

Buildable Lands Report For Thurston County

Executive Summary

March 2014

Since the late 1970s the Thurston Regional Planning Council has provided estimates of the buildable land supply in Thurston County. During this time, Thurston County was 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 requiring local cities, towns, and the county to develop detailed plans on how they planned to accommodate growth. These are called comprehensive plans. At the same time the seven cities and towns and Thurston County developed county-wide planning policies that laid out how Thurston County was to grow as a region. Under these policies, Thurston Regional Planning Council was asked to review land supply and planned densities to ensure that the urban areas were large enough to accommodate 20 years of projected growth.

The State legislature added a monitoring and evaluation provision to the GMA in 1997. This provision is often referred to as the “Buildable Lands Program.” It affects six western Washington counties (Clark, King, Kitsap, Pierce, Snohomish, and Thurston) and the cities and towns within them. Thurston Regional Planning Council was asked to develop the Buildable Lands Report for Thurston County, based on its long history of monitoring land supply. Two reports have been previously issued in 2002 and 2007. This third report is due no later than June 30, 2015. It is being issued in 2014 to inform local comprehensive plan updates, and to build on data developed in the update of the 2012-13 Population and Employment Forecast. This abbreviated approach is a response to lack of state funding for a robust update.

The Buildable Lands Program in Thurston County 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 land supply in the urban growth areas for anticipated future growth in population, and the third is whether there is an adequate land supply in the urban growth areas for anticipated future growth in employment.

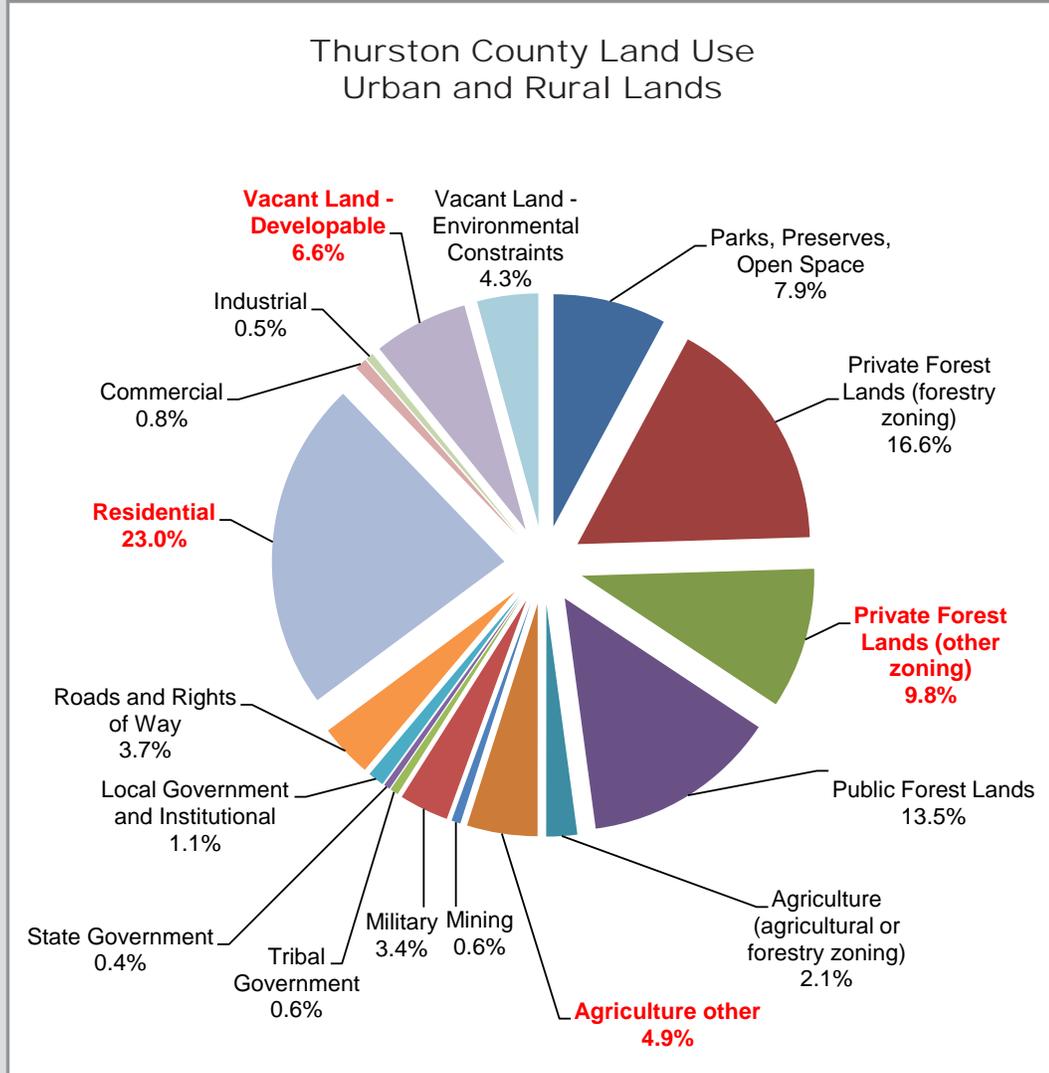


Yelm Area 2002



Thurston County Land Use:

Thurston County is approximately 735 square miles (including lakes and other land-locked water bodies.) Of this area, 6.6 percent has been identified as vacant land. A further 23 percent is in residential uses – some of which can intensify over time. Another almost 15 percent is in forest or agriculture uses today, but in zoning designations that will allow for residential development in the future (see categories highlighted in red in the figure below).





Lacey area 2004



ACHIEVED RESIDENTIAL DENSITIES

Are urban densities being achieved in urban growth areas?

Description:

Achieved residential density is the measure of how much land each new home, condo, or apartment complex requires. As a rule of thumb, if development is occurring at four or more dwellings per net acre, it is considered urban and consistent with the Growth Management Act.

Why is this important to measure?

The South Sound is one of the fastest growing areas in the state. In 1985, twenty-five years ago, approximately 140,000 people were living in Thurston County. By 2010, this number had risen to over 250,000. This is a gain of around 110,000 people. We're expecting another 120,000 people by 2035, or within the next 25 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.

We have around 130,000 thousand jobs in Thurston County, and expect another 60,000 by 2035, or within the next 25 years. These jobs will attract workers and their families. We're also expecting an increasing number of people to move to the Thurston County to commute to jobs in the Central Puget Sound region, and to large job centers such as Joint Base Lewis-McChord. We also attract retirees and out of the area students to our university and colleges.

This means that one-third of the jobs and housing that will exist in 2035 will have been created between now and then, having a tremendous impact on our built environment.

Monitoring achieved density tells us how compact growth is as our communities grow, and if we are using land, as a resource, wisely. This will help achieve our community visions of concentrating growth in the urban areas, and providing more opportunities for areas where people can live, work, shop, learn, and play in close proximity. It will also help achieve our goals of preserving natural resources and a rural atmosphere in the remainder of the county.

How this is measured:

Achieved residential density is measured by comparing new construction of residential homes and apartments against lot size. Public roads, open space, and critical areas and buffers are removed from the land area calculations.

Findings - Are urban densities being achieved in urban growth areas?

- Overall, Thurston County urban jurisdictions are achieving urban densities greater than the rule of thumb threshold of four dwelling units per acre.
- Individually, 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 city limits (incorporated areas) than the unincorporated growth area.

The achieved density in Yelm, Tenino, and Rainier’s unincorporated urban growth areas 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. Until that time, 1 unit per 5 acre rural zoning acts as a holding area.

What does this mean?

The Growth Management Act comprehensive plans and zoning were passed in the early 1990s in all of Thurston County’s jurisdictions. Since that time, all urban jurisdictions with sewer infrastructure have seen an increase in achieved residential density, meaning that they are using land supply more efficiently.

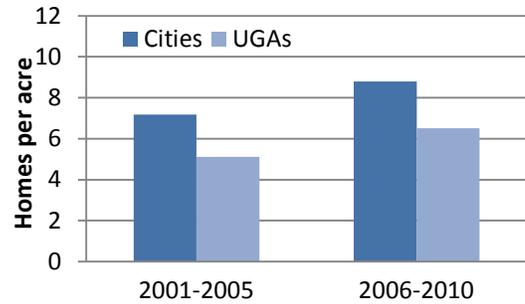
Not only is less land consumed for the same number of homes, but less public infrastructure is needed to support a more compact form of growth. This means that fewer miles of roads, stormwater, water, and sewer pipes need to be built and maintained. Compact growth also leaves more land for parks, open space and rural uses.

Some Key Definitions:

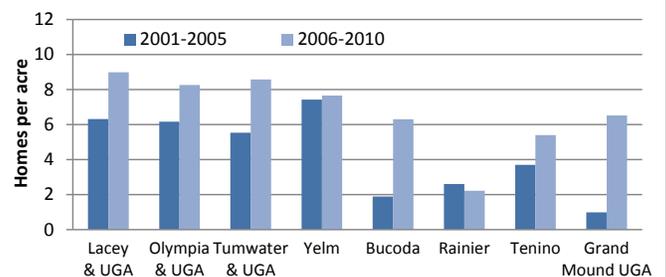
Net Density measures the number of homes divided by the area in residential lots. The subdivision area given to open space and roads is not included. Critical areas such as wetlands, subdivision parks, and stormwater ponds are usually included in the open space.

Gross Density measures the number of homes within a subdivision divided by the total area, including local roads and open space.

Achieved Density (Net Density) in Thurston County’s Urban Areas



Achieved Density (Net Density) in Thurston County’s Urban Areas, City Limits and Adjacent Growth Areas*



Note: *Does not include Yelm, Tenino, and Rainier unincorporated growth areas as they are zoned for 1 unit per five acre until annexation into adjacent city.



Tumwater Area 2002



RESIDENTIAL LAND SUPPLY IN URBAN AREAS *Is Thurston County's urban residential land supply sufficient to accommodate projected housing and population growth to the year 2035?*

Description:

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



Why is this important to measure?

Residential land supply is one determinant of where future growth will locate. Thurston County has been one of the fastest growing counties in Washington for the last thirty years. Thurston County and each city and town have developed visions on how they plan to grow over the next twenty years. These visions are laid out in their comprehensive plans. The forecast provides an opportunity to evaluate if the rules and regulations each jurisdiction has in place will result in the amount, type and placement of growth they expect and hope to receive.

How is land supply measured?

Residential land supply is measured by first taking an inventory of all the land, buildings, and other types of uses that are on the ground in 2010. This creates a land use inventory.

After that, a series of assumptions are applied 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 such as 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.

What about environmentally sensitive areas?

Environmentally sensitive areas and their associated buffers are not included in the available land supply.

What about parks and schools?

Parks, schools, and churches are often located in residential areas. An assumption is made on how much land will be needed for these uses

What about land availability?

A factor is applied to the land supply to take into account what amount of land is not expected to be available for development over the planning period. This is commonly referred to as a market factor, and takes into account that not all property owners will be willing to sell or develop their land.

How is land capacity model calibrated?

The land capacity model is calibrated to a database of planned projects (over 130 projects and almost 6,000 residential units). Calibration is by jurisdiction and zoning category. The calibration reports are part of the Population and Employment Forecast documentation, and can be found through this link:

www.trpc.org/data/Documents/Population%20Forecast/8-12%20Maps/Calibration.pdf

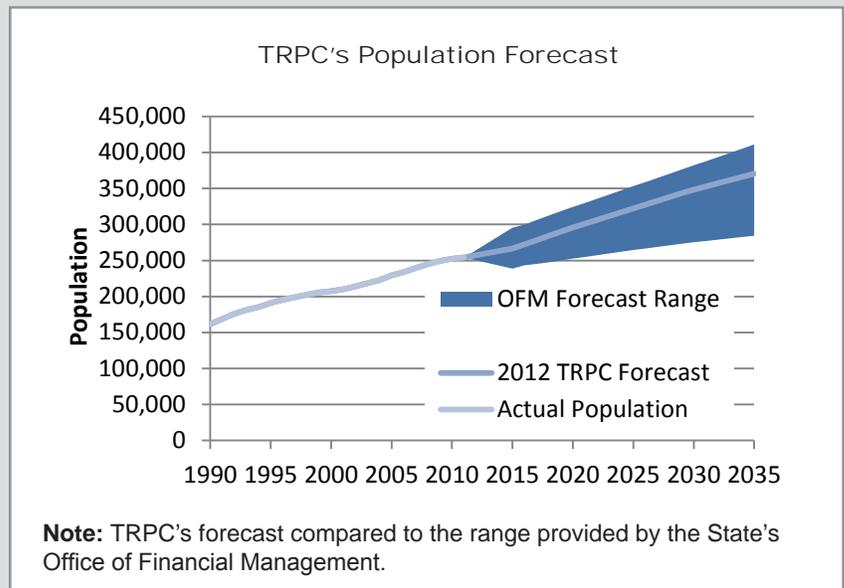
Want more information?

More information on how land supply is calculated, along with a series of land supply maps, can be found on TRPC's website under the Population Forecast section.

www.trpc.org/data/Pages/popfore.aspx

What is land supply compared to?

Land supply is compared to the projected need for housing. The housing projections come from TRPC's Population and Employment Forecast, which sets forecasts or targets for each city and town and the growth areas. By state law, these forecasts must be within the range of the State Office of Financial Management's (OFM) population projections.



Findings – Is there enough land in the urban growth areas?

Based on adopted policies in place in Thurston County as of mid-year 2012, the evaluation shows that:

- 1) There is sufficient land supply to accommodate projected population growth (to 2035) in Thurston County’s urban areas (cities plus unincorporated growth areas or UGAs), and
- 2) Each urban jurisdiction in Thurston County has designated sufficient land supply to accommodate projected population growth (to year 2035).

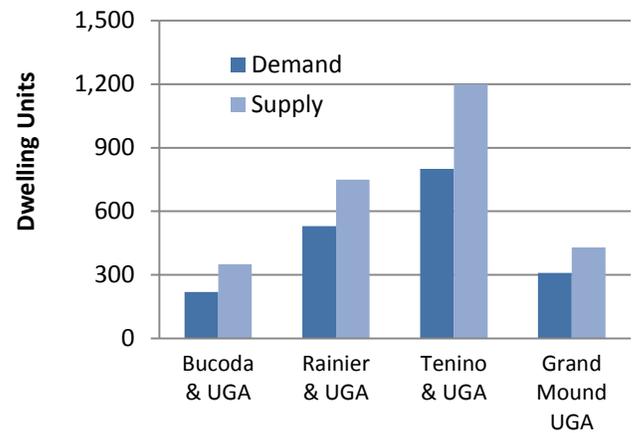
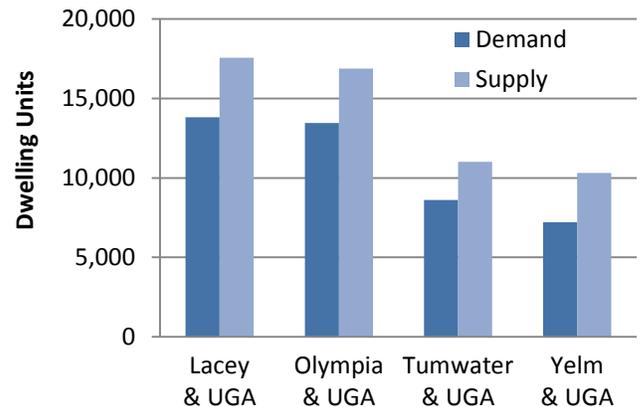
Is there too much land in the urban growth areas?

This question is not part of the “buildable lands” review requirement, and will be fully addressed during the Urban Growth Area review undertaken by counties every ten years under the State’s Growth Management Act. Data developed for this report shows that the excess capacity within the urban growth areas is **sufficient to accommodate projected growth**, but also that the growth areas are not too large based on the criteria established by Thurston County. It falls within the range of the established reasonable market factor of between 10 and 25 percent.

Questions remain as to how much of the residential land supply will be available for development due to the pending federal endangered species listing.

Thurston County’s urban Growth areas include the incorporated areas (cities and towns), the unincorporated urban growth areas within and around the cities and towns, and the unincorporated Grand Mound area. Each city and town has its own growth area, although in the case of Olympia, Lacey, and Tumwater they can share common boundaries.

Supply vs. Demand for Dwelling Units in Thurston County Urban Areas



DESIGNING URBAN GROWTH AREAS INVOLVES A DELICATE BALANCE



Too much Land
Supply equals
Sprawl

Too Little Land
Supply equals
Inflated Land Cost

From: Issues in designating urban growth areas, State of Washington Department of Community Development (1992).



Lacey/Olympia Commercial Corridor 2002



COMMERCIAL AND INDUSTRIAL LAND SUPPLY

Is Thurston County's urban commercial and industrial land supply sufficient to accommodate projected job growth to the year 2035?

Description:

It is projected that around 60,000 new jobs will be created in Thurston County between 2010 and 2035. This means that almost one-third of the jobs that will exist in 2035 will have been 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 the community of our future.

Why is commercial and industrial land supply important to measure?

This analysis takes a broad look at the inventory of commercial and industrial land to support employment. Adequate land supply has been identified as one of the core components of commercial and industrial economic development. For more on this issue, please see the Sustainable Economy White Paper produced through the Sustainable Thurston project.

Where will new jobs locate?

New jobs will locate in all parts of the county, but around 95 percent of new jobs will locate in the urban areas. Rural jobs tend to be home-based employment or resource-based.

Within the urban areas, 72 percent of new jobs are expected to locate in areas zoned for commercial uses (including mixed-use zoning districts). These include most jobs in state and local government, the exception being some schools and The Evergreen State College. It also includes jobs in shopping areas, professional offices, including doctor and dentist offices, and other types of services. Some light-industrial types of jobs locate in these areas, including mini-storage facilities.

Eight percent of new jobs are expected in areas zoned for predominately industrial uses. The majority of these jobs are in manufacturing and warehousing, but there are also many other types of business such as recreation (batting cages, dance and gymnastics studios) that locate in warehouse-style building.

The remaining 20 percent will locate in areas zoned for residential uses. In residential areas, 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.

How Much Land Will These New Jobs Need?

In order to decide the minimum amount of land these new jobs will need, two factors need to be estimated:

Employees per Building Square Feet

In Thurston County's urban areas there is an average of 3.3 employees per 1,000 square feet of commercial building space (including vacancies). For industrial or warehouse spaces, there is an average of 1.5 employees per square feet.

These figures do not include schools, churches, and other buildings used for community gathering spaces. They also do not include warehouse distribution centers, which tend to have much lower employee per square foot ratios.

Average Building square foot Floor to Area Ratio (FAR)

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. In Thurston County it averages around 11,000 square feet per acre. Compare this to industrial buildings, where it averages around 6,000 square feet per acre.

These factors vary by area. Where land prices are higher and vacant land is harder to find, land is used more efficiently. For comparison, downtown Tacoma has approximately 300 employees per acre, while Olympia has 46 employees per acre in commercial areas (city and urban growth area).

Findings – Is There Enough Land?

The evaluation shows that there is enough vacant, partially-used and redevelopable land to support the employment growth forecast to the year 2035 for urban areas in Thurston County.

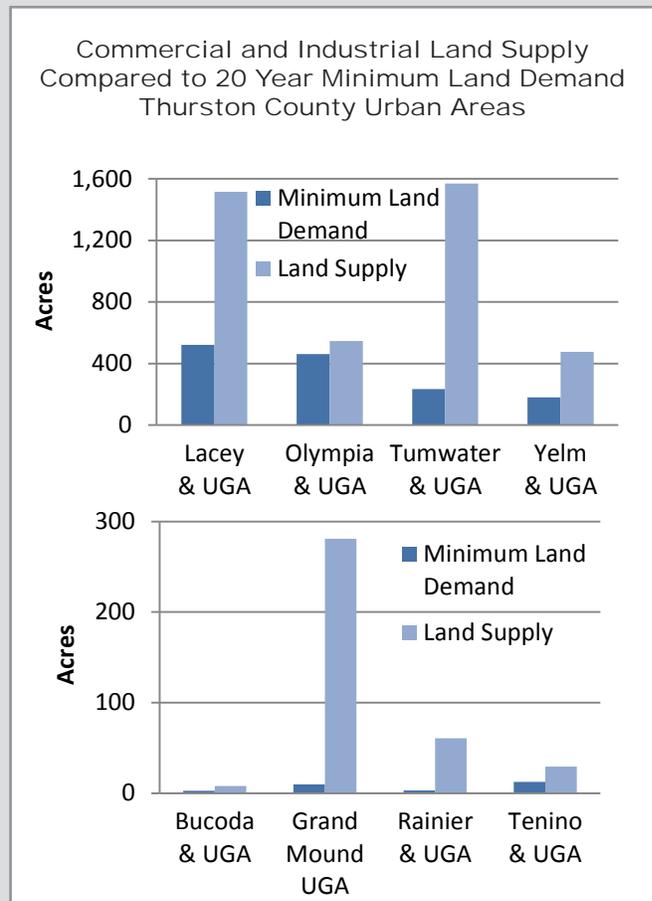
The supply varies by jurisdiction. Each jurisdiction has a vision for how they plan to grow, which is laid out in their comprehensive plans. Olympia, for instance, has very little vacant industrial land compared to Tumwater and Lacey. Taking the three cities together, there is ample space for attracting manufacturing or warehousing jobs. All three cities have sufficient space for jobs in the commercial sector, however 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 the pending federal endangered species listings.

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.



RURAL LANDS

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

Description:

Rural lands are those lands outside of the designated urban growth areas and tribal reservations. Of the 735 square miles that comprise Thurston County, 87% are designated as rural lands.

Why are these important to measure?

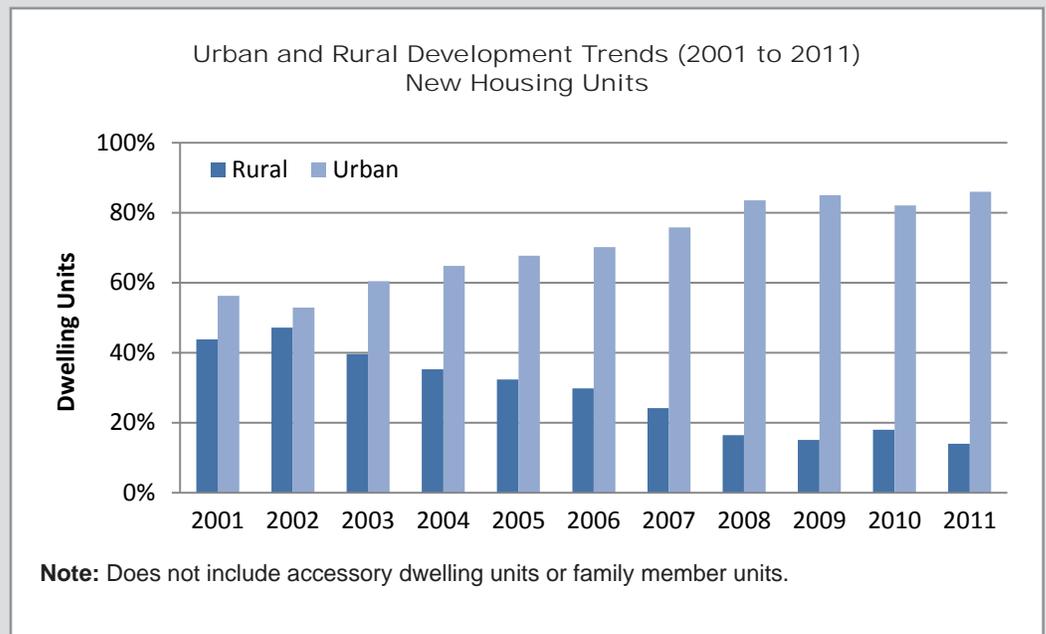
Measuring development capacity and trends in development on rural lands is not a requirement of the buildable lands program, but it does inform the urban analysis and provides useful information to local decision makers.

Rural Development Trends

Just over 31 percent of Thurston County's households live in the rural areas. In the last decade, the percent of new housing units locating in rural areas ranged from 47 percent in the earlier part of the 2000s to 14 percent by 2011. One trend of note was a slow and steady decrease in the percent of new housing units locating in the rural areas. Some of the reasons for this include:

- A moratorium on new rural subdivisions and subsequent rezone (completed in 2006)
- Growing desirability of urban neighborhoods, in particular master planned communities in many of the major cities
- Rising gas prices, making rural commutes less affordable

Based on recent trends and changes in demographics that will likely lead to a greater increase in the number of people seeking to locate in urban neighborhoods close to jobs and services, TRPC's forecast is for 13 percent of future dwelling units to locate in rural areas between 2010 and 2035.



THURSTON REGIONAL PLANNING COUNCIL STAFF:

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About Us

Thurston Regional Planning Council (TRPC) is an intergovernmental board made up of local jurisdictions within Thurston County. TRPC's mission is to "Provide Visionary Leadership on Regional Plans, Policies and Issues." To support this Mission:

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

THURSTON REGIONAL PLANNING COUNCIL - 2014

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 City of Olympia
 City of Rainier
 City of Tenino
 City of Tumwater
 City of Yelm
 Confederated Tribes of the
 Chehalis Reservation
 Nisqually Indian Tribe

 Town of Bucoda
 Thurston County
 North Thurston Public Schools
 Olympia School District
 Intercity Transit
 LOTT Clean Water Alliance
 Port of Olympia
 PUD No. 1 of Thurston County

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This report was prepared as part of Thurston Regional Planning Council's 2013-2014 regional work program

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