

Population and Employment Forecast

How Do We Get the Numbers?

Thurston Regional Planning Council Technical Brief
Updated July 2012

We plan for forecast growth in Population and Employment, but where do we get the numbers?

Overview

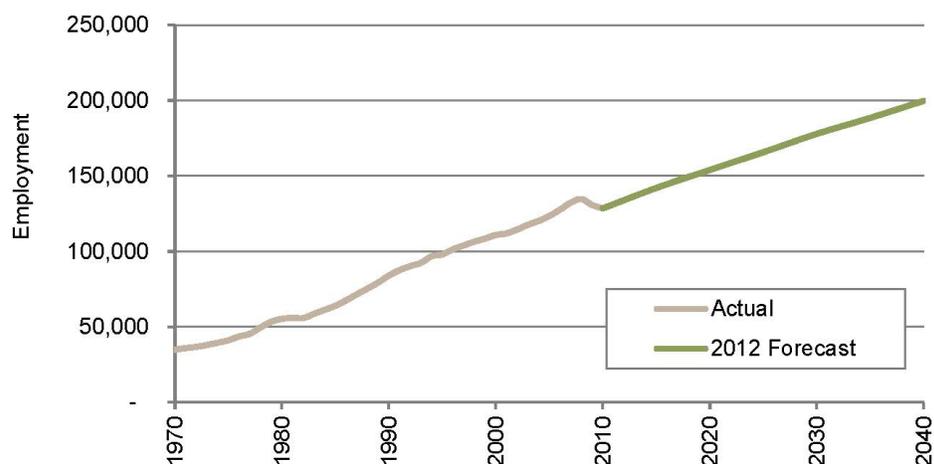
Thurston Regional Planning Council (TRPC) has been providing population and employment forecasts for Thurston County since the 1960s. The forecasts are updated every three to five years.

TRPC's forecasts are based on past trends and a set of assumptions for future conditions.

County-wide Employment Forecast

We forecast **employment** by individual sectors, such as manufacturing or state government, and also examine trends in commute rates and unemployment rates. For each industry we develop a formula based on a group of variables that best describes how growth has occurred in the past. This produces our **labor force demand**.

Thurston County Employment Forecast



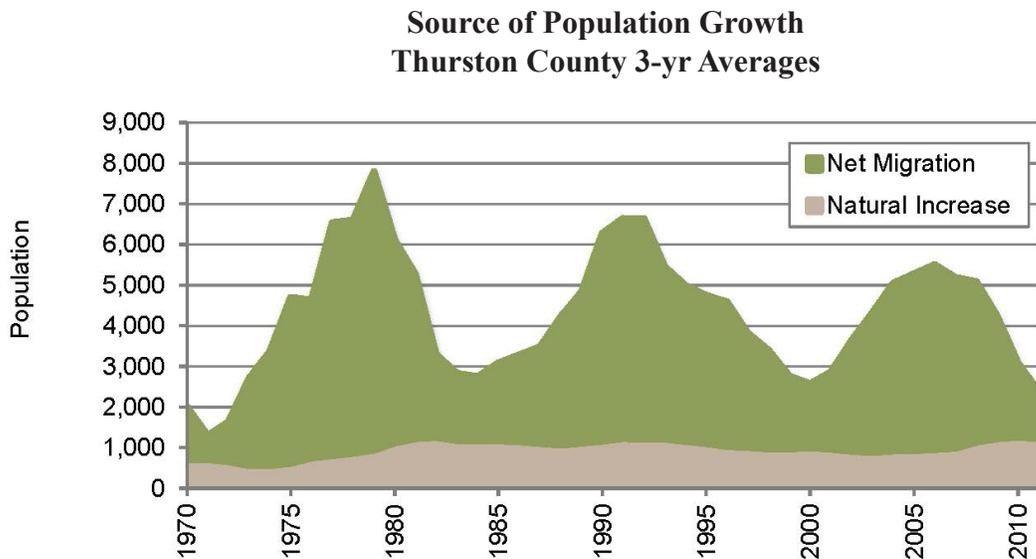
Source: TRPC Data Program.

County-wide Population Forecast

We forecast **population** by looking at demographic trends, such as births, deaths, labor force participation and migration. This produces our **labor force supply**.

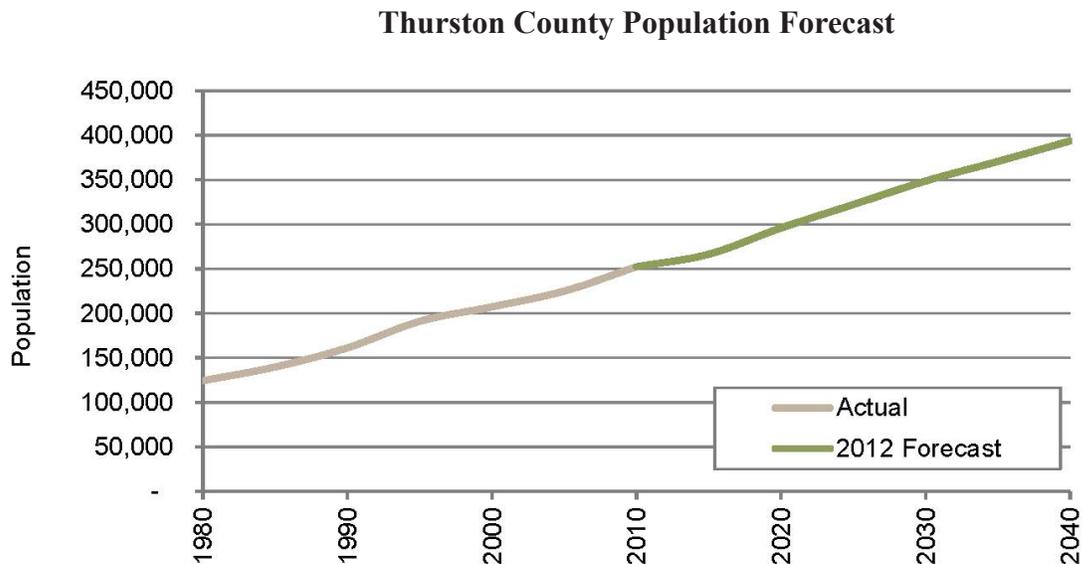
Where Do the People Come From?

Growth occurs in two ways - from the increase of births over deaths (natural increases), and from people moving here (net migration). People move here because of our stable economy, high quality of life, and lower cost of living compared to the central Puget Sound region.



Source: TRPC Data Program.

We are currently forecasting that our region will grow by 140,000 people over the next 30 years. This is about the same amount of population growth our region experienced during the last 30 years.



Source: TRPC Data Program.

City/Smaller Area Forecasts

Once we have developed a county-wide forecast, we allocate the growth to individual cities and areas of the County. We allocate population growth based on past trends, current zoning regulations, and the supply of buildable land. We allocate employment growth by individual sector based on existing employment, availability of infrastructure, and population growth.

How are the Forecasts Used?

Forecasts are used for transportation, sewer, water, land use, school, and other local governmental planning purposes. They are also used by the private sector for market studies and business planning.

What if the Growth Doesn't Occur as Expected?

Forecasts are used for long range planning. Specific decisions on when or where to build schools, fire stations, roads, etc., are made as growth occurs, and are not directly based on the forecast. We revise the forecasts every three to five years to make course corrections.

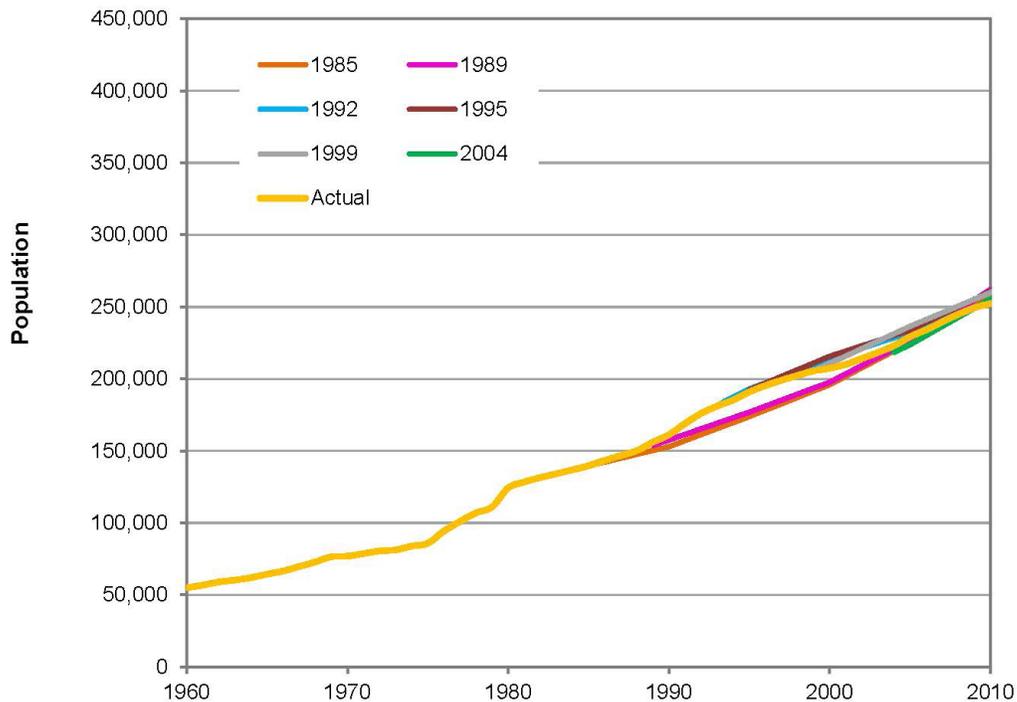
How Reliable Are the Forecasts?

We have developed six forecasts since 1985. A look back shows that they have tracked with actual growth fairly well (see figure below).

Since we update the forecasts every three to five years, each new forecast provides a course correction to account for changes due to updated data sources or unanticipated events.

Long-range models cannot predict the timing of recessions or growth spurts, but effects of these events tend to even out over time. The models are reliable in predicting major trends.

Comparison of Actual Growth to TRPC Forecasts



Source: TRPC Data Program.

Need more information?

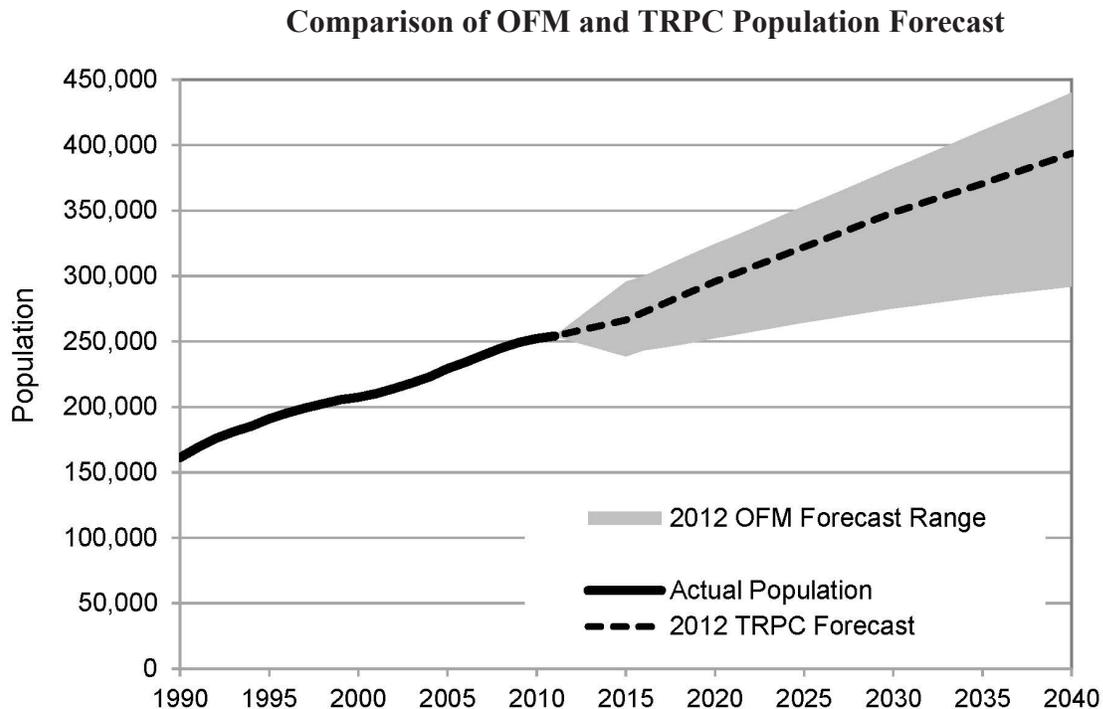
Full Technical Documentation of the County-wide forecast can be found here:

<http://www.trpc.org/data/Pages/popfore.aspx>

How do TRPC's Forecasts Compare to State Forecasts?

Under the State's Growth Management Act, counties and cities are required to base their planning on forecasts that are consistent with those prepared by the Population Studies Division of the Office of Financial Management (OFM). OFM prepares a high, medium, and low forecast for each county. The most recent OFM forecast goes to the year 2040.

The consistency requirement means Thurston County must use a forecast that falls between the high and low OFM forecasts. The most recent TRPC forecast falls within the high and low range of OFM's forecast.



Source: TRPC - Population and Employment Forecast Work Program.

Explanations: The Office of Financial Management (OFM) provides a range of high to low population forecasts. Counties may develop their own forecasts within that range.

What is the Collaborative Process for Updating the Forecasts?

One requirement of the Growth Management Act is that the County must consult with its cities when adopting a forecast.

As stated in the county-wide planning policies, Thurston County and its cities delegated the review and approval of the forecasts to the Thurston Regional Planning Council (TRPC) to ensure that collaboration occurs as the forecasts are developed. TRPC also convenes a stakeholder group to provide guidance during the update process.

Assumptions

Every forecast is a product of the assumptions it makes. Some assumptions are detailed and explicit, such as future birth rates. They are documented in each updated forecast. Others are more general and implicit, but also have major importance in determining the outcome. They are as follows:

Assumptions
Some assumptions - such as availability of water, energy, fuel pricing, climate refugees - are of widespread concern - but there is not a definitive direction on how to model them.

1. There will be no major war, depression, or extensive natural disaster during the period covered by this forecast. In fact, the model is designed to look at “average” economic conditions; it does not attempt to predict the timing of business cycles, such as recessions or recoveries.
2. Thurston County will continue to be influenced by the patterns of growth or decline of Washington State and the Puget Sound Region. Future demographic and employment inter-relationships will largely reflect the general trends of the last twenty to thirty years.
3. The economic base behavioral model (EMPFOR), used to predict future employment trends, adequately interprets historical trends and typifies the local economy.
4. No major existing employers will close or move from the County during the forecast period, except as may be explicitly assumed for each forecast update. Likewise, no new major employers will move into Thurston County during the forecast period, except as may be explicitly assumed.
5. Infrastructure will be provided as needed, according to the currently adopted policies of the various jurisdictions. Significant changes in the relative availability or costs of needed infrastructure - either a) for Thurston County versus other counties, or b) for one sub-area versus another within Thurston County - could affect the projections.
6. The primary determinant of population growth in our community is the growth of jobs. That is, people may want to move here for the lifestyle, but most can only do so if there are jobs for them. Other determinants of population growth include retiree preferences and overall quality of life considerations (this is an attractive place to live, and people are willing to commute to a job outside of the County to live here).
7. The demographic model used to predict future population trends adequately interprets historical trends, and typifies local birth rates, death rates, and the age characteristics of in-migrants.
8. There will be no dramatic changes in our general lifestyle or living patterns within the time period covered by this forecast.

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