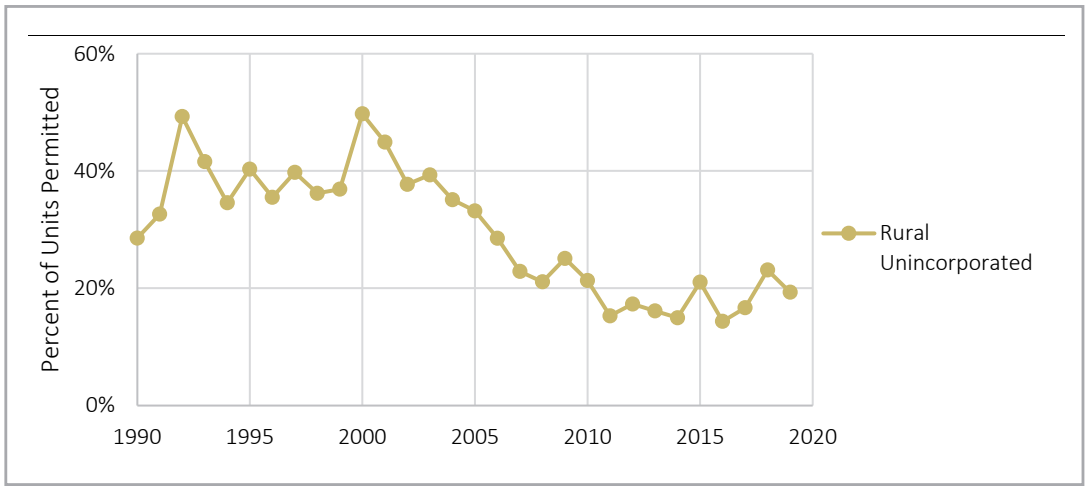
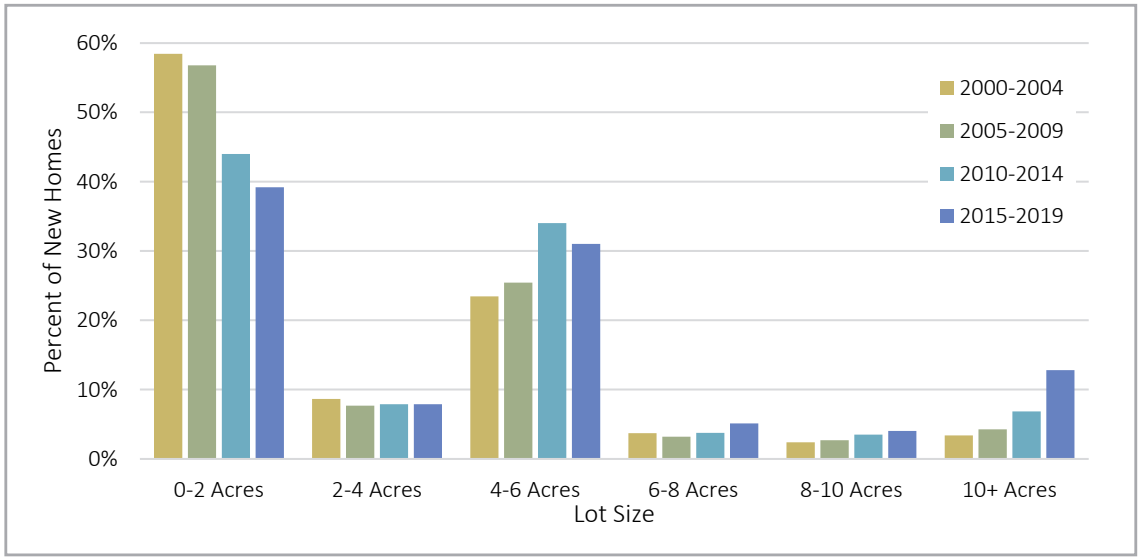


Figure 5-2: Residential Development in Thurston County by Average Lot Size, 2000-2019



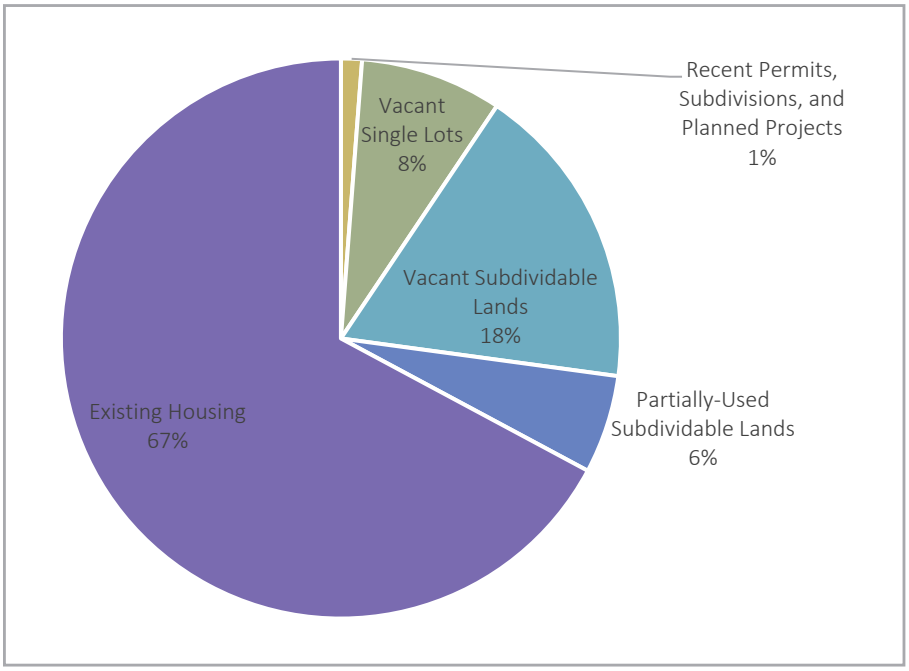
Findings

Rural Residential Capacity

Under current zoning, rural Thurston County has capacity for about 17,300 new dwelling units, well above the estimated demand for 6,400 new units needed over the next 20 years. Seventy-nine percent of the capacity for new dwelling units in rural lands is found in vacant lots or planned projects.

While rural development occurs on a range of lot sizes, in general, average lot sizes in rural Thurston County have been increasing. This is consistent with GMA and regional goals of reducing sprawl and protecting rural resource lands while allowing for a range of housing densities.

Figure 5-3: Estimates of Capacity for Dwellings by Type, Thurston County Rural Areas



Water Availability

The availability of drinking water has been a persistent concern in the rural unincorporated county. Groundwater systems are complex with considerable uncertainty in the amount of water available to support both future development and sufficient streamflow levels for riverine ecosystems, including endangered fish species.

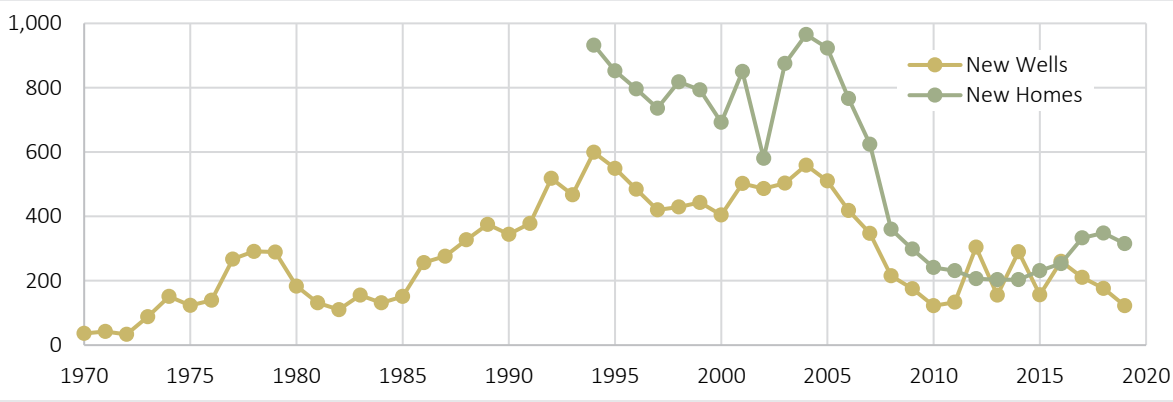
In Washington State, the Dept. of Ecology (Ecology) manages water resources by issuing permits for new surface and groundwater withdrawals. Historically, however, wells for new homes were exempt from permit requirements as long as they used less than 5,000 gallons per day. Since 1990, between 100 and 600 new permit-exempt wells were built in Thurston County each year (Figure 5-4).

In 2016, the Washington State Supreme Court ruled in *Whatcom County v. Hirst* that under the Growth Management Act counties—not the State—were required to ensure adequate water availability before permitting new homes. While each county took a different approach to implement the *Hirst* decision, Thurston County continued to allow the construction of homes on wells.

In 2018, the Washington State Legislature passed the Streamflow Restoration Act (RCW 90.94) which created a process for counties to work with Ecology to manage water resources. The new legislation also required planning to assess water availability at the watershed level and identify projects to offset the impacts of connections to future permit-exempt wells. In Thurston County, this planning work has been completed for the Nisqually and Chehalis River watersheds and is nearing completion for the Deschutes River, and Kennedy-Goldsborough Creek watersheds. If planning is not sufficient in the watersheds, Ecology can limit water withdrawals or dictate other associated changes through the rulemaking process. At this time, none of the planning efforts include offset actions that would reduce future growth in the rural unincorporated portions of Thurston County.

Since current regulation allows the construction of new homes on wells to continue and work is being done to offset the impacts of new wells, the issue of water availability is not projected to impact the capacity for future growth in the rural unincorporated County. Future versions of the forecast and Buildable Lands Report will include an updated methodology if the situation changes.

Figure 5-4: New Wells Compared to New Homes in the Rural Unincorporated County



Note: Includes all wells countywide compared to new homes in the rural unincorporated county. Not all new homes are on wells, and some wells may have since been abandoned.

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6. HOUSING AFFORDABILITY

Will affordable housing be available to people of all incomes in the next 20 years?

Overview

Like many fast-growing counties in western Washington, Thurston County has a shortage of affordable housing. Between 2014 and 2018, on average 33 percent of households were cost burdened, or spending more than 30 percent of their income on housing expenses (Figure 6-1).

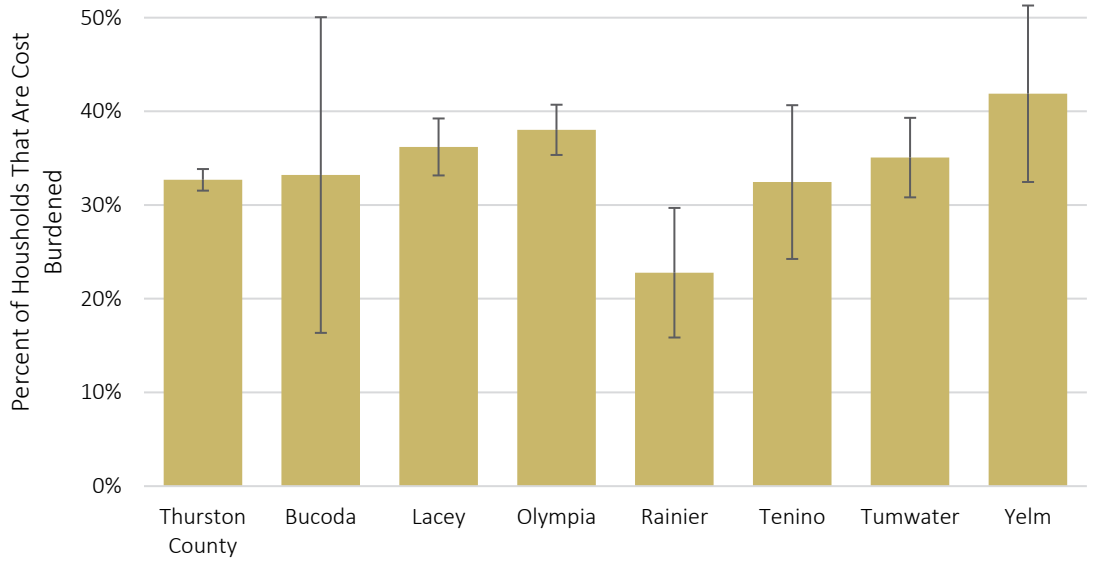
Housing costs have increased much faster than incomes. Since 2010, average home sale prices have doubled, and the average rent has increased 173 percent (nearly tripled). At the same time, incomes have only increased 58 percent (Figure 6-2).

The data produced as part of the Buildable Lands Program provides some information on housing affordability. Compared to the 2014 Buildable Lands Report, Thurston County has:

- About 2,100 fewer acres of developable residential, commercial, and industrial land in the urban areas. A decreasing supply increases the cost of purchasing land.
- A greater percentage of environmentally constrained land on developable parcels (about 1.5 percent more). Environmental constraints — such as wetlands or steep slopes — can increase the cost of developing by requiring additional mitigation.
- About 2,600 more dwelling units are forecasted along urban corridors. Due to their proximity to transit and goods and services, transportation costs are lower for households living along urban corridors compared to those living further away. However, rents are often higher because high-density multifamily housing on infill and redevelopment sites – the most common type of development along corridors – is expensive to construct.

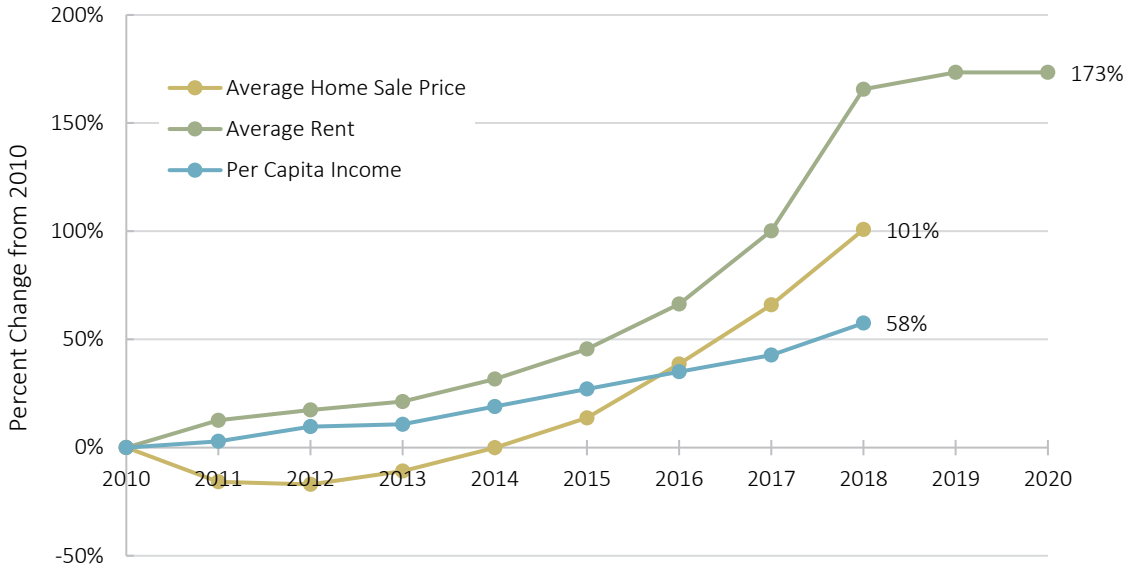
Outside of urban corridors, about 700 new units are projected in infill areas (neighborhoods largely built out by the 1970s). Transportation costs in these areas tend to be lower since they are not far from transit and goods and services. Construction costs also tend to be less: sewer and water infrastructure is already available, and the types of housing that can be built — smaller single-family homes, accessory dwellings, and stick-built multifamily such as townhomes, duplexes, and triplexes — generally have lower per unit construction costs than large apartment complexes (Figure 6-3).

Figure 6-1: Percent of Households Spending 30 Percent or More of Their Income on Housing (Cost Burdened).



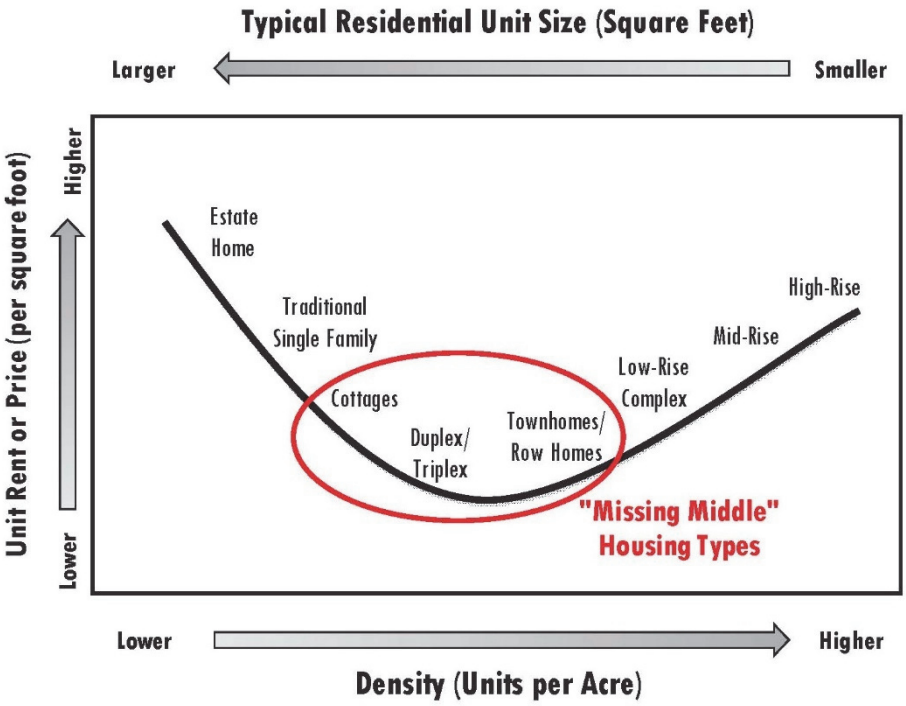
Source: U.S. Census Bureau: 2014-2018 American Community Survey

Figure 6-2: Increase in Housing Costs and Incomes Since 2010



Source: Northwest Multiple Listing Service, University of Washington: Runstad Center for Real Estate Studies, U.S. Bureau of Labor Statistics

Figure 6-3: Relationship Between Housing Costs and Density



Source: Dept. of Commerce: Housing Memorandum: Issues Affecting Housing Availability and Affordability (June 2019)

Housing Affordability Guidance

One of the changes to the Buildable Lands statutes included in E2SSB 5254 was the requirement that the Dept. of Commerce (Commerce) develop guidance for cities and counties to address housing affordability. The guidance addresses three topic areas:

- Infrastructure costs, cost of development, timelines to permit and develop land, market availability of land, the nexus between proposed densities, economic conditions needed to achieve those densities, and the impact to housing affordability for home ownership and rental housing, and market demand when evaluating if land is suitable for development or redevelopment.
- Identifying the measures to increase housing availability and affordability for all economic segments of the community and the factors contributing to the high cost of housing.
- Evaluating how existing zoning and land use regulations are promoting or hindering attainment of the goal for affordable housing.

The new guidance — *Issues Affecting Housing Costs & Affordability*[5] — was prepared by PNW Economics LLC and delivered to the Commerce in June 2019. The new guidance identifies some of the drivers of housing costs (Figure 6-4). While some of the costs identified are directly related to local government policy, others are influenced by state and federal macroeconomic policy. Still others are related to individual consumer preferences.

The guidance also provides recommendations for cities, counties, and the state to reduce the cost of housing.

Figure 6-4: Overview of Economic and Policy Factors Affecting Housing Production and Affordability

Macroeconomic Drivers		
Employment Growth	Prices & Inflation	Interest Rates

Supply Drivers	Demand Drivers
• Infrastructure and Utility Costs • Development and Construction Costs, including: ◦ Timelines for permitting and development ◦ Market Availability of Land • Regulations, including: ◦ Zoning ◦ Development ◦ Environmental • Housing Production Trends and Costs	• Population Growth and Demographics ◦ Age and State of Life ◦ Household Size • Incomes • Interest Rates • Housing Preferences ◦ Structure Type ◦ Tenure (Own or Rent) ◦ Location • Investment and Foreign Ownership

Adapted from "Housing Memo: Issues Affecting Housing Availability and Affordability"

[5]Available at https://www.commerce.wa.gov/serving-communities/growth-management/growth-management-topics/buildable-lands/.

Regional Housing Action Plan

While an assessment of housing affordability is not required as part of the Buildable Lands review and evaluation program, leaders in Thurston County recognize the importance of addressing the issue. In 2019, the cities of Lacey, Olympia, and Tumwater applied for and were awarded funding from Commerce to develop Housing Action Plans. When complete, the plans will provide a snapshot of the region's current housing stock, a projection of future housing needs for different income groups, and a list of actions that the cities can implement to ensure sufficient housing that is affordable to households of all incomes over the next 20 years. The three cities chose to partner with TRPC as part of this effort.

The Regional Housing Action Plan is an opportunity to take a deeper looking into the drivers of housing costs in Thurston County — including those costs related to land supply. The plan will be completed in June 2021.

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7. REASONABLE MEASURES

What actions are needed to meet state Growth Management Act goals?

Overview

Reasonable measures are "those actions necessary to reduce the differences between growth and development assumptions and targets contained in the countywide planning policies and the county and city comprehensive plans with actual development patterns" (RCW 36.70A.215).

The Buildable Lands Report is required to identify reasonable measures if the evaluation finds that the region is not achieving urban densities in the urban growth areas or if there is insufficient land to accommodate the growth forecasted for the urban areas. Once identified, cities and counties are required to include reasonable measures in their next comprehensive plan update.

Findings

This Buildable Lands assessment concludes that Thurston County's development trends are consistent with GMA's land use goals. Recent development patterns show that we are achieving densities consistent with urban development in our urban areas, and a review of residential, commercial, and industrial land capacity shows there is sufficient land in our urban areas to accommodate 20 years of projected population and employment growth. On rural lands, development density is decreasing as average lot sizes increase, consistent with GMA goals to reduce sprawl and preserve rural character and resource lands.

Based on these findings, reasonable measures are not necessary.

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VOLUME II

REGIONAL GOALS

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8. REGIONAL GOALS AND TARGETS

Are we making progress toward meeting our regional vision?

In addition to goals in the Growth Management Act (GMA), Countywide Planning Policies, and Comprehensive Plans, the Thurston Region set goals and targets through a communitywide planning process to support a regional vision known as "Sustainable Thurston." The targets were not adopted into local comprehensive plans. Progress toward meeting these targets does not influence whether or not reasonable measures are required through the Buildable Lands Program — which focusses on goals and targets related to the GMA. It does, however, inform whether the region is developing consistent to our regional vision, and is included in this report as additional information.

Sustainable Thurston

In 2013, Thurston Regional Planning Council adopted *Creating Places — Preserving Spaces: A Sustainable Development Plan for the Thurston Region* (Sustainable Thurston). The plan was the culmination of a two-year effort to envision how the region will "look, function, and feel" in 2035. The plan set forth a bold vision for a more sustainable community based on the consensus of residents and local leaders involved in the project.

The Sustainable Thurston Vision

North County Centers & Corridors	Residential Neighborhoods	South County Communities	Rural Lands
Dense neighborhoods where people can live, work, and play without depending on a vehicle	Areas with a range of housing options centered around neighborhood retail/ civic spaces	Foster entrepreneurship and economic development while maintaining "small town feel"	Preserve rural character and protect critical habitat and resource lands

Sustainable Thurston and Climate Planning

The Thurston Climate Mitigation Plan (2020) identifies strategies to meet the greenhouse gas emissions targets set by Lacey, Olympia, Tumwater, and Thurston County. Strategy T1 in the plan recognizes that achieving the Sustainable Thurston land use goals will be necessary to meet the region's climate mitigation goals.

Are we on track to meet our targets?

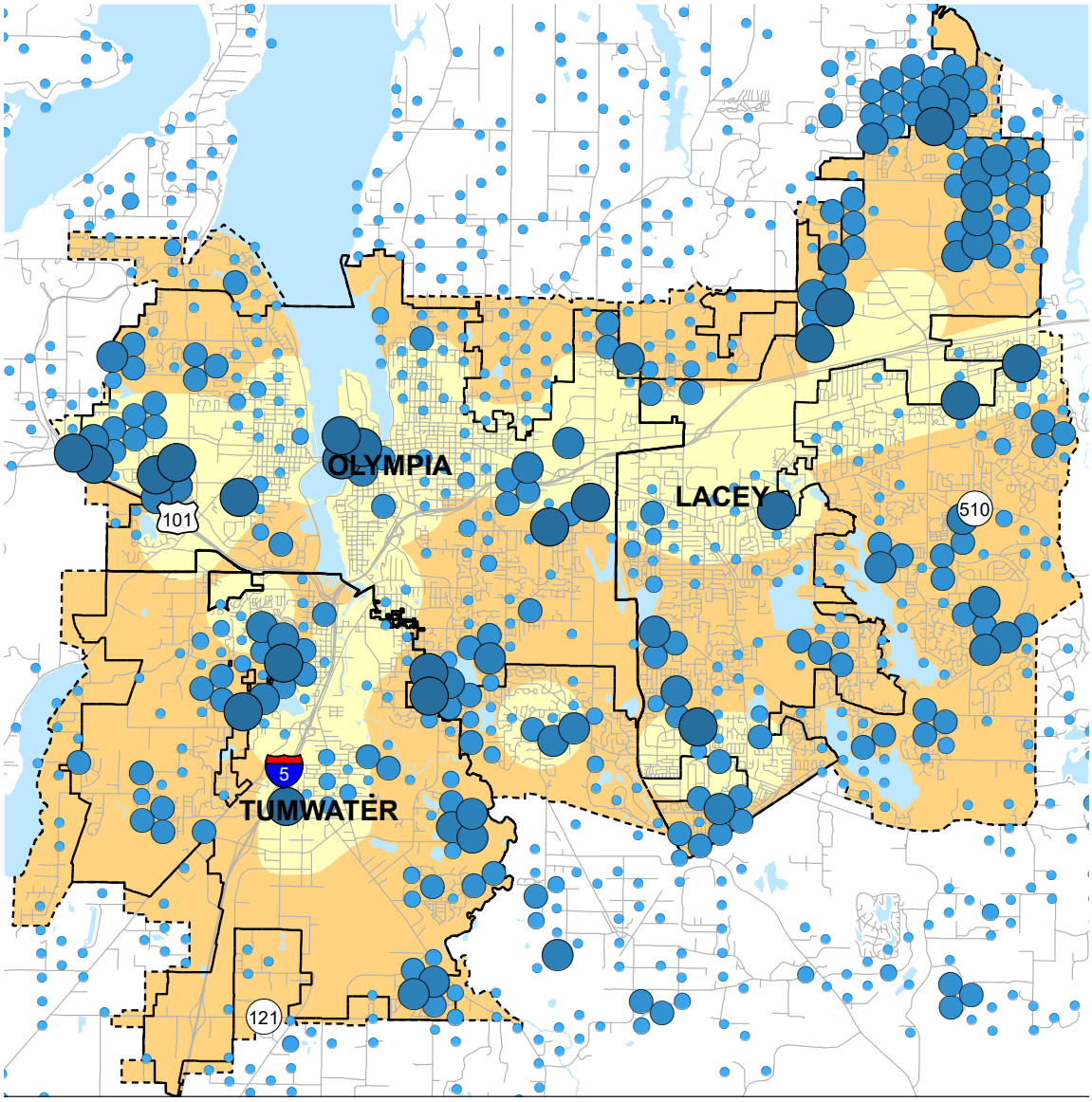
The region is not on pace to meet either land use target adopted in the Sustainable Thurston plan.

Since 2010, the region has added over 13,000 new dwelling units. Eighty-five percent of new housing has been built in cities, unincorporated urban growth areas, and tribal reservations — well below the 95 percent target. Only about 46 percent of urban-area housing is within a half mile of an urban center, urban corridor, or neighborhood center — also below the target of 72 percent.

Figure 8-1 shows where dwellings units have been permitted since 2010 in the Lacey, Olympia, and Tumwater urban area in relation to the urban centers, urban corridors, and neighborhood centers identified in Sustainable Thurston.

TRPC's baseline forecast shows that with current zoning and development regulations, we should not expect much change in this trend. Eighty-six percent of new housing between 2010 and 2035 is projected to be in a city, unincorporated urban growth area, or tribal reservation. Only 57 percent of urban area growth will likely be within a half mile of an urban center, urban corridor, or neighborhood center.

Figure 8-1: Recent Dwelling Units in Lacey, Olympia, and Tumwater



Sustainable Thurston Priority Goal 1

Create vibrant centers, corridors, and neighborhoods while accommodating growth.

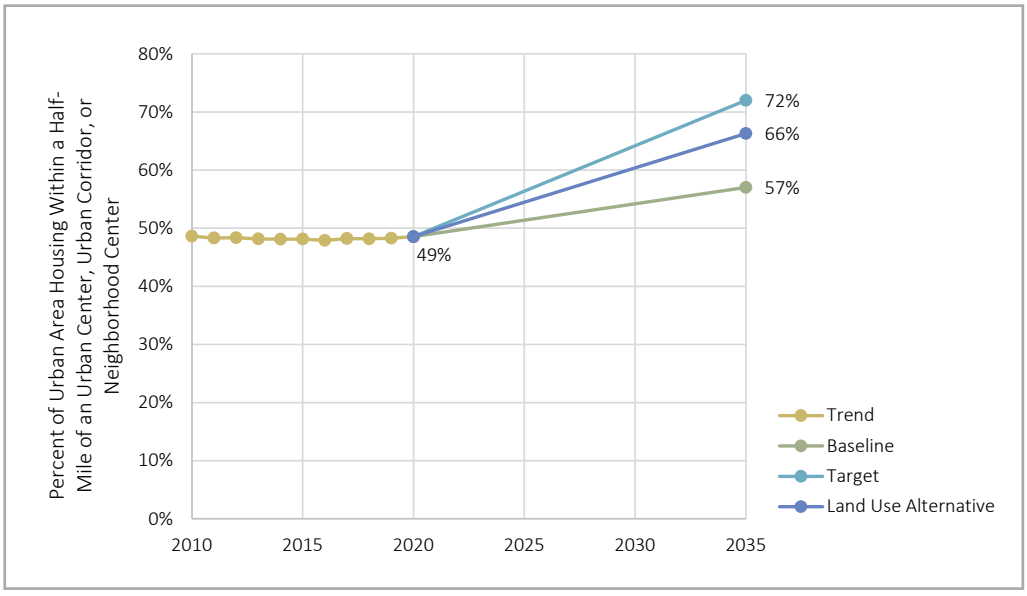
Target

By 2035, 72 percent of all (new and existing) households in our cities, towns, and unincorporated urban growth areas will be within a half-mile (comparable to a 20-minute walk) of an urban center, corridor, or neighborhood center with access to goods and services to meet some of their daily needs.

How Are We Doing?

Since 2010, the amount of urban area housing within a half mile of an urban center, urban corridor, or neighborhood center has remained just below 50 percent (Figure 8-2). An increase in development in urban centers and corridors — as seen in downtown Olympia — and emerging neighborhood centers — such as Tumwater Hill — have been offset by growth in the fringes of the urban areas.

Figure 8-2: Percent of Urban Area Housing Within a Half-Mile or an Urban Center, Urban Corridor, or Neighborhood Center



What's the Outlook?

The baseline forecast shows that by 2035, 57 percent of urban area housing will be within a half mile of an urban center, corridor, or neighborhood center with access to goods and services to meet some of their daily needs. This assumes both a growing population in existing centers and corridors (Figure 8-1) and new neighborhood centers meeting the Sustainable Thurston vision. The strategies modeled in the land use alternative scenario could increase that up to 66 percent. Both, however, are below the Sustainable Thurston target (72 percent).

Sustainable Thurston Priority Goal 2

Preserve environmentally sensitive lands, farmlands, forest lands, prairies, and rural lands and develop compact urban areas.

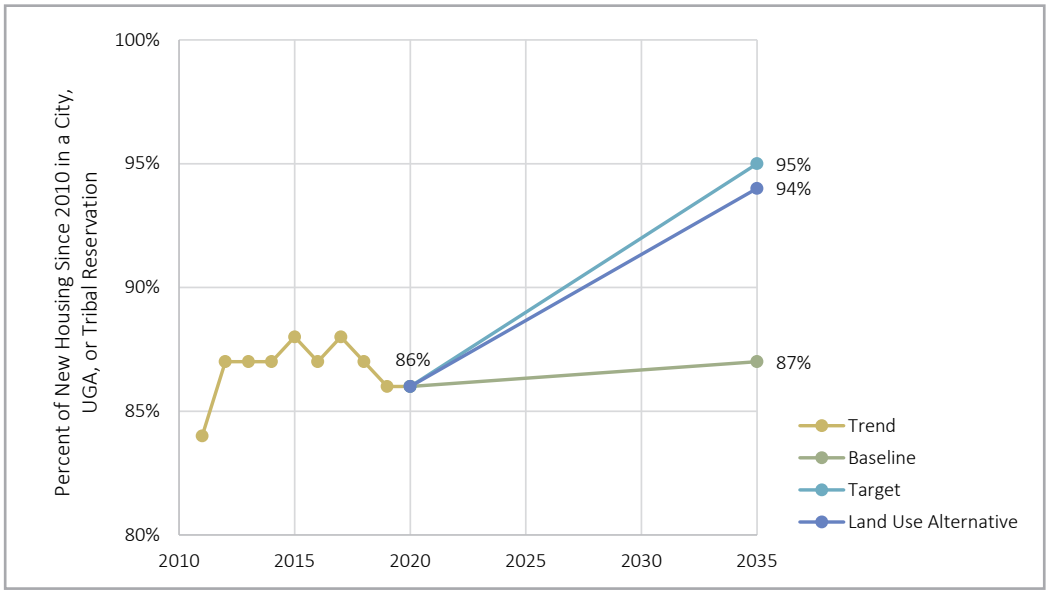
Target

Between 2010 and 2035, no more than 5 percent of new housing will locate in the rural areas, and 95 percent will be within cities, towns, unincorporated urban growth areas, and tribal reservations. Rural areas are defined as outside of the cities, towns, unincorporated urban growth areas, and tribal reservations.

How Are We Doing?

Between 2010 and 2020, 86 percent of new housing in Thurston County was built in a city, town, unincorporated urban growth area, or tribal reservation (Figure 8-3). Fourteen percent was built in the rural county.

Figure 8-3: Percent of Housing Build After 2010 in a City, UGA, or Tribal Reservation



What's the Outlook?

The baseline forecast projects that 87 percent of housing built between 2010 and 2035 will be in the urban areas and tribal reservations. The strategies modeled in the preferred land use scenario could increase that to 94 percent — close to the Sustainable Thurston Target of 95 percent.

A Land Use Alternative

What can we do to make progress towards our regional targets? As part of the 2021 Buildable Lands Report update, TRPC created a land use alternative to see if the Sustainable Thurston targets are still achievable by 2035, and what broad types of strategies would be needed. We ran assumptions through the land use model to ensure the alternative was reasonably achievable based on current development patterns and trends. Strategies focused on five types of areas, each discussed in the following sections:

- North County Urban Centers and Corridors
- North County Neighborhood Centers
- Wider Urban Areas
- Rural Unincorporated County
- South County Communities and Tribal Reservations

Appendix III shows the assumptions used in TRPC's land capacity model for both the baseline forecast and the land use alternative.

Meeting the Sustainable Thurston targets show in Figures 8-2 and 8-3 will require increasing housing in our urban areas — particularly around urban centers and corridors — while preserving farmland, forestlands, and critical habitat in the rural unincorporated county. This will require cities and the County to implement the types of strategies described in the land use alternative.

However, the land use alternative shows us that even with the aggressive strategies to increase capacity included in the land use alternative, we are not likely to meet the Sustainable Thurston land use targets by 2035. By 2035, we could expect 66 percent of urban-area households to be within walking distance of an urban center, corridor, or neighborhood center under this new scenario. And we could expect about 94 percent of housing built since 2010 to be in an urban area or tribal reservation.

We may not be able to meet our targets by 2035, but there is time to make significant progress.

North County Urban Centers and Corridors

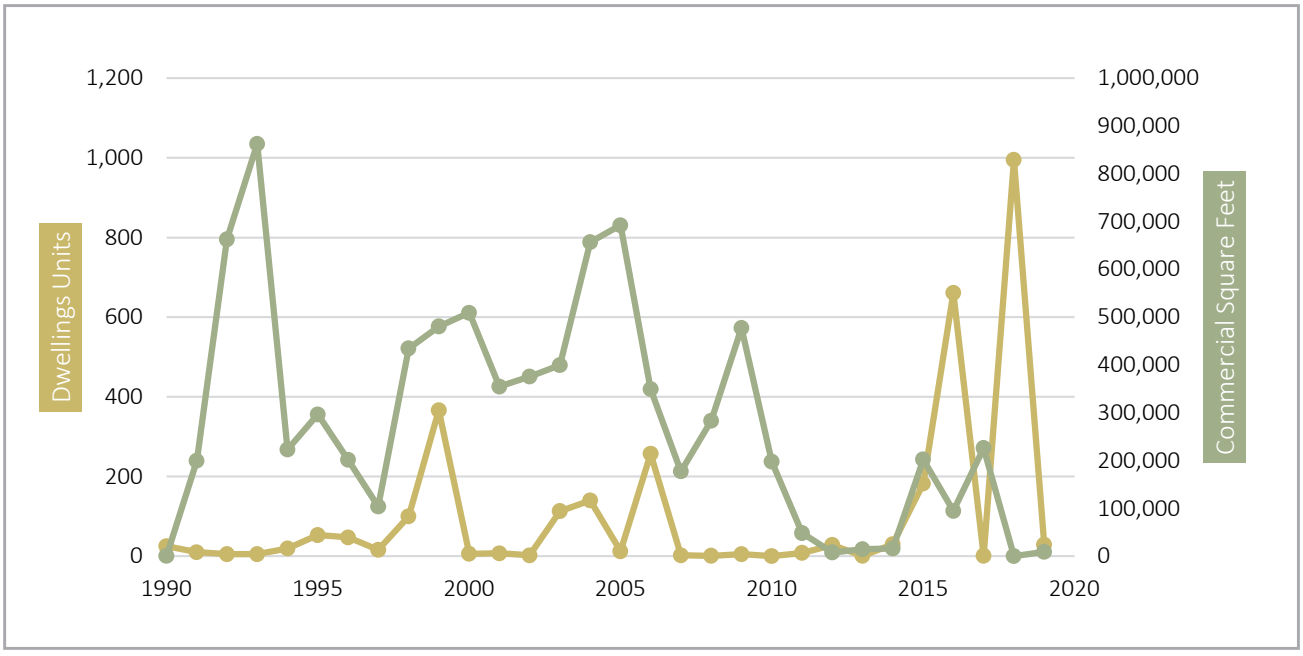
Urban Centers and Corridors are the core of the region's economy. They include the downtowns and city centers of Thurston County's jurisdictions and the 15-minute transit corridors that connect them. They also include the households living within walking distance — a half-mile radius or roughly 20-minute walk.

Sustainable Thurston's vision for centers and corridors calls for vibrant areas with a range of businesses serving the surrounding neighborhoods. Densities are high enough to support active and multimodal transportation — with enough shops and businesses close to homes that walking is a viable choice, and enough people to support frequent transit. Away from centers and corridors, densities decrease to transition into adjacent residential neighborhoods.

Figure 8-5 shows the areas in Lacey, Olympia, and Tumwater with city center or corridor zoning. From 1990 to 2014, these areas saw little new housing — about 50 units per year. Since then the number has increased over seven-fold, to over 370 units per year (Figure 8-4). Much of this gain has been due to development on the east end of Martin Way — close to I-5 and Joint Base Lewis-McChord — and in downtown Olympia. Commercial development has decreased compared to the previous decades.

North County urban centers and corridors follow the highways that predated I-5 (Highway 99 and the Olympic Highway). Businesses along the corridors were historically — and in many areas continue to be — auto oriented. Low-density development and lots of surface parking translates to areas with a lot of potential for infill and redevelopment.

Figure 8-4: Permit Trends in Areas with Urban Center and Corridor Zoning in Lacey, Olympia, and Tumwater

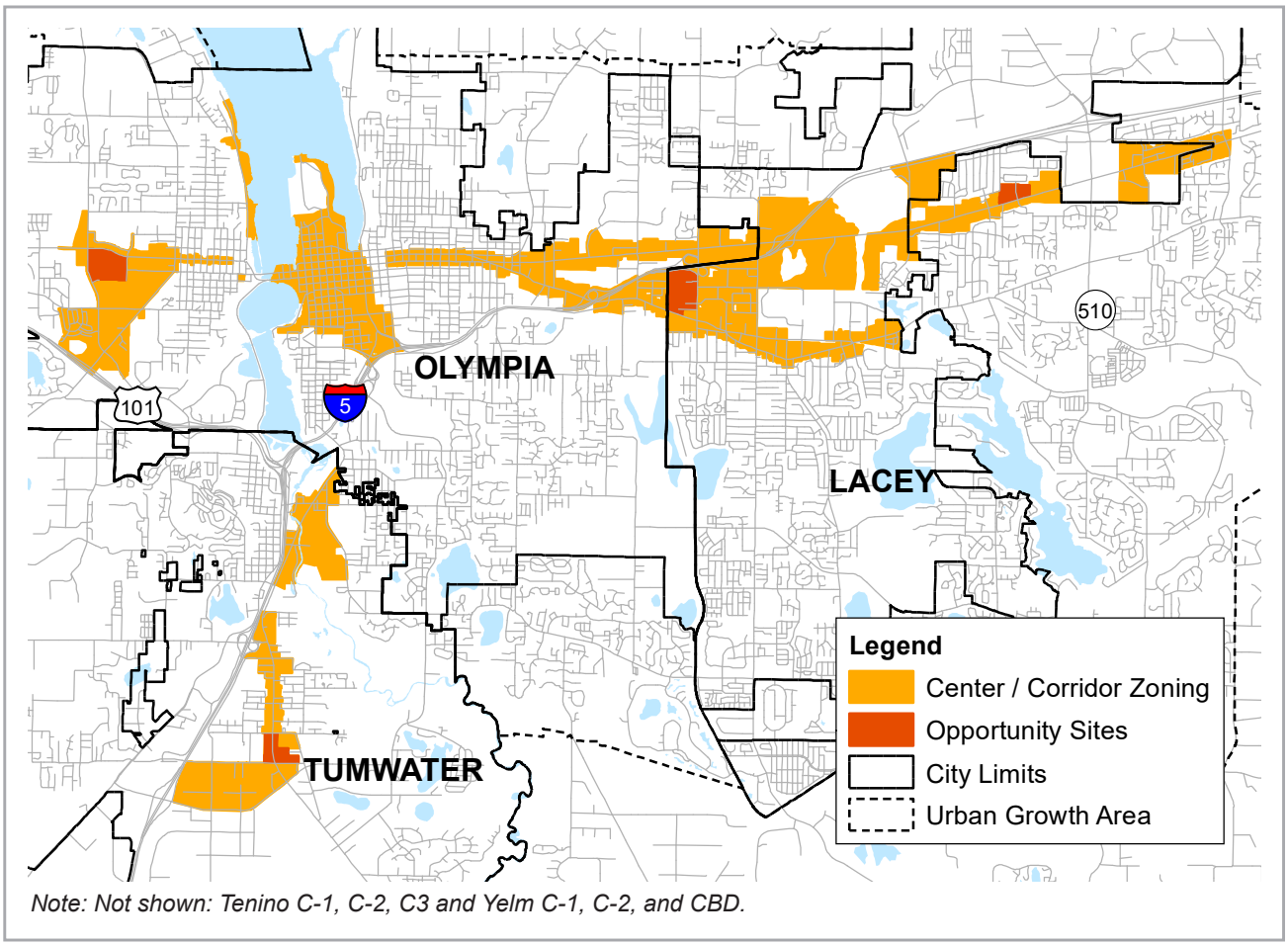


To meet the targets of Sustainable Thurston, the land use alternative looked at two strategies:

- **Mixed Use Development** — In center and corridor zones that allow a mix of commercial and residential uses, the land use alternative assumed a greater share of land would develop with residential uses (generally 10 percentage points more).
- **Redevelopment** — For four locations with lots of parking, the probability of redevelopment was increased even if they had new or high value existing development.

Figure 8-5 shows the areas where development assumptions were adjusted in the land use alternative. Detailed assumptions are shown in Appendix III.

Figure 8-5: Urban Centers, Urban Corridors, and Redevelopment Sites



Note: Not shown: Tenino C-1, C-2, C3 and Yelm C-1, C-2, and CBD.

Table 8-1 shows how these strategies would increase residential capacity in Lacey, Olympia, and Tumwater's urban center and corridor zones.

Since most urban center and corridor zones allow high density, even modest increases in the percent of land that develops as residential uses has a big impact on capacity. These areas currently have capacity for about 6,660 new dwellings. Increasing residential development in mixed use zones could increase capacity by about 11,520 units. Further increasing redevelopment at the four identified sites would increase capacity to 12,000 units.

Table 8-1: Residential Capacity in Urban Centers and Corridors Zones

			Land Use Alternative	
City/UGA	Zone	Baseline	Without Redeveloped Sites	With Redevelopment Sites
Lacey	CBD 4	30	60	60
Lacey	CBD 5	90	130	130
Lacey	CBD 6	40	90	90
Lacey	CBD 7	10	10	10
Lacey	MHDC	890	1,100	1,120
Lacey	WD	720	1,200	1,280
Olympia	DB	730	1,270	1,270
Olympia	HDC-1	< 10	20	20
Olympia	HDC-2	< 10	20	20
Olympia	HDC-3	20	80	80
Olympia	HDC-4	1,610	4,440	4,680
Olympia	UR	160	180	180
Olympia	UW	580	760	760
Olympia	UWH	300	430	430
Tenino	C-1	< 10	< 10	< 10
Tenino	C-2	< 10	< 10	< 10
Tenino	C-3	10	20	20
Tumwater	BD	650	660	660
Tumwater	CBC	600	670	810
Tumwater	TC	30	60	60
Yelm	C-1	80	170	170
Yelm	C-2	40	70	70
Yelm	CBD	70	80	80
Total		**6,660**	**11,520**	**12,000**

Planning on Urban Centers and Corridors

The Thurston region has a long history of planning on urban centers and corridors. While each plan is tailored to the needs of a specific area, each has similar goals: increasing infill and redevelopment, encouraging a mix of residential and commercial retail uses, and increasing opportunities for multimodal transportation options. Planning helps inform the cities if changes to infrastructure or development regulation are needed to meet these goals.

2012	Urban Corridors Task Force [link]
2013	Woodland District Plan [link]
2014	Capitol Boulevard Plan [link]
2014	Brewery District Plan [link]
2014	Martin Way Study (State Avenue to Lilly Road) [link]
2017	Olympia Downtown Strategy [link]
2020	Martin Way Corridor Study (State Avenue to Meridian Road, Underway) [link]

Urban Centers and Corridors: The Reserve at Lacey

Following the merger of Safeway and Albertsons, the Albertsons grocery store on Pacific Avenue and Carpenter Road in Lacey closed. In June 2016, the City of Lacey approved a 300-unit 55+ housing complex, known as the Reserve at Lacey. The four-story project totaled 290,000 square feet, of which 9,000 was commercial retail space.

The site has many advantages, especially for the senior population. It is located on a bus route, across the street from a grocery store and pharmacy, and is within a half-mile of the Lacey Senior Center. However, the project was not without controversy. Residents of the adjacent historic residential neighborhood appealed the project — unsuccessfully — to the city's Hearings Examiner Board over concerns about traffic, noise, lighting, heights, and views. Construction began in 2019 and was completed in 2020.

Meeting the Sustainable Thurston targets will require similar types of development across Thurston County's urban centers and corridors.

Neighborhood Centers

Sustainable Thurston envisioned neighborhood centers as small-scale retail areas serving residents' day-to-day needs, with amenities such as a corner grocery store, coffee shop, or restaurant. There would be enough people living within walking distance — a half-mile radius or roughly 20-minute walk — to support businesses of this size.

In the Lacey-Olympia-Tumwater urban area there are 38 existing or future neighborhood centers: 36 are areas with neighborhood retail-type zoning (a total of 195 acres) plus two sites that are expected to develop as part of future development projects (the Mill Pond development in Olympia and the City of Olympia-owned property at Boulevard Road and Log Cabin Road).

These areas support a wide range of business types. While some cater to nearby residents' day-to-day needs and might be a destination for nearby walkers or bikers, others are auto oriented. Currently, TRPC estimates that nine have businesses that are consistent with the Sustainable Thurston vision for walkable neighborhood centers:

- Yelm Highway and Ruddell Road (Lacey)
- Yelm Highway and College Street (Lacey)
- Northeast Olympia
- West Olympia
- Wildwood Center (Olympia)
- Tumwater Hill
- South Capitol (Olympia)
- Kaiser Rd and Harrison (Olympia)
- Briggs Village (Olympia)

Increasing the number of people who live near a neighborhood center that meets the Sustainable Thurston vision can be accomplished in two ways: increasing the capacity for new housing around neighborhood centers and by increase the number of neighborhood centers that have the types of businesses that Sustainable Thurston envisions (see “Increasing Housing Around Neighborhood Centers” Page 85). The land use alternative looked at both of these strategies. Zoning densities were increased in select residential neighborhoods (see “Wider Urban Areas”). Within 500 feet of all parcels zoned for neighborhood retail, the density was raised to a minimum of 15 units per acre. And a greater mix of residential and commercial uses was assumed within the neighborhood zones themselves.

The changes to density increase the 2035 housing projections near neighborhood centers by 700 units (200 units near the centers that currently meet the Sustainable Thurston vision). However, expanding the number of neighborhood centers that meet the Sustainable Thurston from the current nine to all 38 means that 26,600 additional homes would live within walking distance of a shop serving some of their day-today needs.

Increasing Housing Around Neighborhood Centers

Of the 38 areas in Lacey, Olympia, and Tumwater with neighborhood retail zoning, TRPC estimates that only nine meet the Sustainable Thurston vision for neighborhood centers. Approximately 10,800 households live within a half-mile of these areas, projected to increase to 13,000 by 2035.

How can we increase the amount of housing near neighborhood centers?

ZONING

200 more homes (+2%)

The land use alternative shows that increasing zoning densities (to about 8-10 units per acre) near the neighborhood centers that currently meet the Sustainable Thurston vision will lead to a modest increase in housing.

BUSINESSES

26,600 more homes (+205%)

If all areas with neighborhood retail zoning had the business types Sustainable Thurston envisions, the number of households living near a neighborhood center would more than double, even without changes to zoning.

Types of Neighborhood Centers

Neighborhood centers in the Lacey-Olympia-Tumwater urban area fall into four general categories. The first two are consistent with the Sustainable Thurston vision, the last two are not.

Pedestrian-oriented*	Businesses cater to nearby residents' daily needs. Parking is limited. Types of businesses include small grocery stores, coffee shops, and restaurant.
	• West Olympia (Olympia Coop) • Tumwater Hill • Briggs Village (Olympia)
Auto-oriented*	Businesses cater to nearby residents' daily needs. Scale is larger and there is more parking. Businesses include larger grocer, restaurants, pharmacies, salons, and coffee shops.
	• Yelm Highway / College St (Lacey) • Yelm highway / Ruddell Rd (Lacey)
Limited Services	Developed, but not with businesses that nearby residents would walk to or need on a daily basis. Examples include ministorage, gas station, and offices.
	• Israel Rd and Littlerock Rd (Tumwater) • Boulevard Rd and 18th Ave (Olympia) • Hawks Prairie Rd and Marvin Rd (Lacey)
Vacant / Unbuilt	Undeveloped parcels, including the commercial part of master planned communities. Types of businesses to be determined.
	• 41st Ave and Marvin Rd (Lacey) • Mill Pond Village (Olympia) • Boulevard Rd and Log Cabin Rd (Olympia)

**Consistent with the Sustainable Thurston vision for neighborhood centers*

These two strategies work hand-in-hand: a vibrant, walkable neighborhood center requires a minimum number of people living nearby to support it. On average, every household can support about 15.1 square feet of walkable, commercial retail space[6]. It takes roughly 1,000 households within a half mile to support a small neighborhood retail center (about 15,000 square feet) and 2,000 households to support a medium neighborhood retail center (about 30,000 square feet).

Small Neighborhood Retail Center

15,000 square feet

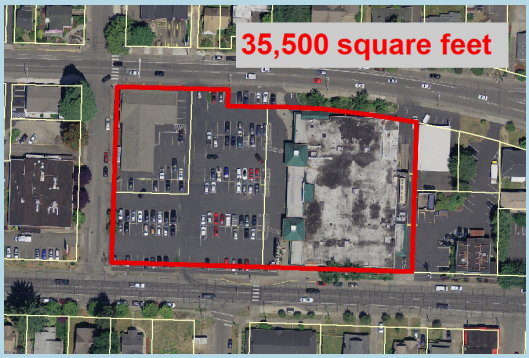
1,000 households within a half mile

Bank, dentist, salon

Medium Neighborhood Retail Center

30,000 square feet

2,000 households within a half mile



Grocery store, barber shop, juice bar, compounding pharmacy

Of the 38 sites identified in Figure 8-6, only 15 have enough population to support at least a small neighborhood retail center. That is projected to increase to 23 by 2035 (Table 8-2). One has enough population to support a medium neighborhood center, increasing to two in 2035.

Increasing population in and around neighborhood centers is challenging. By nature, they are in predominantly single-family areas with lower densities. Most of the future capacity is on a small number of vacant lots and lots with capacity for a few infill units. The area with neighborhood-retail zoning itself is generally limited to just a few parcels, which limits opportunities for mixed-use development.

[6]Easton and Owen (2009) "Creating Walkable Neighborhood Business Districts" (http://www.makersarch.com/wp-content/uploads/2016/04/Creating_Walkable_Neighborhood_Districts_2009.pdf)

Neighborhood centers that are significantly larger (in terms of square feet) than their surrounding population can support do exist, but they depend on residents living outside the immediate area. Such areas require more parking, which changes the character of the area. On the other hand, neighborhood centers may have sufficient population, but the businesses are not conducive for walking or biking trips (e.g., a mini storage center).

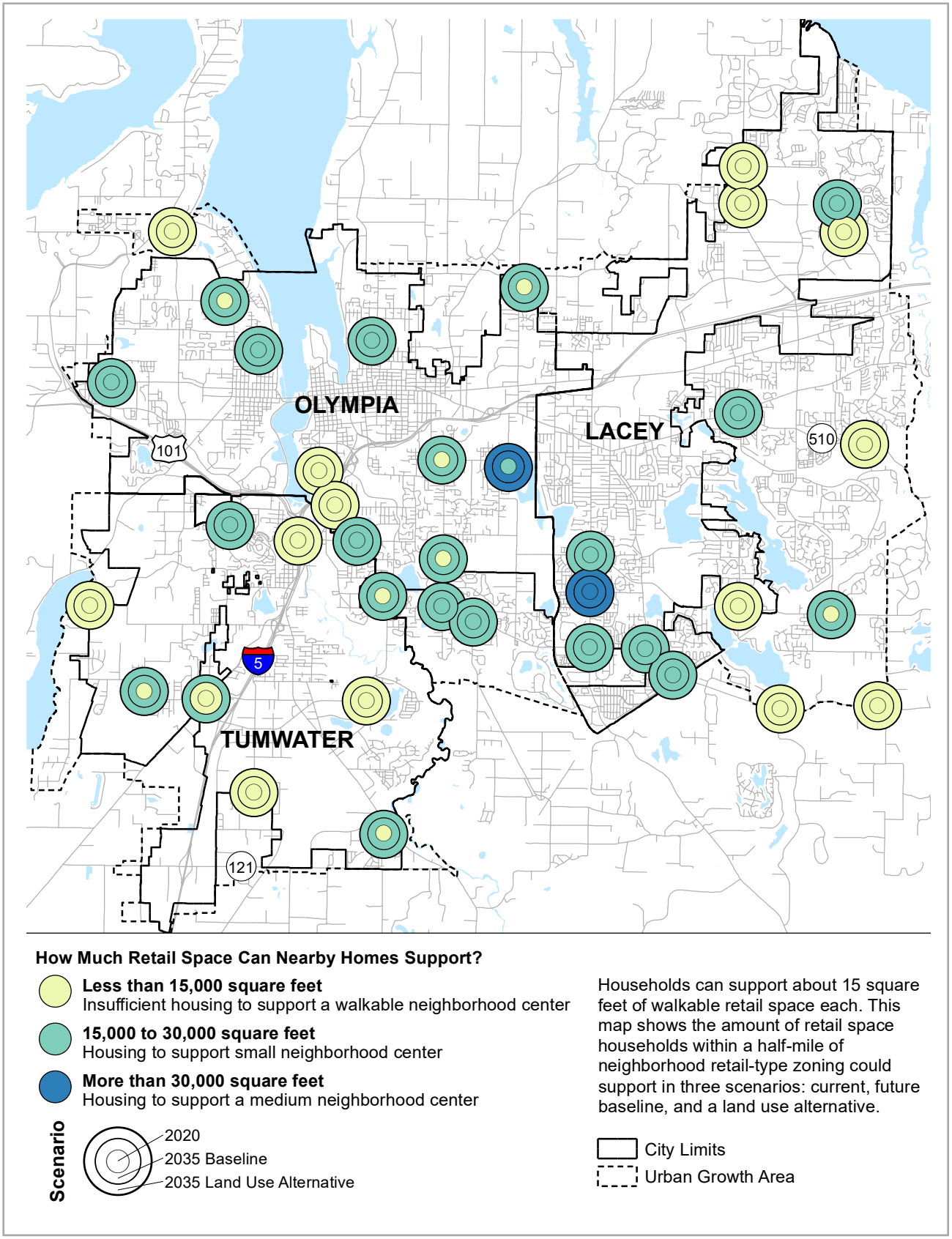
Economic development is an additional component to attracting the types of businesses that make up healthy, vibrant neighborhood centers. Having a clear vision for what neighborhood centers should look like in Thurston County will not only help jurisdictions develop appropriate development regulations, it will also help with recruiting the businesses most suitable for each site.

Table 8-2: Neighborhood-Supported Retail Space

How Many Square Feet of Retail Space Could the Surrounding Households Support?	Number of Neighborhood Centers with Sufficient Housing		
	2020	2035 Baseline	2035 Land Use Alternative
No Retail Center Fewer than 15,000 square feet	23	15	14
Small Neighborhood Retail Centers 15,000 to 30,000 square feet	14	21	22
Medium Neighborhood Retail Centers 30,000 square feet or larger	1	2	2
Total	**38**	**38**	**38**

Note: Table shows the number of neighborhood centers that could be supported based on the surrounding population alone. Larger retail centers may exist, but they are dependent on vehicle traffic. "2035 Land Use Alternative" includes expanded redevelopment assumptions.

Figure 8-6: Housing Near Neighborhood Retail Zoning



Neighborhood Centers: Briggs Village

The Briggs Village development in Olympia was approved in 2003. The original plan called for 810 multifamily and single-family housing units plus 224,000 square feet of commercial space constructed in phases over 10-20 years. The pedestrian-friendly, urban village style development was the first of its kind in Thurston County.

Since construction began in 2005, 310 housing units have been built but no commercial development. Build out of the project has been slowed by the recession and limited market demand for the type of commercial included in the approved plan. Plans for a grocery store did not pan out, in part because of the site's proximity to existing stores in Tumwater and Lacey. In response, the City of Olympia has approved modification to the original plan: allowing one-story commercial development (instead of the two- to three-story), and drive-through retail.

Despite the slowdown, development does continue, including on adjacent properties. Silver Leaf Estates, a 120-unit senior housing project due east of the site was completed in 2018. The same year the Chambers Prairie Grange was redeveloped as a coffee shop. These, along with the Briggs YMCA, merit the area's status as a neighborhood center, albeit one that will continue to evolve.

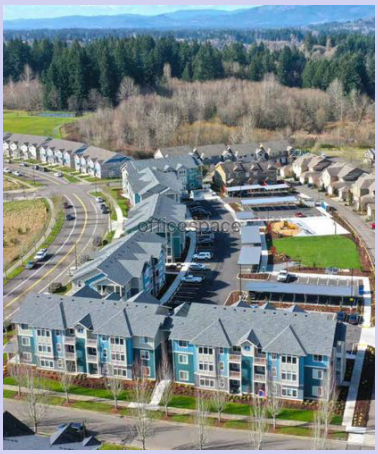


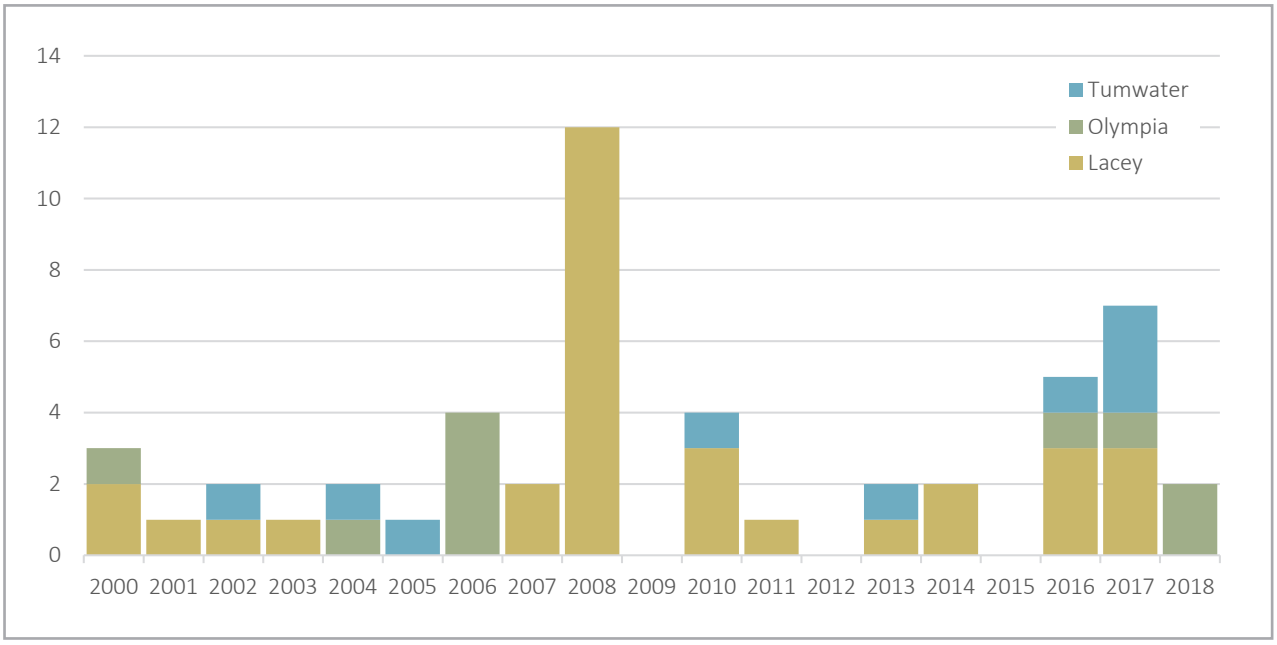
Photo Credit: Thurston County GeoData, Officespace.com

Wider Urban Areas

The "wider urban areas" are the parts of Lacey, Olympia, and Tumwater's incorporated and unincorporated urban growth areas that are more than a half mile from an urban center, urban corridor, or neighborhood center. These areas are predominantly low/medium-density single-family in character, with the lowest densities around environmentally sensitive areas. They also include the majority of the region's industrial zoning.

The land use alternative modeled an increase in density in these areas' low/medium-density residential zones (Figure 8-8). This increase in density could be achieved by decreasing minimum lot sizes for new single-family subdivisions or by increasing the types of housing allowed. Allowing small multifamily housing — such as duplexes, triplexes, fourplexes, townhomes, or cottage apartments — makes it easier to develop at the higher end of the currently allowed density ranges. In addition, the land use alternative assumed about 50 percent more accessory dwellings than the baseline forecast.

Figure 8-7: Accessory Dwellings Permitted in Lacey, Olympia, and Tumwater, 2000-2018



Increasing residential capacity in zones outside of urban centers, urban corridors, and neighborhood centers has a mixed impact on the Sustainable Thurston land use targets. On one hand, it makes it easier to achieve the target of at least 95 percent of countywide housing since 2010 in urban areas. On the other hand, since these areas are on the edge of the urban areas, it makes it harder to meet the target of 72 percent of urban-area housing within a half mile of goods and services.

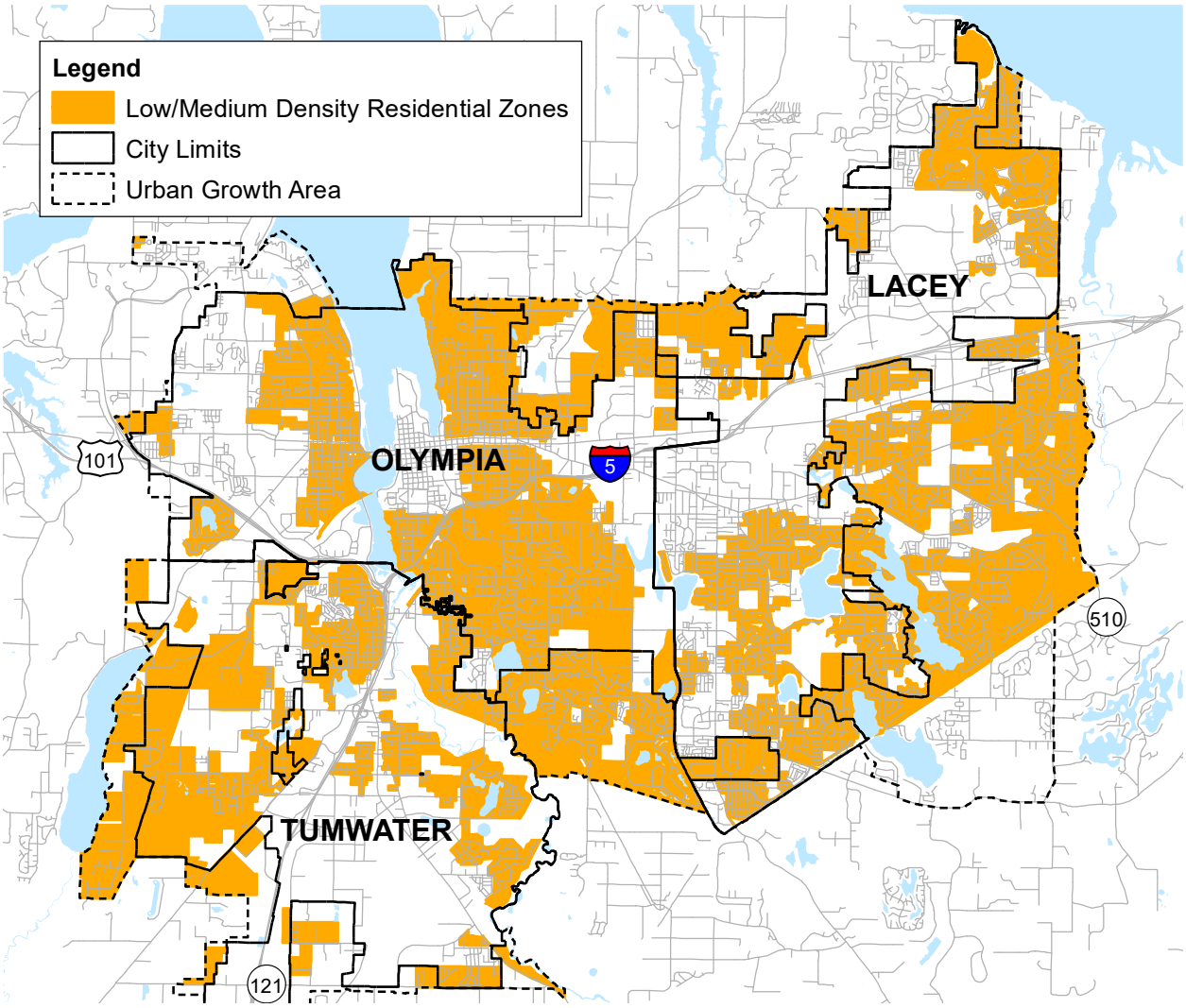
Increasing density in these zones has modest impact on capacity. The increases in density modeled in the land use alternative only affected a relatively small number – less than five percent – of properties. However, given that the zones included in the alternative cover roughly half of Lacey, Olympia, and Tumwater's land area, the overall effect was to increase capacity by 3,000 units (Table 8-3).

Table 8-3: Residential Capacity in Select Lacey, Olympia, and Tumwater Residential Zones

City/UGA	Zone	Baseline	Land Use Alternative
Lacey	LD 0-4	2,190	2,630
Lacey	LD 3-6	3,510	3,910
Olympia	R-4-8	5,020	5,930
Olympia	R-6-12	1,080	1,200
Tumwater	SFL	4,580	5,100
Tumwater	SFM	2,210	2,820
Yelm	R-14	360	390
Total		**18,950**	**21,980**

*Note: *Land use alternative does not include a change in assumptions.*

Figure 8-8: Low/Medium-Density Residential Zones

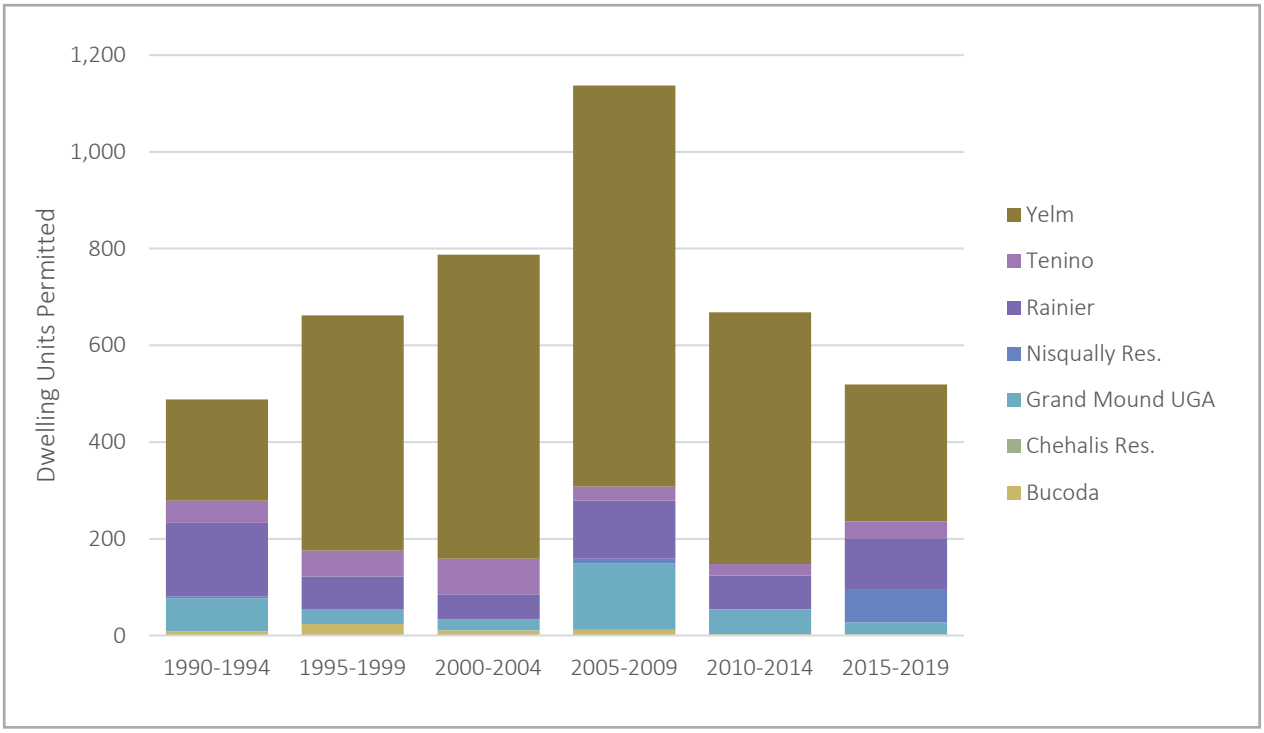


Not shown: Yelm R-18

South County Communities and Tribal Reservations

South County Communities include the cities of Rainier, Tenino, and Yelm, the Town of Bucoda, the Nisqually Indian Reservation, the Confederated Tribes of the Chehalis Reservation, and the Grand Mound urban growth area. These communities serve as cultural and commercial hubs for the surrounding rural areas. Sustainable Thurston's vision for south county communities is for vibrant business districts where the small-town character is preserved.

Figure 8-9: Dwellings Units Permitted in South County Communities



Since 1990, south county communities and tribal reservations have averaged about 140 new dwelling units per year. Nearly 70 percent of development is in Yelm, one of the fastest growing communities in Washington State. Forecasting growth for these communities is challenging since there is a small amount of data from which to draw trends. For Bucoda and Rainier, the lack of a sewer system is a barrier for development and there is uncertainty around if and when systems might be constructed.

Thurston County's south county communities share many of the characteristics of the north county communities, but on a smaller scale. They function as centers of activity for the surrounding rural area. For this reason, housing growth in these areas would support both of the Sustainable Thurston land use targets. However, in recognizing the character of these areas and Sustainable Thurston's vision for the south county communities, the land use alternative only analyzed modest changes in zoning assumptions in areas identified by jurisdiction staff. With these assumptions, capacity increased by about 180 units (Table 8-4).

Table 8-4: Residential Capacity in Select South County Zones

Jurisdiction	Zone	Baseline Forecast	Land Use Alternative
Tenino	C-1	< 10	< 10
Tenino	C-2	< 10	< 10
Tenino	C-3	10	20
Yelm	C-1	80	170
Yelm	C-2	40	70
Yelm	CBD	70	80
Yelm	R-14	360	390

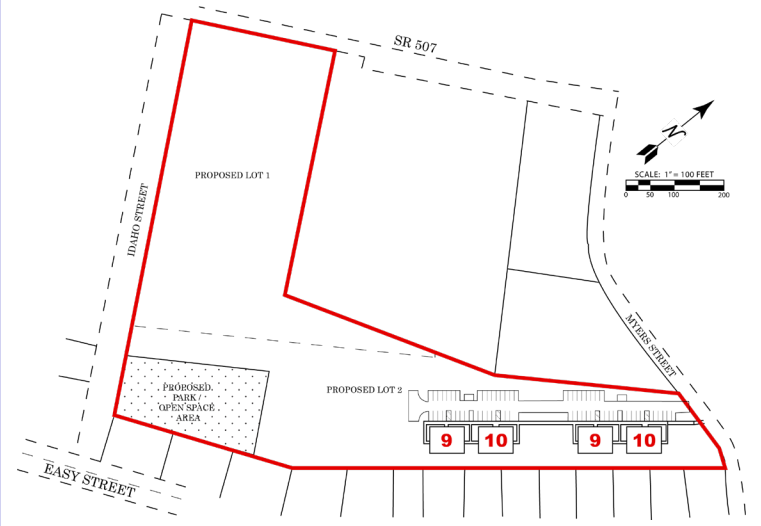
South County Communities: Trotter Downs Estates

The Trotter Downs Estates apartment complex was approved by the City of Rainier in 2020. The development consists of 38-units across four buildings. The property sits on a 10-acre lot that was later subdivided, separating the commercial-zoned area fronting SR-507 from the residential portion.

The project is unique in several ways: it is one of the few apartment complexes outside of Yelm built in the south county over the past few decades, and it is built on septic systems. The developer — Doug Bloom — has three decades of experience building similar-scale projects in Thurston County. This experience helped with the hydrogeologic study, design, and engineering of the commercial septic system required by the project. Bloom's company has the necessary licenses needed to operate such a system, although they have opted to contract out septic operation for other projects.

Due to these requirements, this type of project typically does not pencil out with fewer than eight units. Bloom estimates he would have been able to build double the units if he had access to sewer. Should sewer become available, the buildings are sited in a way that does not preclude additional development.

Bloom notes there is considerable demand for apartments in the south county. The cost of land in Rainier allows him to offer rents that are lower than in nearby Lacey and Yelm. And while the technical aspects of this type of development may be challenging for someone without the experience, Bloom says the bigger barrier is the lack of parcels large enough for similar projects to pencil out.



Rural Areas

Rural areas are the unincorporated parts of Thurston County outside of an urban growth area or tribal reservation. The rural areas contain a wide range of residential land use types:

- Rural communities, such as Rochester, Littlerock, or Boston Harbor.
- Small-lot developments along lakes and shorelines.
- Low-density development, mainly five-acre minimum lot sizes, but also ten- and 20-acre minimums.
- Natural resource zoning (Long-term agriculture, long-term forestry, and Nisqually agriculture).

Rural Residential and Resource Lands

Rural unincorporated Thurston County has significant capacity for new housing — approximately 17,300 new units — but lower growth rates compared to the urban areas. Over the past 20 years, the rural county has seen about 500 new units per year compared to 1,300 in the urban areas. While the availability of housing and developable land in the urban county affect development in the rural county, the opposite is not necessarily true.

Much of the developable land in the rural unincorporated county is valuable for farm and forestry and is under increasing pressure to develop. The Thurston County Comprehensive Plan's Natural Resource chapter includes the goals of no net loss of farmland and timberlands (Goals 1 and 5). This is consistent with the Sustainable Thurston vision of a thriving natural resource-based economy in rural areas. A strong economy in the rural county promotes resiliency and self-sufficiency.

Thurston County has two strategies to protect agricultural activities. Natural resource zoning — Long-term Agriculture (LTA), Nisqually Agriculture (NA), and Long-term Forestry (LTF) — help preserve large parcels needed for many agricultural activities. Current use tax programs provide tax relief for property owners who commit to keeping land in agricultural or forestry uses. TRPC estimates that there are roughly 56,400 acres of farmland[7] and 196,000 acres of timberland in rural Thurston County. This estimate includes land within the zones and tax programs discussed above, as well as parcels with 5 acres or more of cultivated/pasture land covers.

Of the estimated 56,400 acres of farmland in rural Thurston County, approximately 20,200 are developable, with capacity for 3,380 new homes. Of the 196,000 acres of timberland, 39,200 acres are developable, with capacity for 6,830 new homes. This accounts for about 60 percent of rural Thurston County's capacity for new housing.

The land use alternative assumed there would be no new housing development on farm and timberlands. Combined with the increased capacity in urban areas, the scenario shows that Thurston County can accommodate its housing growth while preserving natural resource lands, which would be difficult to achieve under the status quo. The land use alternative would reduce the pressure to develop farm and timber lands important

[7]TRPC estimates there are 60,500 acres of farmland in Thurston County, of which 56,400 -- 94 percent -- are in the rural unincorporated County. See "Estimates of Farm and Forestland" on page 95 for a comparison of different farmland inventories.

to sustain a natural resource economy and local food production system. Without the strategies identified in the land use alternative, it is likely that some farmland – especially lands closest to the urban areas – will convert to housing.

Table 8-5: Farmland and Forestlands at Risk of Development in Rural Thurston County

	Total Acres	2020 Housing Units	Projected Housing 2020-2040	Housing Capacity
Farmland	56,400	1,610	1,190	3,380
… LTA / NA Zone	15,400	360	110	350
… Current Use Tax Program, excluding above	21,500	570	820	2,300
… Other parcels*, excluding above	19,500	680	260	730
Forest / Timberland	196,000	250	2,410	6,830
… LTF Zone	143,600	80	0	0
… Current Use Tax Program, excluding above	52,400	170	2,410	6,830
Not Farm or Forestland	143,700	33,460	2,790	7,070
Total	**396,100**	**35,320**	**6,390**	**17,280**

Note: "Other" includes parcels with five or more acres of cultivated or pasture land covers in the 2016 NOAA C-CAP imagery. Projected housing is the number of new units that are expected over 20 years based on where there is developable land and past development trends. Housing capacity is the theoretical maximum number of units that could be built based on zoning, environmental constraints, and existing use.

Estimates of Farm and Forestland

Natural Resource Zoning

Under GMA, cities and counties are directed to designate natural resource lands and identify steps to preserve them. Thurston County has three zones related to farm and timberlands

- Long-term Agriculture: 14,500 acres
- Nisqually Agriculture: 1,000 acres
- Long-term Forestry: 143,600 acres

Zoning does not guarantee that the land will remain in production, but it does limit incompatible uses and lot subdivision.

Current Use Tax Programs

Current use tax programs provide an incentive for landowners to keep land in farm or timber use in return for a tax break. Thurston County has four programs.

- Designated Forest Lands: 127,260 acres
- Open Space Farm and Agriculture: 32,843 acres
- Open Space Timber Land: 2,245 acres
- Open Space Open Space: 3,264 acres

The programs are not permeant protection. Land may be unenrolled, but the landowner must pay back some of the discounted taxes.

Land Cover Imagery

Land cover data derived from aerial or satellite imagery provides an estimate of where agricultural activities are occurring. 2016 NOAA C-CAP data was used for this report.

- Cultivated land cover: 6,300 acres
- Pasture/Hay land cover: 36,900 acres

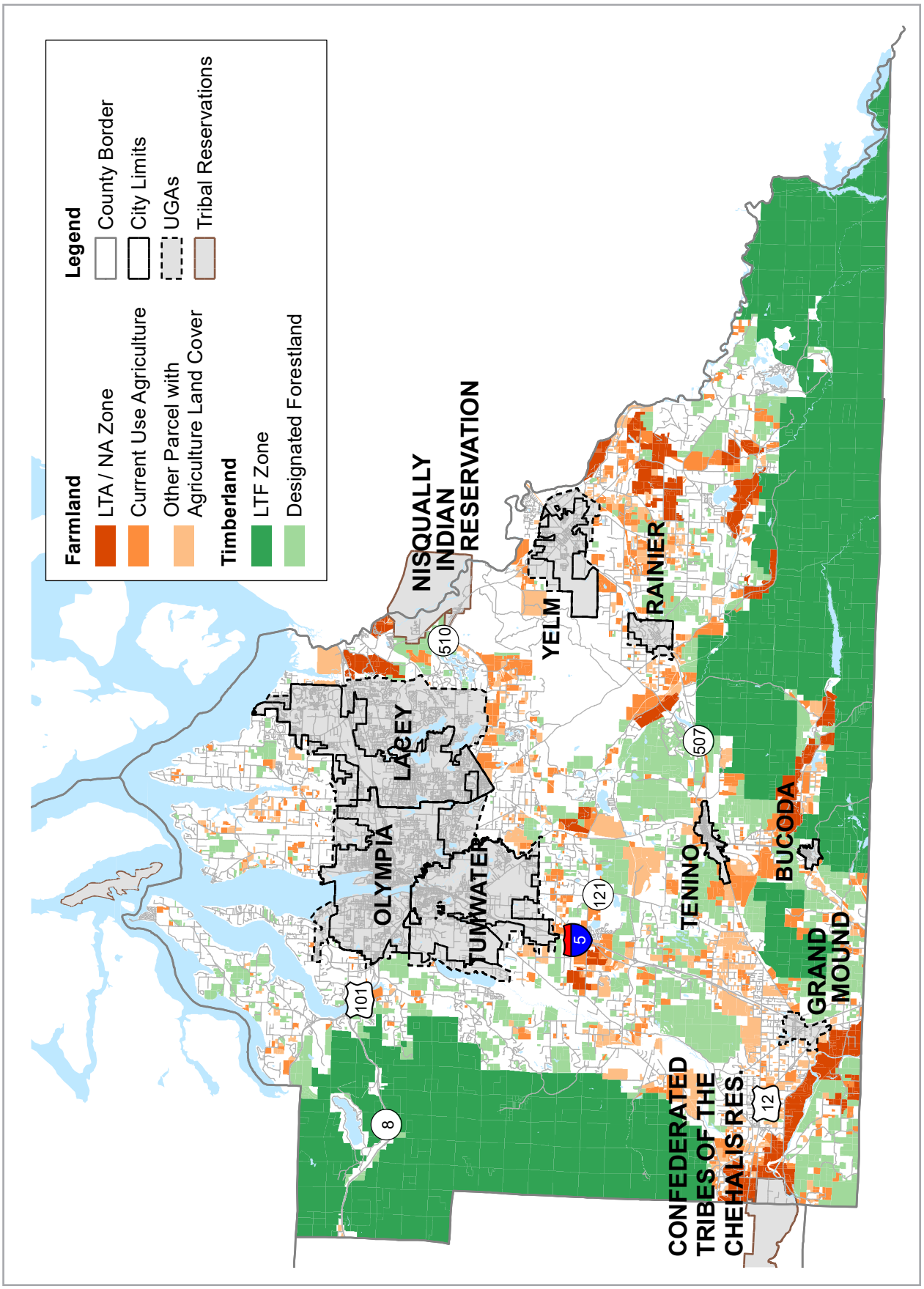
Other sources of land cover data include the American Farmland Trust and USDA's Cropland Data Layer.

Other Sources

Numerous other data sources provide estimates of land in agricultural use.

- USDA 2017 Census of Agriculture: 62,250 acres
- Washington Dept. of Agriculture's Agricultural Land Use layer: 33,100 acres

Figure 8-10: Farm and Forestland in Thurston County



Rural Commercial Areas

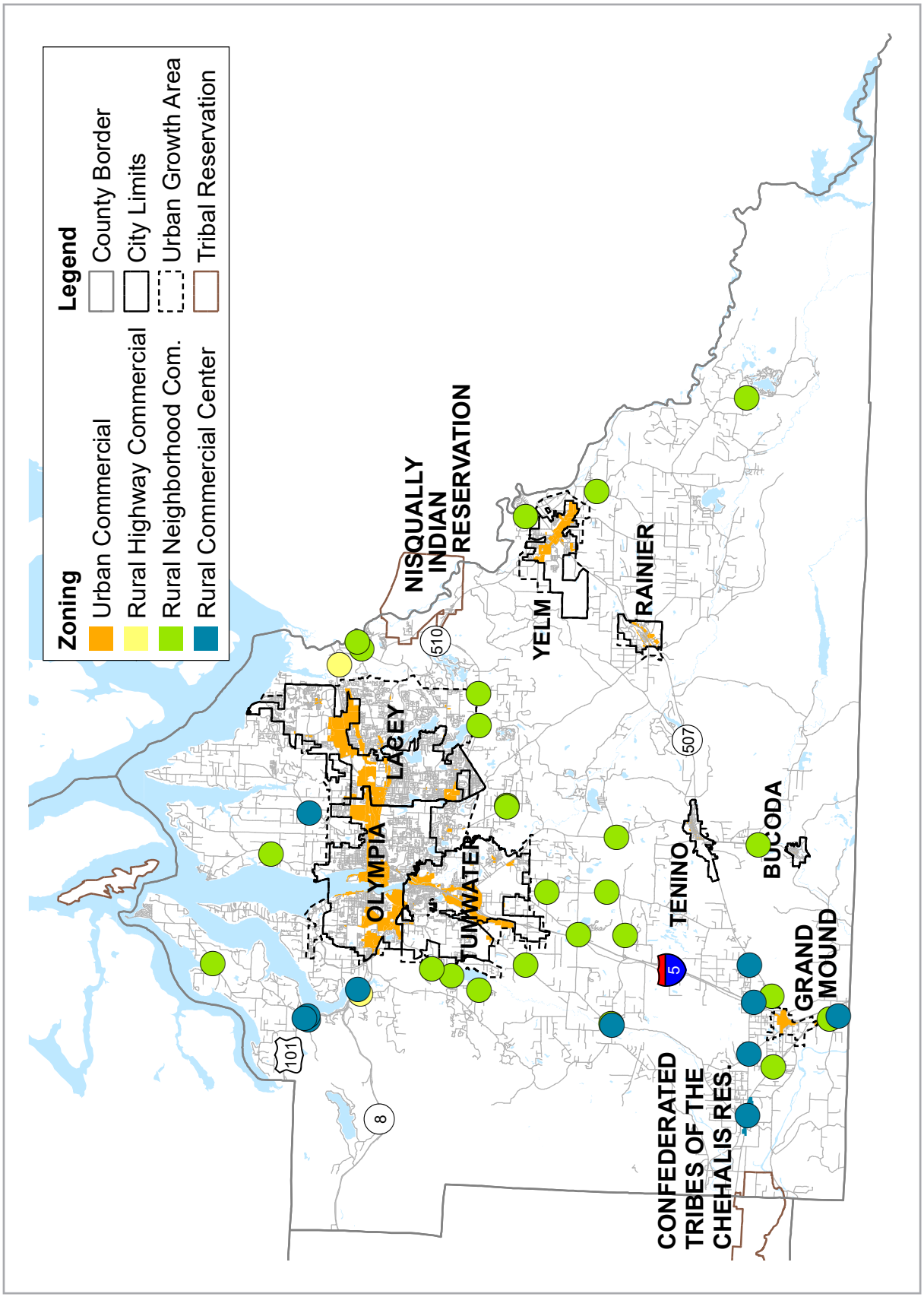
Since there is limited commercial and retail development in the rural areas, residents rely on businesses in the north county urban areas and south county communities. Rural Commercial Center (RCC) is the primary commercial zoning district serving rural residents. The Neighborhood Convenience (NC) zoning district provides for small businesses that serve nearby residents with convenience services, and is typically less than an acre in size. The Highway Commercial (HC) zone also allows commercial development but is intended to serve the traveling public. Commercial zoning in the rural county generally includes land uses that pre-date the Growth Management Act. Figure 8-11 shows the location of rural commercial zones.

On average, rural households live 1.4 miles from a commercial area (Table 8-6). For three-quarters of these households, the nearest commercial area is in the rural unincorporated county. For 11 percent, it is in a south county community. For remaining households, the nearest commercial area is in the Lacey, Olympia, or Tumwater urban area. All households need access to commercial areas for goods and services. Their location and the distances they must travel to get to those services have implications for traffic congestion and greenhouse gas emissions.

Table 8-6: Proximity to Commercial Centers

	Average Distance (Miles) to Commercial Area	Location of Nearest Commercial Center		
		Rural County	North County Urban Area	South County Urban Area
Urban Households	0.3	1%	92%	7%
Rural Households	1.4	76%	14%	11%

Figure 8-11: Rural Commercial Zoning



9. RECOMMENDATIONS

What actions are needed to meet regional goals?

Sustainable Thurston established a vision that saw the Thurston Region becoming a model for sustainability and livability through innovation and leadership within the span of a single generation. The analysis completed for Volume II of the 2021 Buildable Lands Report concludes that we are not on track to meet the two land use targets developed for Sustainable Thurston's priority goals.

The goals and targets developed for Sustainable Thurston were intended to be aspirational, pushing local partners to stretch toward an outcome that was attainable, but ambitious. Unlike the GMA requirements discussed in Volume I of this report, local jurisdictions are not required to achieve the targets set in Sustainable Thurston. Nevertheless, as part of the outreach for this Buildable Lands Report, local jurisdictions and stakeholders reaffirmed the value of this regional vision, including its land use goals and targets, in guiding plans and policy for land use development, including for the upcoming round of periodic Comprehensive Plan updates. These land use goals are also seen as critical to supporting other regional priorities, including climate mitigation and housing affordability.

In 2012, an Urban Corridors Task Force commissioned by Thurston Regional Planning Council published a list of recommendations for achieving more compact, transit-supportive land-use patterns in urban areas. This report, which heavily influenced the Sustainable Thurston land use goals, included the following note:

> *"Adopted land use and transportation plans envision the emergence of dynamic urban centers offering an array of 'car-lite' lifestyle choices not currently available in Thurston County. This is an ambitious goal for a region of our size. Achieving this takes more than vision and regulations. It takes proactive, strategic measures on the part of local governments, and new public/private partnerships. It requires new ways of thinking about the value of urban investments and development, and that takes political leadership and courage. It will take bold measures to make our urban vision real."*

Nearly a decade later, TRPC's analysis of projected future growth patterns bears out this conclusion. Despite having a shared vision, and despite the regulatory changes jurisdictions have undertaken in recent years to support increased urban development and preserve sensitive rural lands, the region is not on pace to meet the land use targets identified for the Sustainable Thurston plan. While we foresee some progress toward more concentrated urban development, particularly in city centers and corridors, we are likely to fall short of our vision without additional changes to development patterns.

The land use alternative modeled for this report points to some strategies by which our region may still make substantial progress toward achieving the Sustainable Thurston vision. These recommendations were developed with input from the Buildable Lands Advisory Committee. The recommendations may be considered by jurisdictions and community partners as they develop and review local plans and programs.

Changing our current trajectory toward a land use pattern more in line with the Sustainable Thurston vision will require adjustments to growth patterns in both urban and rural areas. The land use alternative shows this will depend on a greater concentration of development in our existing urban areas and significantly less development of rural natural resource lands than will likely occur under business-as-usual conditions. Achieving this outcome will require proactive leadership from county and city policymakers who recognize this interdependence and seek continued partnership in pursuing a shared vision for the benefit of the community as a whole.

A series of past studies and planning efforts have identified strategies and actions to drive the type of development patterns called out in the Sustainable Thurston vision. While some of these past recommendations have been completed or are underway, and others may no longer be relevant, these studies contain many viable ideas drawn from the expertise and input of partners across the region. They should be reviewed as a starting place when looking for strategies in specific areas.

- Revitalizing Urban Transit Corridors, TRPC Urban Centers and Corridors Task Force (2012)
- Sustainable Thurston (2013)
- Woodland District Strategic Plan (2013)
- Tumwater Brewery District Plan (2014)
- Capitol Boulevard Corridor Plan (2014)

- Martin Way District Report (2014)
- Mainstreet 507: Rainier's Binghamton Street (2016)
- Mainstreet 507: Tenino's Sussex Avenue (2016)
- City of Olympia Downtown Strategy (2017)
- Main Street Rochester (2019)

General Recommendations

1. Continue to work toward the Sustainable Thurston land use goals, while acknowledging that we may need a longer timeframe than 2035 to achieve the targets.
    - Include strategies to advance Sustainable Thurston goals in the next round of periodic Comprehensive Plan updates.
    - Evaluate the implications of not meeting the Sustainable Thurston land use targets on the region's climate mitigation targets.
2. Let regulatory changes set the stage, by creating a vision and removing barriers, and support efforts by the private market that complete the vision. Look for strategic opportunities and partnerships to accelerate development that will advance multiple goals.
    - Promote local workforce development and training so Thurston County has the expertise in place — builders, architects, engineers, developers, etc. — to construct the amount and types of housing envisioned in Sustainable Thurston.
3. Articulate the tradeoffs in policies and site-specific development decisions that impact our ability to meet the Sustainable Thurston vision and targets, as a formal part of the decisionmaking process. These tradeoffs include housing affordability, climate impacts, habitat/wildlife preservation, local agriculture systems, public health, costs, and equity.
    - When a proposal would remove land with residential capacity from that use, capacity should be replaced elsewhere in the urban area, rather than accommodated in the rural area.
    - Other potential tools include: regional comparison of impact fees, land swaps for prime agriculture land, Transfer of Development Rights program.

4. Continue to actively involve the public in developing the vision for their neighborhoods, and in understanding and balancing the tradeoffs associated with achieving the Sustainable Thurston targets.

5. Continue to address the need for affordable housing by implementing the strategies identified in Housing Action Plans and through other partnerships, such as the Regional Housing Council.

Urban Centers and Corridors

6. Continue to increase the amount of residential development in city centers.

    - Implement recommendations from past planning efforts, including the Olympia Downtown Strategy, Lacey Woodland District, and Tumwater Brewery District plans.

    - Review development trends and refine the use of policies that are resulting in increased development in urban centers, such as Multifamily Tax Exemption (MFTE), parking requirement and impact fee waivers.

7. Increase the amount of residential development in mixed use zones along corridors. In corridor zones that allow a mix of commercial and residential uses, the land use alternative assumed a greater share of land would develop with residential uses (generally 10 percentage points more).

    - Review and, where appropriate, apply some successful standards from "downtown" urban centers to corridors, such as minimum densities, impact fee waivers/credits, reduced parking requirements, Multifamily Tax Exemption (MFTE).

    - Pursue Planned Action Environmental Impact Statements (EIS) for subareas or key locations along corridors to reduce uncertainty for developers and incentivize development.

    - Coordinate with transit providers to ensure areas with high-density zoning have access to transit, and areas with existing frequent transit service are zoned appropriately. Plan for highest-density nodes along corridors to better support access to frequent transit service.

8. Create incentives for redevelopment at key redevelopment sites located along corridors that could include significant amounts of new housing.
    - Create subarea plans for areas that may need support from the public sector to redevelop, similar to those created for the Brewery District in Tumwater and Woodland Square in Lacey. The land use alternative identified four potential priority sites: Capitol Village/Target Plaza (Olympia), Point Plaza East/West (Tumwater), WinCo Foods Plaza, Martin Way (Lacey UGA).
9. Review urban corridor "boundaries."
    - Assess whether population and/or transportation patterns create a need to identify new or expand existing corridor boundaries.
    - For any new or expanded corridor areas, coordinate planning to ensure future land use and transportation infrastructure supports the Sustainable Thurston land use vision and multimodal travel.

Neighborhood Centers

10. Identify and more clearly define the vision, intent, and function of urban Neighborhood Centers.
    - Consider how Neighborhood Centers with denser housing and commercial goods and services could develop in areas with access to one or more transit routes.
11. Increase the density of residential development near Neighborhood Centers. The land use alternative assumed minimum densities of 15 units per acre in existing residential zones within 500 feet of neighborhood centers.
12. Identify the types of businesses that will best serve households surrounding Neighborhood Centers and create incentives to attract and support those businesses. The land use alternative identified 29 sites with neighborhood-retail-type zoning that currently lack the type of businesses that serve nearby residents' day-to-day needs.
13. Identify whether there are additional locations where future residential density may support new neighborhood centers.

Wider Urban Areas

14. Increase residential development within the wider urban area (i.e. more than a half-mile from urban centers, urban corridors, and neighborhood centers). The land use alternative looked at increasing zoning densities in existing low/medium-density residential zones.
    - Continue efforts to expand the range of housing type options (duplexes, cottage housing, accessory dwellings, etc.) in predominantly single-family neighborhoods.
15. Consider options for areas where lack of infrastructure is a barrier to future development.
    - Identify infill properties where lack of local sewer connection or other infrastructure-related site constraints are a barrier to development. Make strategic investments to extend utility and other infrastructure to areas where there is not enough future development potential to pay for the improvements that will support higher density growth.
    - Consider options for areas on the edges of UGAs considered difficult to sewer. The 2021 Buildable Lands assessment identified several locations where extending sewer poses a challenge (Black Lake UGA, Northeast Olympia, Southeast Olympia, Northwest Lacey, Southeast Lacey), but also found these areas are generally zoned for low-density development and have minimal residential capacity. Options include maintaining low densities, or removing areas from Urban Growth Area boundaries where environmental constraints make them unlikely to be served by urban utilities within the 20-year planning horizon.
    - Identify areas with agricultural land that may not be suitable for urban development due to infrastructure constraints. Consider options for these areas, such as natural resource zoning or removal from the Urban Growth Area.

South County Cities

16. Continue support for modest mixed-use growth, infill development, and increased amount of residential development in commercial centers.

Rural and Natural Resource Lands

17. Support strategies to preserve natural resource lands, including those used for agriculture and forestry, and support existing natural resource uses.
18. Consider whether future residential density may support new rural commercial centers.

APPENDICES

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APPENDIX I: 2020 UPDATES

The population and employment forecast allocations adopted by Thurston Regional Planning Council used 2017 baseline data and extended the forecast horizon out to 2045. The following adjustments were made to "roll up" the base year to 2020.

Population and Housing Forecast

Residential building permits issued in 2017, 2018, and 2019 were collected from jurisdictions. New dwellings were added to the baseline. Total residential capacity was reduced on parcels with new development. The housing forecast allocations to planning areas were not adjusted based on the changes in capacity.

A coding error was corrected to allow development or redevelopment on parcels with parking lots and no other existing development.

Employment Forecast

Commercial building permits issued between 2017 and 2019 were collected from jurisdictions to estimate new building area developed since 2017. New building area was subtracted from the total land supply.

2020 and 2040 employment estimates for small areas were interpolated using the adopted countywide employment forecast, which is broken out into five-year intervals, for each employment industry. This assumes a relatively straight-line increase in employment and does not account for cycles of employment growth and decline.

A discrepancy between the countywide employment forecast and forecast allocations was corrected.

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APPENDIX II: RESIDENTIAL CAPACITY BY PLANNING AREA

The following table provides 2020 residential capacity by planning area for the baseline scenario.

Planning Area	City	UGA	Total
Lacey			
Central	1,760	0	1,760
Hawks Prairie	1,130	580	1,710
Horizons	470	10	480
Lakes	600	790	1,390
Meadows	350	1,480	1,830
Pleasant Glade	310	1,360	1,670
Seasons	0	3,890	3,890
Tanglewilde Thompson Place	40	1,490	1,530
Lacey Total	**4,660**	**9,590**	**14,250**
Tumwater			
Airport	740	0	740
Brewery	660	0	660
Bush Prairie	650	0	650
Deschutes	180	0	180
Littlerock	2,560	100	2,660
Mottman-Black Lake	150	0	150
New Market	100	0	100
SE Capitol Boulevard	790	0	790
Southside	0	1,710	1,710
SW Tumwater	90	0	90
Trosper	980	10	980
Tumwater Hill	770	70	840
Westside	0	1,250	1,250
Tumwater Total	**7,660**	**3,140**	**10,800**

Planning Area	City	UGA	Total
Olympia			
Downtown	1,560	0	1,560
High Density Corridor - Eastside	920	0	920
High Density Corridor - Westside	770	0	770
Northside	1,970	530	2,490
Northwest	0	180	180
Southside	3,770	760	4,530
Southwest	650	220	870
Westside	3,150	0	3,150
Olympia Total	**12,800**	**1,680**	**14,480**
Yelm			
Master Planned Community	5,730	0	5,730
Yelm	2,240	660	2,900
Yelm Total	**7,970**	**660**	**8,630**
Bucoda	**210**	**0**	**210**
Rainier	**820**	**100**	**920**
Tenino	**570**	**20**	**580**
Grand Mound	**0**	**370**	**370**
Urban Areas Total	**34,680**	**15,550**	**50,230**
Rural Areas Total	**–**	**–**	**17,280**

APPENDIX III: RESIDENTIAL CAPACITY AND MODEL ASSUMPTIONS

The following tables give assumptions used in the land capacity model and estimated residential capacity in the baseline scenario and land use alternative. Complete documentation for the land capacity model is available at www.trpc.org/236.

Abbreviations

BSL	Baseline Forecast
LUA	Land Use Alternative
UGA	Unincorporated urban growth area

Notes

A. Assumptions modified for land use alternative
B. Density of 15 units per acre used for parcels within 500 feet of a neighborhood center
C. Mixed use assumption further increased at four redevelopment sites
D. Assumed parcels with farm or forest criteria would not be developed (no capacity)

		Density Average units per acre for new development.		Mixed Use What percent of developed land will be residential?		Capacity How many new units could be built, including redevelopment?		
Zone		**BSL**	**LUA**	**BSL**	**LUA**	**BSL**	**LUA**	**Note**
Bucoda								
COM	City	2.0	2.0	25%	25%	8	8	
IND	City	–	–	0%	0%	0	0	
MF	City	2.0	2.0	100%	100%	8	8	
PU	City	–	–	0%	0%	0	0	
RES	City	2.0	2.0	100%	100%	199	199	
Total						**214**	**215**	
Grand Mound								
AC	UGA	8.3	8.3	10%	10%	75	75	
LI	UGA	–	–	0%	0%	0	0	
PID	UGA	–	–	0%	0%	0	0	
R3-6/1	UGA	6.3	6.3	100%	100%	216	216	
R4-16/1	UGA	8.3	8.3	100%	100%	75	75	
Total						**366**	**366**	

		Density Average units per acre for new development.		Mixed Use What percent of developed land will be residential?		Capacity How many new units could be built, including redevelopment?		
Zone		**BSL**	**LUA**	**BSL**	**LUA**	**BSL**	**LUA**	**Note**
Lacey								
AG	UGA	0.2	0.2	100%	100%	10	10	
AQUATC	City	–	–	0%	0%	0	0	
AQUATC	UGA	–	–	0%	0%	0	0	
C	City	–	–	0%	0%	0	0	
CBD 4	City	20.0	20.0	10%	20%	30	64	A
CBD 5	City	20.0	20.0	10%	20%	91	127	A
CBD 6	City	20.0	20.0	10%	20%	44	87	A
CBD 6	UGA	20.0	20.0	10%	20%	0	0	A
CBD 7	City	20.0	20.0	10%	10%	8	9	
CCD	City	–	20.0	0%	40%	0	57	A
CO	City	20.0	20.0	5%	5%	46	46	
GC	City	–	–	0%	0%	0	0	
HD	City	20.0	20.0	100%	100%	974	974	
HD	UGA	20.0	20.0	100%	100%	575	575	
HPBD-BC	City	12.5	12.5	2%	2%	71	71	
HPBD-C	City	12.5	12.5	2%	2%	18	18	
LD 0-4	City	6.3	8.0	100%	100%	752	989	A,B
LD 0-4	UGA	6.3	8.0	100%	100%	1,439	1,646	A,B
LD 3-6	City	8.3	10.0	100%	100%	242	271	A,B
LD 3-6	UGA	8.3	10.0	100%	100%	3,270	3,642	A,B
LHN	City	2.0	2.0	100%	100%	30	30	
LI	City	–	–	0%	0%	0	0	
LI	UGA	–	–	0%	0%	0	0	
LI-C	City	–	–	0%	0%	0	0	
MD	City	12.5	12.5	100%	100%	974	976	
MD	UGA	10.0	10.0	100%	100%	826	826	
ME	City	–	–	0%	0%	0	0	
ME	UGA	–	–	0%	0%	0	0	
MGSA	UGA	8.3	8.3	100%	100%	2,407	2,407	
MHDC	City	20.0	20.0	50%	60%	355	406	A
MHDC	UGA	20.0	20.0	50%	60%	532	713	A,C
MMDC	City	8.3	8.3	50%	50%	71	71	
MMDC	UGA	12.5	12.5	50%	50%	160	160	
NATURL	City	0.1	0.1	100%	100%	1	1	
NC	City	–	20.0	0%	40%	0	9	A
NC	UGA	–	20.0	0%	40%	0	20	A
OS-I	City	–	–	0%	0%	47	47	
OS-I	UGA	–	–	0%	0%	0	0	
OSI-P	City	–	–	0%	0%	0	1	
OSI-P	UGA	–	–	0%	0%	0	0	
OSI-S	City	–	–	0%	0%	0	0	
OSI-S	UGA	–	–	0%	0%	0	0	
SHORES	City	4.0	4.0	100%	100%	3	3	
SMU	City	–	–	0%	0%	0	0	
URBCON	City	1.0	1.0	100%	100%	3	3	
V(U)C	City	8.3	8.3	60%	60%	178	178	
V(U)C	UGA	8.3	8.3	75%	75%	373	373	
WD	City	50.0	50.0	40%	60%	720	1,284	A,C
Total						**14,248**	**16,093**	

Zone		Density: Average units per acre for new development. BSL	LUA	Mixed Use: What percent of developed land will be residential? BSL	LUA	Capacity: How many new units could be built, including redevelopment? BSL	LUA	Note
Olympia								
AS	City	–	–	0%	0%	0	0	
COSC	UGA	12.5	12.5	25%	25%	31	31	
CSH	City	–	–	0%	0%	0	0	
DB	City	100.0	100.0	40%	50%	730	1,270	A
GC	City	12.5	12.5	2%	2%	106	106	
HDC-1	City	8.3	8.3	5%	40%	1	16	A
HDC-2	City	8.3	8.3	5%	40%	2	22	A
HDC-3	City	8.3	8.3	15%	40%	25	76	A
HDC-4	City	100.0	100.0	15%	40%	1,606	4,677	A,C
I	City	–	–	0%	0%	0	0	
LI-C	City	–	–	0%	0%	0	0	
LI-C	UGA	–	–	0%	0%	0	0	
MHP	City	8.3	8.3	100%	100%	7	7	
MR-10-18	City	10.0	10.0	100%	100%	127	129	
MR-7-13	UGA	8.3	8.3	100%	100%	0	0	
MS	City	20.0	20.0	40%	40%	212	213	
NR	City	7.1	20.0	10%	40%	2	26	A
NR	UGA	7.1	20.0	10%	40%	6	21	A
NV	City	12.5	12.5	85%	85%	376	376	
PO/RM	City	20.0	20.0	50%	50%	754	773	
PUD	City	20.0	20.0	50%	50%	55	57	
R-1/5	City	0.2	0.2	100%	100%	5	5	
R-1/5	UGA	0.2	0.2	100%	100%	27	27	
R-4	City	2.0	2.0	100%	100%	16	16	
R-4	UGA	2.0	2.0	100%	100%	110	110	
R-4-8	City	6.7	8.0	100%	100%	2,796	3,363	A,B
R-4-8	UGA	6.7	8.0	100%	100%	932	1,092	A
R-4-8 T	City	7.1	8.0	100%	100%	1,056	1,212	A,B
R-4-8 T	UGA	7.1	8.0	100%	100%	238	261	A,B
R-4CB	City	4.0	4.0	100%	100%	284	284	
R-6-12	City	9.1	10.0	100%	100%	1,046	1,159	A,B
R-6-12	UGA	9.1	10.0	100%	100%	36	39	A,B
RLI	City	4.0	4.0	100%	100%	455	455	
RLI	UGA	4.0	4.0	100%	100%	129	129	
RM-18	City	20.0	20.0	100%	100%	915	918	
RM-18	UGA	20.0	20.0	100%	100%	174	174	
RM-24	City	20.0	20.0	100%	100%	984	985	
RM-H	City	100.0	100.0	95%	95%	0	0	
RMU	City	100.0	100.0	50%	50%	7	23	
UR	City	100.0	100.0	95%	95%	161	184	
UV	City	12.5	12.5	75%	75%	184	184	
UW	City	100.0	100.0	30%	40%	582	759	A
UWH	City	100.0	100.0	80%	80%	304	427	
Total						**14,481**	**19,605**	

Zone		Density Average units per acre for new development. BSL	 LUA	Mixed Use What percent of developed land will be residential? BSL	 LUA	Capacity How many new units could be built, including redevelopment? BSL	 LUA	Note
Rainier								
CC	City	2.0	2.0	25%	25%	8	8	
FRL	City	–	–	0%	0%	0	0	
HC	City	2.0	2.0	25%	25%	12	12	
IND	City	–	–	0%	0%	0	0	
NC	UGA	2.0	2.0	25%	25%	0	0	
PF	City	–	–	0%	0%	0	0	
R6/8	City	3.0	3.0	100%	100%	489	486	
R8/25	City	3.0	3.0	100%	100%	176	174	
REN 0.25	City	3.0	3.0	100%	100%	48	48	
REN 0.35	City	2.9	2.9	100%	100%	2	2	
REN 1.00	City	1.0	1.0	100%	100%	2	2	
RRR1/5	UGA	0.2	0.2	100%	100%	96	96	
SC	City	2.0	2.0	10%	10%	83	78	
T/OS/P	City	–	–	0%	0%	0	0	
Total						**915**	**905**	
Tenino								
C-1	City	12.5	12.5	10%	20%	1	4	A
C-2	City	12.5	12.5	10%	20%	1	3	A
C-3	City	12.5	12.5	25%	35%	10	21	A
I	City	–	–	0%	0%	0	0	
MF	City	10.0	10.0	100%	100%	8	8	
P/SP	City	–	–	0%	0%	0	0	
PO	City	8.0	8.0	25%	25%	0	0	
RRR1/5	UGA	0.2	0.2	100%	100%	18	18	
SF	City	8.0	8.0	100%	100%	337	337	
SF-D	City	8.0	8.0	100%	100%	27	27	
SF-ES	City	4.0	4.0	100%	100%	68	68	
WT	City	8.0	8.0	75%	75%	115	115	
Total						**585**	**601**	

Zone		Density: Average units per acre for new development. BSL	LUA	Mixed Use: What percent of developed land will be residential? BSL	LUA	Capacity: How many new units could be built, including redevelopment? BSL	LUA	Note
Tumwater								
ARI	City	–	–	0%	0%	0	0	
BD	City	20.0	20.0	25%	30%	650	663	A
BP	UGA	–	–	0%	0%	0	0	
CBC	City	33.3	33.3	50%	60%	599	807	A,C
CD	UGA	12.5	12.5	2%	2%	0	0	
CS	City	12.5	12.5	2%	2%	0	0	
GB	City	–	–	0%	0%	0	0	
GB	UGA	–	–	0%	0%	0	0	
GC	City	12.5	12.5	5%	5%	141	142	
GC	UGA	–	–	0%	0%	0	0	
HC	City	–	–	0%	0%	0	0	
HI	City	–	–	0%	0%	0	0	
HI	UGA	–	–	0%	0%	0	0	
LI	City	–	–	0%	0%	0	0	
LI	UGA	–	–	0%	0%	0	0	
MFH	City	20.0	20.0	100%	100%	402	402	
MFM	City	12.5	12.5	100%	100%	970	970	
MFM	UGA	12.5	12.5	100%	100%	597	597	
MHP	City	8.0	8.0	100%	100%	44	44	
MU	City	20.0	20.0	20%	20%	76	76	
NC	City	–	20.0	0%	40%	0	8	A
NC	UGA	–	20.0	0%	40%	0	4	A
OS	City	–	–	0%	0%	0	0	
OS	UGA	–	–	0%	0%	0	0	
R/SR	City	4.0	4.0	100%	100%	370	370	
R/SR	UGA	4.0	4.0	100%	100%	122	122	
SFL	City	6.9	8.0	100%	100%	2,610	2,840	A,B
SFL	UGA	6.9	8.0	100%	100%	1,970	2,262	A,B
SFM	City	7.4	10.0	100%	100%	1,767	2,230	A,B
SFM	UGA	7.4	10.0	100%	100%	446	595	A
TC-C	City	–	–	0%	0%	0	0	
TC-MU	City	12.5	12.5	5%	30%	6	38	A
TC-PO	City	–	–	0%	0%	0	0	
TC-R	City	20.0	20.0	80%	80%	24	25	
Total						**10,795**	**12,194**	

Zone		Density Average units per acre for new development. BSL	 LUA	Mixed Use What percent of developed land will be residential? BSL	 LUA	Capacity How many new units could be built, including redevelopment? BSL	 LUA	Note
Yelm								
AC	UGA	2.0	2.0	25%	25%	2	2	
C-1	City	7.1	7.1	10%	20%	79	170	
C-2	City	7.1	7.1	10%	20%	35	68	
C-3	City	7.1	7.1	10%	10%	12	12	
CBD	City	8.3	8.3	50%	60%	67	81	
I	City	–	–	0%	0%	0	0	
ID	City	–	–	0%	0%	0	0	
LI	UGA	–	–	0%	0%	0	0	
MPC	City	8.3	8.3	65%	65%	5,729	5,729	
P/OS	City	–	–	0%	0%	0	0	
R-14	City	20.0	22.0	100%	100%	355	388	
R-4	City	6.3	6.3	100%	100%	899	899	
R-6	City	7.4	7.4	100%	100%	792	792	
RR1/5	UGA	0.2	0.2	100%	100%	657	657	
Total						**8,627**	**8,798**	
Rural Thurston County								
HC	Rural	–	–	0%	0%	0	0	
LTA	Rural	0.1	0.1	100%	100%	347	1	D
LTF	Rural	–	–	0%	0%	0	0	
MGSA	Rural	0.2	0.2	100%	100%	703	199	D
MR	Rural	–	–	0%	0%	0	0	
NA	Rural	–	–	0%	0%	0	0	
NC	Rural	–	–	0%	0%	0	0	
PP	Rural	–	–	0%	0%	0	0	
R 1/10	Rural	0.1	0.1	100%	100%	204	73	D
R 1/20	Rural	0.1	0.1	100%	100%	363	108	D
RCC	Rural	–	–	0%	0%	2	2	
RL1/1	Rural	1.0	1.0	100%	100%	798	727	D
RL1/2	Rural	0.5	0.5	100%	100%	331	321	D
RL2/1	Rural	2.0	2.0	100%	100%	542	530	D
RR1/5	Rural	0.2	0.2	100%	100%	251	108	D
RRI	Rural	–	–	0%	0%	0	0	
RRR1/5	Rural	0.2	0.2	100%	100%	13,506	4,946	D
UR 1/5	Rural	0.2	0.2	100%	100%	234	92	D
Total						**17,282**	**7,107**	