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BRIEFLY

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New Population Projections for GMA Planning



**Goals and Promises
Reviewed
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The recent census documents a decade of growth for Washington. State population increased by 21.1 percent from 1990 to 2000. Migration to the state is a major factor in this growth. The census provides the basis for new projections by the Office of Financial Management of future population growth for the state's counties. The counties will use these forecasts as they revise the comprehensive plans required by the Growth Management Act.

Population grew from 1990 to 2000

The 2000 census counted 5,894,121 residents in Washington state. This was an increase of 21.1 percent over the 4,866,669 counted in 1990. The state ranked tenth highest among the states in percentage growth in population between 1990 and 2000.¹

Historically, much of the state's growth has come from migration from other states or other countries. The decade from 1990 to 2000 was no exception. By OFM's estimates, 787,184 new state residents were born over the decade while 405,110 state residents died. Thus what demographers call *natural increase* added 382,074 to the state's population, or 37 percent of the state's 1,027,452 population gain. *Net migration*, the excess of migration to Washington over migration from the state, added 645,378 residents, 63 percent of the gain.

Many of those who move to the state are highly educated, and this has contributed to the high educational attainment of the state's residents. The 2000 census supplementary survey found that Washington ranked eighth among the states in the share of population that had a Bachelor's degree or higher, 29.6 percent, and third in the share with a high school diploma, 89.1 percent.

As Chart 1 shows, the five counties with the largest populations were King, Pierce, Snohomish, Spokane, and Clark. The five counties with the largest absolute growth in population over the decade were King, Snohomish, Pierce, Clark, and Spokane. The five counties with the largest percentage growth in population were Clark, San Juan, Grant, Franklin and Pend Oreille. Chart A-1 at the end of this brief give data for all counties.

CHART 1

Top 5 Counties

2000 Population

King	1,737,034
Pierce	700,820
Snohomish	606,024
Spokane	417,939
Clark	345,238
Kitsap	231,969

Absolute Growth 1990-2000

King	229,729
Snohomish	140,396
Pierce	114,617
Clark	107,185
Spokane	56,606
Thurston	46,117

Percent Growth 1990-2000

Clark	45.0%
San Juan	40.3%
Grant	36.3%
Franklin	31.7%
Pend Oreille	31.6%
Whatcom	30.5%

Source: US Census

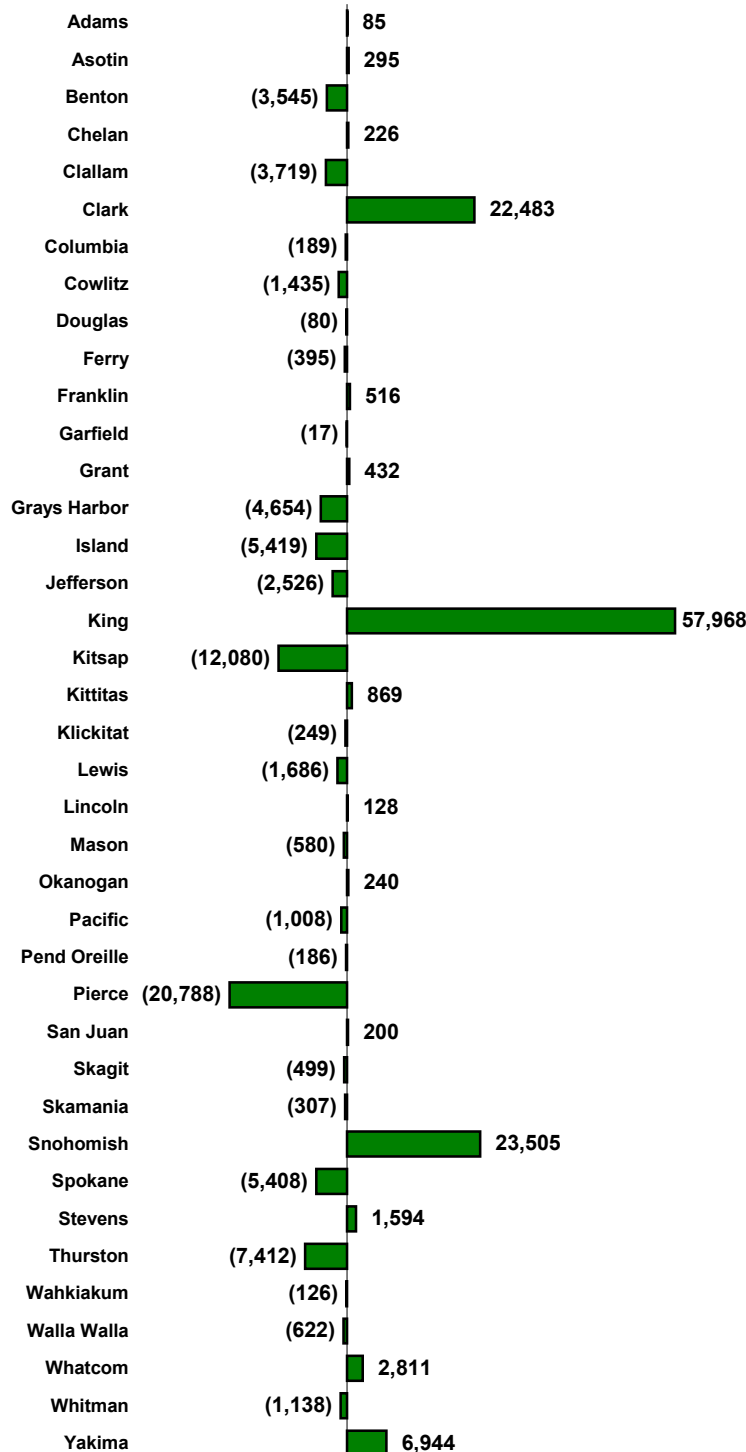
Population projections

Counties planning under the Growth Management Act are required to base their comprehensive plans on population projections prepared by the Office of Financial Management. The first OFM GMA population projections were released in 1995. In January of this year OFM released updated projections that reflected the information on Washington's population developed through the 2000 census.²



CHART 2

The difference between the actual county population in 2000 and the projection made in 1995



Source: US Census, Office of Financial Management

For each county, OFM produces three alternative population projections, designated high, intermediate, and low. The intermediate projection represents the most likely trend, while the high and low projection alternatives establish uncertainty bands around that trend.

GMA requires each county to adopt a projection for planning purposes that lies between the high and low OFM projections.

In 1995, OFM's intermediate projection of year 2000 state population was 5,849,893, about 44,000 below the actual value of 5,894,121, an error of less than 0.8 percent. Expressed as annual growth rates, population grew by 1.93 percent per year over the decade, rather than by the predicted 1.86 percent. (Some of the divergence between predicted and actual growth may be the result of the increased accuracy in the 2000 actual. It appears that census takers missed fewer people in 2000 than in 1990.³)

Overall, the intermediate projection made by OFM in 1995 hit very close to the mark.

Not surprisingly, the projections for individual counties show greater percentage errors. Chart 2 shows how each county's actual population in 2000 compared with its forecast. The 2000 population was greater than projected in 15 counties and less than projected in 24 counties. The three counties where the absolute increase in population most exceeded the projection were King, 57,968, Snohomish, 23,505, and Clark, 22,482. The county that fell furthest short of the projection was Pierce, 20,788.

In five cases, Clark, King, Snohomish, Stevens, and Yakima, actual population in 2000 exceeded the high projection. In 14 cases, the actual population fell below the low projection. Included in this latter group were four central Puget Sound counties, Island, Kitsap, Pierce, and Thurston.



Considering the six central Puget Sound counties (Island, King, Kitsap, Pierce, Snohomish, and Thurston) as a group, OFM's 1995 projection missed the actual 2000 value by only 1.0 percent (3,518,986 versus 3,554,760). For each of the counties, the percentage error was much greater.

New population projections

In January of this year OFM issued updates to the GMP population projections. The new projections extend to the year 2025. The new intermediate projection foresees lower overall state population growth than had been projected in 1995. For example, the 1995 intermediate projection for state population in 2020 was 7,610,089, while the revised projection is 7,545,269. The change amounts to a 0.1 percent reduction in the projected annual rate of population increase for the state over the 2000-2020 interval.

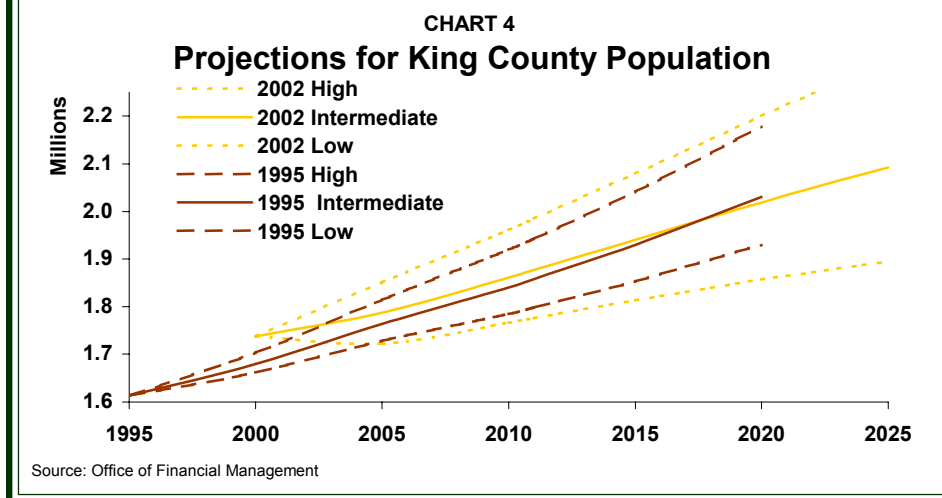
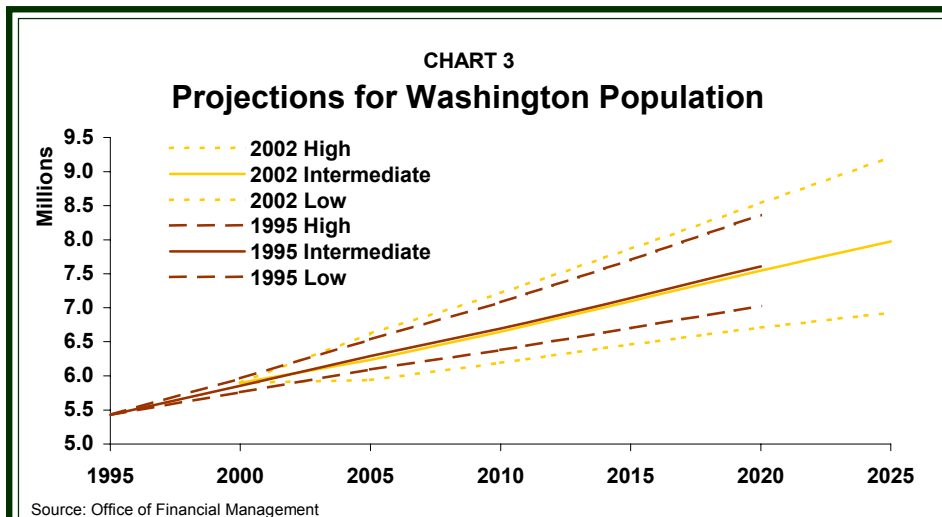
More significant than the change in the intermediate projection, however, are the changes in the high and low projections. The bands of uncertainty are now much larger. Chart 3 shows the old and new projections for the state as a whole. For the original population predictions, the spread between the high and low numbers for the year 2020 is 1,340,000; for the new projections the spread is 1,830,000.

The statewide pattern is reflected in individual counties. Chart 4 compares the new and old projections for King County. The new projections start from the census bureau count of the county's population for the year 2000, which is above the old high projection for the year. The new intermediate projection shows lower growth than the old, however, and by 2020 the new intermediate projection lies below the old. The new high projection lies everywhere above the old high, while the new low is below the old low from 2005 on.

Comprehensive plan updates

Counties planning under GMA are required to update their comprehensive plans regularly to account for changing circumstances. Many counties will use the new OFM population projections as part of their next updates.

Changes in the planning targets for population will affect several elements in the comprehensive plans: If a county's population planning targets rise, the housing element of the comprehensive plan must identify land to meet the housing needs of the additional residents. Traffic forecasts must be updated and the transportation element of the comprehensive plan





must set out specific actions to assure that local transportation facilities continue to meet established level-of-service standards. Similarly, the capital facilities element of the comprehensive plan must be adjusted to accommodate the additional population.

The legislature intended for the Growth Management Act to force counties to plan for the growth that will occur. However, this intent will be frustrated if the population projections used by the counties understate the growth that actually occurs. There are two reasons to worry that this will happen.

First, the ranges between the OFM high and low predictions are quite large. While the low projections of population growth are substantially less than the most likely trends, counties are free to adopt them as planning targets. If many counties do this the state in aggregate will under plan for growth.

Second, even if all counties adopt the intermediate projections as planning targets and these projections are accurate in aggregate, some counties will surely experience growth considerably greater than targeted.

This has been the recent experience in a number of counties; King County is a notable example. In 1992 the county set 20-years targets for growth in jobs, population and housing. By 2000, eight years into the planning period, the county had added 231,600 jobs, 170,000 residents, and 74,600 housing units. This represented 67 percent, 50 percent, and 38 percent of the county's 20-year planning targets, respectively.⁴ Although the county seems to be on track to meeting its 20-year target for housing, the extraordinary job growth has rendered that target inadequate. The result has been high housing prices in the county and a worsening regional imbalance between jobs and housing.⁵

What is needed is recognition that, on a county level, population projections are subject to considerable error. Comprehensive plans should be flexible enough to accommodate the growth that actually occurs.

Employment growth leads population growth. When plans fail to provide sufficient housing near to centers of employment growth, house prices are pushed up and workers are forced to commute longer distances to their jobs. The long commutes exacerbate the regional traffic congestion.

There is a clear asymmetry in the consequences error in planning for the growth of demand for housing in a location: the cost of under forecasting the demand is less than the cost of over forecasting the demand. To compensate counties should choose population planning targets toward the high end of the range provided by OFM.

(Endnotes)

¹ www.census.gov

² www.ofm.wa.gov/demographics.htm

³ Theresa J. Lowe, *Understanding Census 2000: Coverage Issues and Growth Trends*, Office of Financial Management, Research Brief No. 11, March 2001

⁴ Chandler Felt, "Buildable Lands Update," Presentation to the King County Growth Management Planning Council, May 22, 2002.

⁵ Washington Research Council, *Managing Growth is a Balancing Act*, ePB 01-1 January 25, 2001.





CHART A-1

	2000	Change, 1990-2000		Forecast, 2000-2010	
	Population	Total	Percent	Low	High
Washington	5,894,121	1,027,452	21.1%	5.0%	22.4%
Adams	16,428	2,825	20.8%	5.9%	20.8%
Asotin	20,551	2,946	16.7%	3.3%	17.9%
Benton	142,475	29,915	26.6% ↓	3.5%	26.6%
Chelan	66,616	14,366	27.5%	6.6%	21.6%
Clallam	64,525	8,315	14.8% ↓	-2.2%	12.8%
Clark	345,238	107,185	45.0% ↑	16.1%	35.0%
Columbia	4,064	40	1.0% ↓	-10.1%	8.8%
Cowlitz	92,948	10,829	13.2%	5.6%	31.7%
Douglas	32,603	6,398	24.4%	9.4%	32.8%
Ferry	7,260	965	15.3% ↓	0.0%	32.2%
Franklin	49,347	11,874	31.7%	5.7%	24.7%
Garfield	2,397	149	6.6%	-6.0%	16.6%
Grant	74,698	19,900	36.3%	7.9%	29.2%
Grays Harbor	67,194	3,019	4.7% ↓	-5.4%	10.5%
Island	71,558	11,363	18.9% ↓	2.0%	23.4%
Jefferson	25,953	5,547	27.2% ↓	6.4%	28.5%
King	1,737,034	229,729	15.2% ↑	1.7%	12.9%
Kitsap	231,969	42,238	22.3% ↓	0.0%	32.3%
Kittitas	33,362	6,637	24.8%	0.8%	21.5%
Klickitat	19,161	2,545	15.3%	3.3%	24.4%
Lewis	68,600	9,242	15.6%	1.4%	28.0%
Lincoln	10,184	1,320	14.9%	-6.0%	15.2%
Mason	49,405	11,064	28.9%	7.4%	35.1%
Okanogan	39,564	6,214	18.6%	2.9%	20.9%
Pacific	20,984	2,102	11.1% ↓	-5.4%	11.4%
Pend Oreille	11,732	2,817	31.6%	6.3%	27.4%
Pierce	700,820	114,617	19.6% ↓	5.8%	22.1%
San Juan	14,077	4,042	40.3%	12.2%	34.9%
Skagit	102,979	23,434	29.5%	10.6%	33.1%
Skamania	9,872	1,583	19.1% ↓	2.3%	25.3%
Snohomish	606,024	140,396	30.2% ↑	11.6%	29.0%
Spokane	417,939	56,606	15.7%	3.5%	21.9%
Stevens	40,066	9,118	29.5% ↑	6.7%	34.9%
Thurston	207,355	46,117	28.6% ↓	14.5%	38.9%
Wahkiakum	3,824	497	14.9% ↓	-0.4%	18.4%
Walla Walla	55,180	6,741	13.9%	0.1%	19.9%
Whatcom	166,814	39,034	30.5%	8.7%	30.1%
Whitman	40,740	1,965	5.1% ↓	-7.6%	20.2%
Yakima	222,581	33,758	17.9% ↑	-0.9%	14.8%

↑: over high forecast
 ↓: under low forecast

Source: US Census