

Regional Benchmarks

For Thurston County

Tracking Growth Management
Policy Implementation

November 2008

Prepared by:



THURSTON REGIONAL PLANNING COUNCIL (TRPC) is a 22-member intergovernmental board made up of local governmental jurisdictions within Thurston County, plus the Confederated Tribes of the Chehalis Reservation and the Nisqually Indian Tribe. The Council was established in 1967 under RCW 36.70.060, which authorized creation of regional planning councils.

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This report was prepared as part of the Thurston Regional Planning Council's 2008 regional work program.

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Chapter I: Introduction

Overview

The 2008 publication of Regional Benchmarks for Thurston County, *Tracking Growth Management Policy Implementation* stems from an effort on the part of local governments in Thurston County to monitor the region's progress toward meeting the 13 goals of the 1990 state Growth Management Act (GMA). This is accomplished by comparing actual trends in key indicators against benchmarks established in several overarching growth management areas: Land Use, Growth, Transportation, Economy, Environment, Water, and Housing Affordability.

The Regional Benchmarks Report has an important role to play in determining whether implementation of the Growth Management Act is occurring and achieving the desired results. Accurate information regarding the results of the policies in adopted comprehensive plans in the county is crucial. By tracking indicators at the regional level, local governments are provided with a regional perspective of what's happening, leading to improved regional coordination regarding growth management planning.

A particular effort has been made to make the information in the Benchmarks Report accessible to a wide variety of readers. A standard 2-page format has been developed for each benchmark to allow readers to easily review key data trends. For those who are interested in more detail, a wide variety of supporting data tables are provided as well, and many of these tables are updated annually in The Profile.

This report marks the fourth TRPC Regional Benchmarks Report, the first being published in 1996. The 2000 Regional Benchmarks Report was recognized for excellence in planning implementation when it received an Honor Award from the American Planning Association and the Planning Association of Washington. The third report contained results from the first Buildable Lands Analysis for Thurston County, and was used extensively by the Vision/Reality Task Force to develop: *Understanding Public Vision and Marketplace Realities in the Thurston Region*. This Fourth edition of the Regional Benchmarks Report includes some of the benchmarks and indicators developed during the Vision/Reality process. A chapter has been added for water. The Buildable Lands chapter have been removed from the Report, and is now available as a separate document.

TRPC's Regional Benchmarks Report is a work in progress. We encourage you to please use the Reader Survey at the beginning of this report to provide us with your feedback and comments.

Key Dates in Recent Growth Management Planning in Thurston County

1983	First Urban Growth Area Boundary interjurisdictional agreement adopted
1988	Revised Urban Growth Area Boundary interjurisdictional agreement adopted
1990	State Growth Management Act (GMA) passage
1990	County passes interim downzone of 1 unit per 5 acres in most of rural area
1992	County-Wide Planning Policies adopted
1993	First post-GMA Regional Transportation Plan adopted
1994-95	GMA Comprehensive Plan amendments adopted by jurisdictions
1995-96	GMA implementing development regulations adopted by jurisdictions
1997	“Buildable lands” amendments to GMA passed
1998	Regional Transportation Plan updated
2002	First Buildable Lands Report completed
2004	GMA Comprehensive Plan updates
2004	Regional Transportation Plan (2025) updated
2007	County passes rural rezone
2007	Second Buildable Land Report completed

Possible “Outlooks” for Benchmarks



**sunny, overall
positive results**



**partly sunny /
partly cloudy**



**stormy, concerns
for the future**

Summary of Benchmarks

Benchmark 1: Urban Residential Densities Increase over Time

Outlook: partly sunny/partly cloudy

Assessment: Yes they have overall, but in the cities they have decreased slightly.

Benchmark 2: Urban Mixed-Use Areas Receive an Increased Share of Growth over Time

Outlook: stormy, concerns for the future

Assessment: Mixed-Use areas have had a decreasing share of overall growth compared to the last evaluation period.

Benchmark 3: Achieved Residential Densities in Infill Areas and Strategy Corridors Occur at Transit-Supportive Levels

Outlook: stormy, concerns for the future

Assessment: While achieved densities in infill areas and strategy corridors are higher than the overall achieved density, they were not high enough to support efficient transit.

Benchmark 4: The Percentage of Small Lots Created in Subdivisions in the Cities and UGAs Increases over Time

Outlook: sunny, overall positive results

Assessment: The percentage of small lots created in subdivisions has increased.

Benchmark 5: The Percentage of Growth in Urban Areas Increases over Time Compared to Rural Areas

Outlook: partly sunny/partly cloudy

Assessment: The share of housing in urban areas was decreasing, however in the last two years urban areas have seen an increased share in housing.

Benchmark 6: Rural Densities Decrease over Time

Outlook: sunny, overall positive results

Assessment: Rural densities have decreased over time.

Benchmark 7: The Share of Drive-Alone Commute Trips at Large Work Sites Decreases over Time

Outlook: partly sunny/partly cloudy

Assessment: The share of drive-alone commute trips at large work sites has decreased somewhat since 1993. However, this reduction is significantly below the 35 percent reduction target set by the state.

Benchmark 8: The Number of Transit Trips Per Capita Increases or Remains Steady over Time

Outlook: sunny, overall positive results

Assessment: Transit trips per person have increased in recent years due to an expansion in Intercity Transit's service area after several years of cuts.

Benchmark 9: Vehicle Miles Traveled (VMT) Per Capita Decreases over Time

Outlook: partly sunny/partly cloudy

Assessment: Vehicle miles traveled per capita has increased in recent years, however changes are slight.

Benchmark 10: Real Wages Increase over Time

Outlook: sunny, overall positive results

Assessment: Since 1990, real wages have increased in Thurston County.

Benchmark 11: Unemployment Rate Declines or Remains Steady

Outlook: sunny, overall positive results

Assessment: Thurston County's unemployment rate rose steadily between 1999 and 2002, but has declined every year beyond 2003. The County has had a lower unemployment rate than that of the State since 1990.

Benchmark 12: The Amount of Land Designated to Parks and Preserves per Capita Remains Constant or Increases

Outlook: partly sunny/partly cloudy

Assessment: Since 1991, the amount of parks and preserves per capita has been increasing or remained steady in the incorporated areas, but has been decreasing overall.

Benchmark 13: Acres of Open Space Land Enrolled in the Open Space Tax Program Increase or Remains Steady over Time

Outlook: sunny, overall positive results

Assessment: The amount of open space land enrolled in the open space tax program has been generally increasing over time.

Benchmark 14: The Solid Waste Recycle Rate Per Capita Increases over Time

Outlook: partly sunny/partly cloudy

Assessment: The recycle rate per capita has been increasing steadily since 2001, however the solid waste entering the landfill per capita has also increased steadily over time.

Benchmark 15: Highest Annual Readings for Particulate Matter (PM10) Remain at or Below the National Standard of 150 Micrograms per Cubic Meter

Outlook: sunny, overall positive results

Assessment: The highest annual reading for particulate matter has remained below the national standard since 1990.

Benchmark 16: Coho Salmon Production in the Deschutes River Increases or Remains Steady over Time

Outlook: stormy, concerns for the future

Assessment: Coho salmon smolt production in the Deschutes River has dropped over time.

Benchmark 17: Seven-day Minimum River Flows Increase or Remain Steady over Time

Outlook: partly sunny/partly cloudy

Assessment: Flows have been lower in the Deschutes River, but higher in the Chehalis and Nisqually Rivers than the recent historic records.

Benchmark 18: Shellfish Bed Health in Puget Sound Inlets Increases over Time

Outlook: stormy, concerns for the future

Assessment: Shellfish bed water quality has decreased over time in Henderson Inlet and the Nisqually Reach.

Benchmark 19: Marine Water Quality Health Improves over Time

Outlook: stormy, concerns for the future

Assessment: There remains a very high level of concern over water quality in Budd Inlet, and a high level of concern for Nisqually Reach.

Benchmark 20: Median Household Income Keeps Pace with Average Housing Sale Price

Outlook: stormy, concerns for the future

Assessment: In the last five years, the rise in home costs has outpaced the rise in median household income.

Benchmark 21: The Housing Affordability Index for First Time Buyers Increases and the Affordability Index for All Buyers Remains Above 100

Outlook: partly sunny/partly cloudy

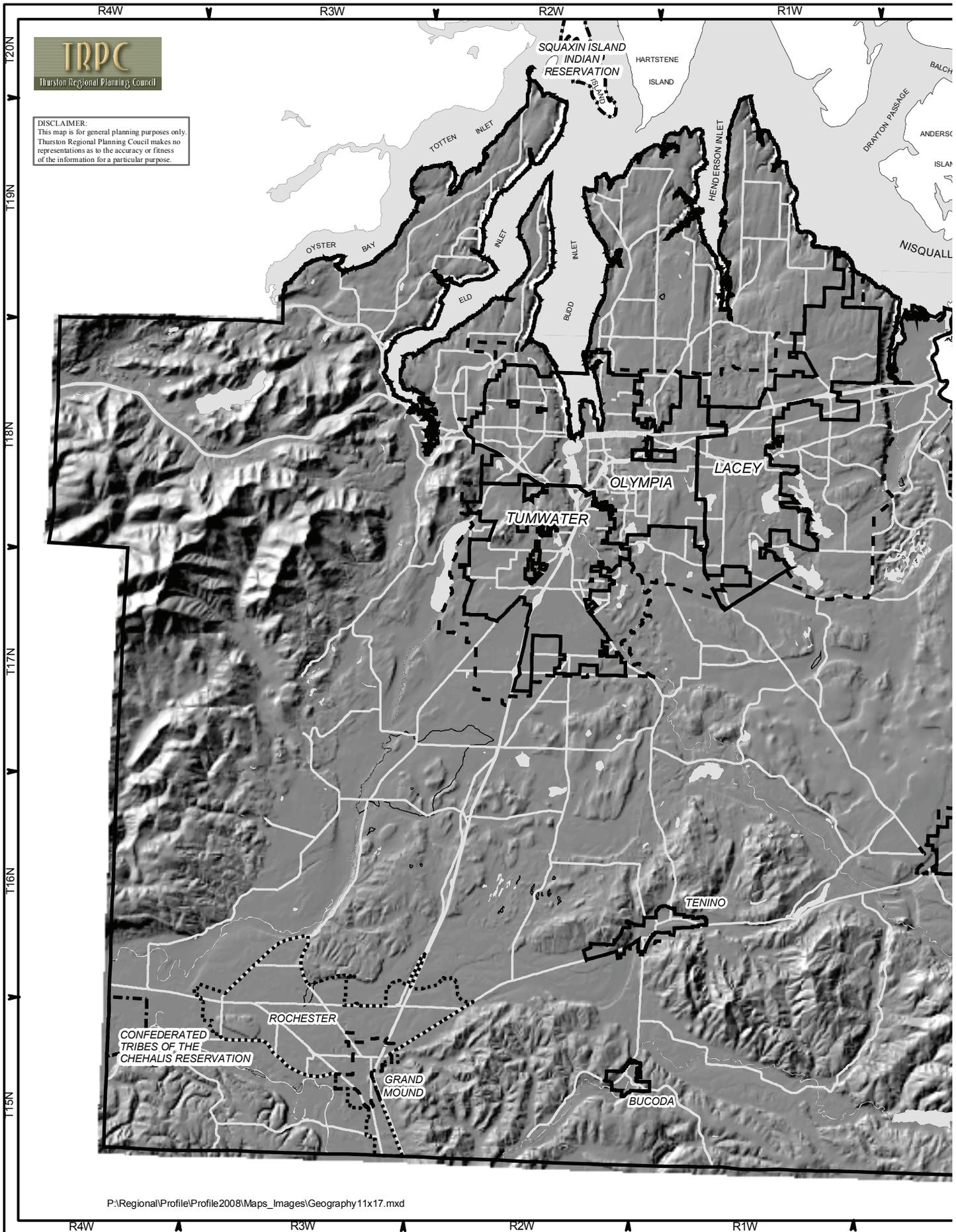
Assessment: The housing affordability index has remained above 100 for all buyers, but has been decreasing lately. It was increasing for first time buyers until 2004, when it began to decrease steadily.

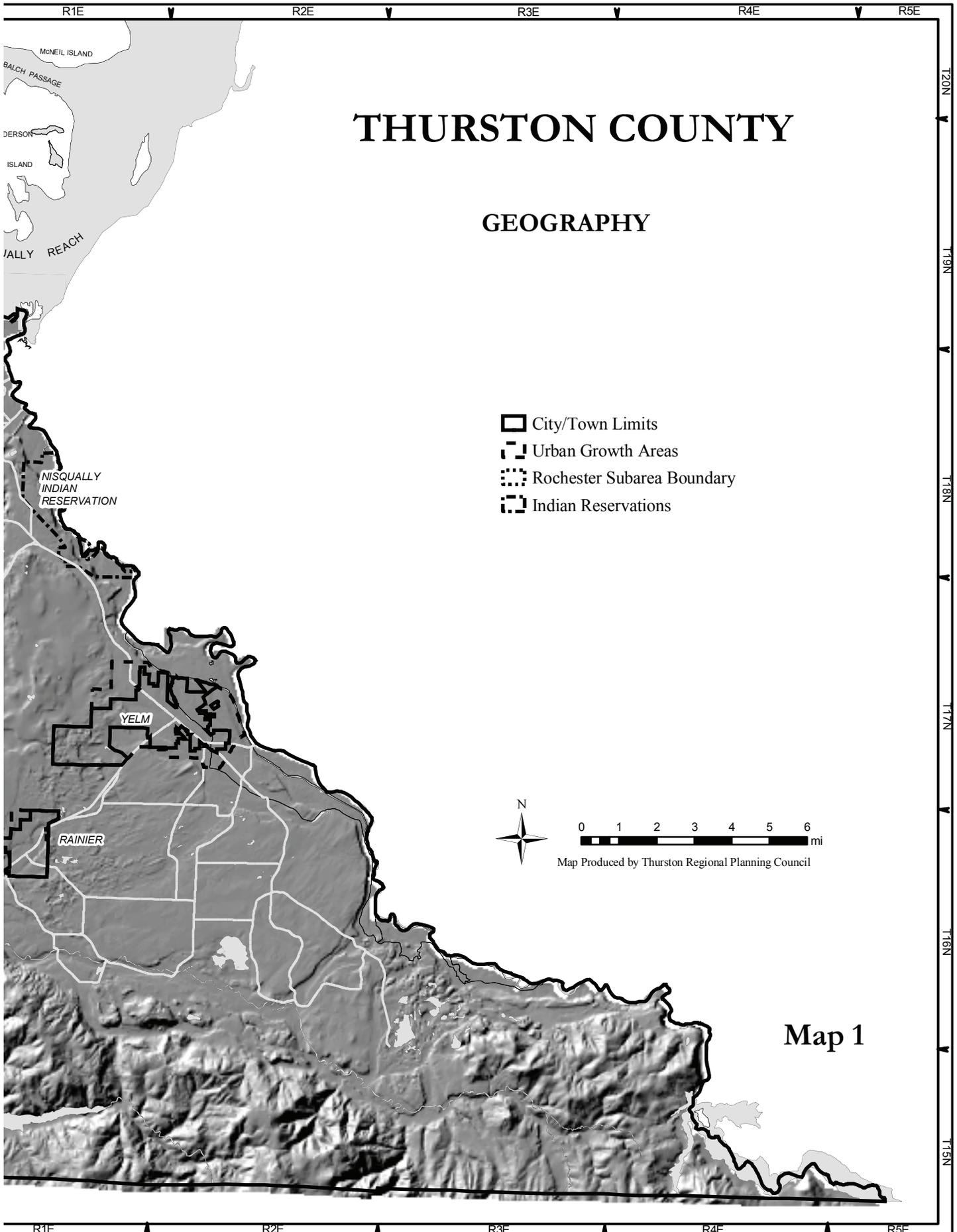
Benchmark 22: The Apartment Vacancy Rate Remains at or Around Five Percent

Outlook: sunny, overall positive results

Assessment: The apartment vacancy rate in Thurston County has remained at or around five percent.

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Chapter II: Puget Sound Trends

Overview

Are people driving less distance to work? Or more? And why?

This chapter looks at key housing, wage and commuting patterns in an attempt to understand the broader Puget Sound market and its affect on Thurston County Commuting.

Commuting

Commuting trends give an idea of how far people travel to work. Commuters are defined as people living in one county and working in another – or people willing to travel longer distances for a job.

What happened?

Between 1990 and 2000 the number of in-bound commuters – or people living in other counties and working in King County, grew significantly, from 160,000 to 225,000 people, or an increase of around 65,000 workers. As a result, the number of out-bound commuters in surrounding counties grew during this time period, and the percent of residents holding jobs within the county they lived in decreased.

Where did they come from?

In 1990, the majority of King County's in-bound workers came from Snohomish County (53 percent), followed by Pierce County (33 percent), Kitsap County (5 percent) and Thurston County (1 percent).

By 2000 a greater percent of the in-bound workers were coming from the south, with Pierce County's share increasing to 36 percent, Kitsap County's to 7 percent and Thurston County's to 2 percent or around 5,000 workers. Snohomish County's share decreased to 46 percent by 2000. This shift was likely due to lower home prices in Pierce and Thurston County compared to Snohomish County by 2000.

How did this affect Thurston County?

As the homes of King County's in-bound workforce shifted south, so did Pierce County's. In 1990, the majority of in-bound workers in Pierce County came from King County (49 percent). This had decreased to 43 percent by 2000. During the same interval Thurston County's share increased from 29 to 33 percent, and Kitsap County's increased from 10 percent to 12 percent.

Workers were driving further for their jobs in the Puget Sound Region. The question is why.

Housing Prices and Wages

It is likely that many people were willing to drive longer distances to work to either:

- Take a higher paying job in the larger cities (Tacoma or Seattle)
or
- Buy a larger home for less money in the less developed counties such as Thurston County

What has happened to the Puget Sound housing market in the last decade?

In 1996, just after GMA Comprehensive Plans were adopted in most Puget Sound Counties, median home prices in the largest metropolitan areas (King County) were higher than adjacent areas.

Nine years later home prices had more than doubled in most of the Puget Sound Counties. So while housing prices rose everywhere, they rose even more in King County than surrounding areas, creating a greater difference between different areas.

How did wages compare to home prices?

The rise in wages didn't keep pace with the rise in housing prices during this time.

In 1996, the average wage per job was higher in King County compared to surrounding counties. At that time, wages were comparable between Pierce and Thurston Counties. Nine years later, wages in King County were still higher than surrounding counties. By this time, wages in Pierce County were higher than Thurston County.

So while King County continued to provide jobs with the highest wages (and the greatest number of jobs), workers found that housing was getting increasingly more expensive.

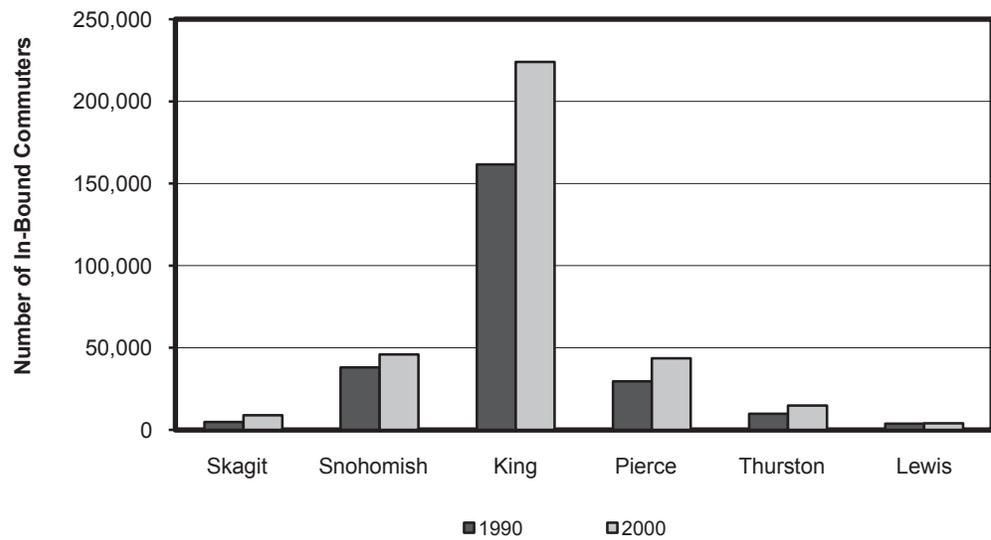
Summary

The rise in the number of commuters traveling between Puget Sound Counties for work has large implications on the transportation system. It is likely to keep increasing as long as there is such a large difference between housing prices and wages in the Puget Sound Region, or until commuters begin to factor in the cost of transportation when making decisions on where to live or work.

Puget Sound Region Map

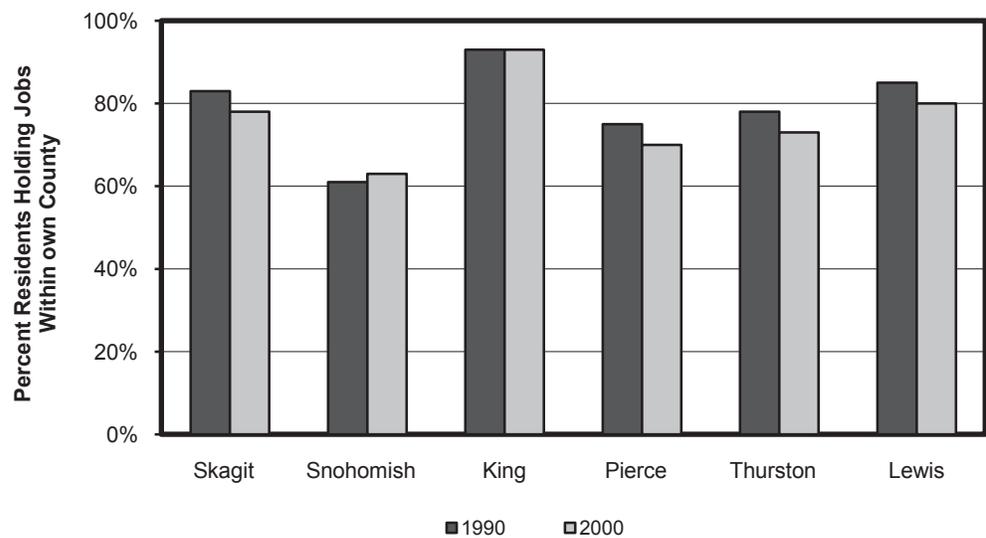


Figure II-1
In-Bound Commuters (Number of Workers Commuting in from another County for a Job)



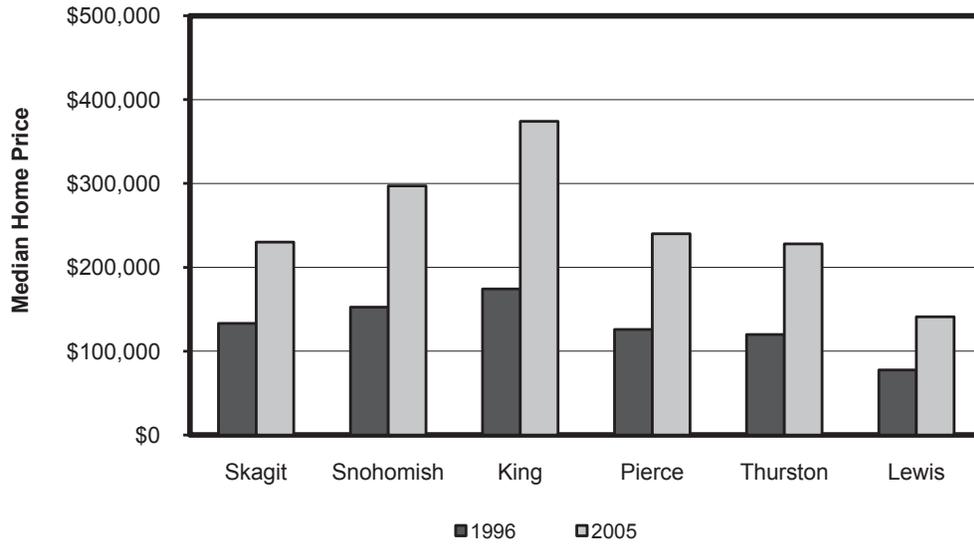
Source: U.S. Bureau of the Census.

Figure II-2
Residents Holding Jobs Within Own County



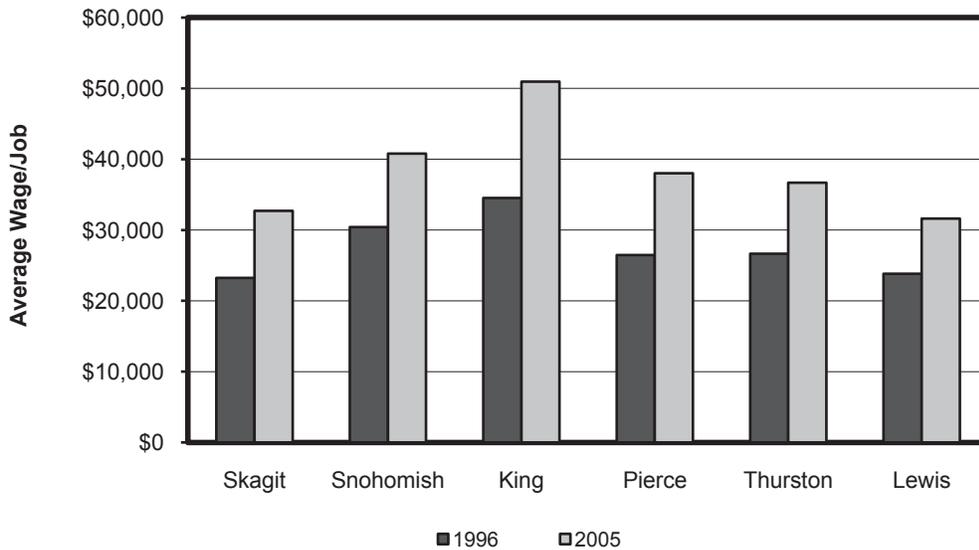
Source: U.S. Bureau of the Census.

Figure II-3
Median Home Price, 1996 and 2005



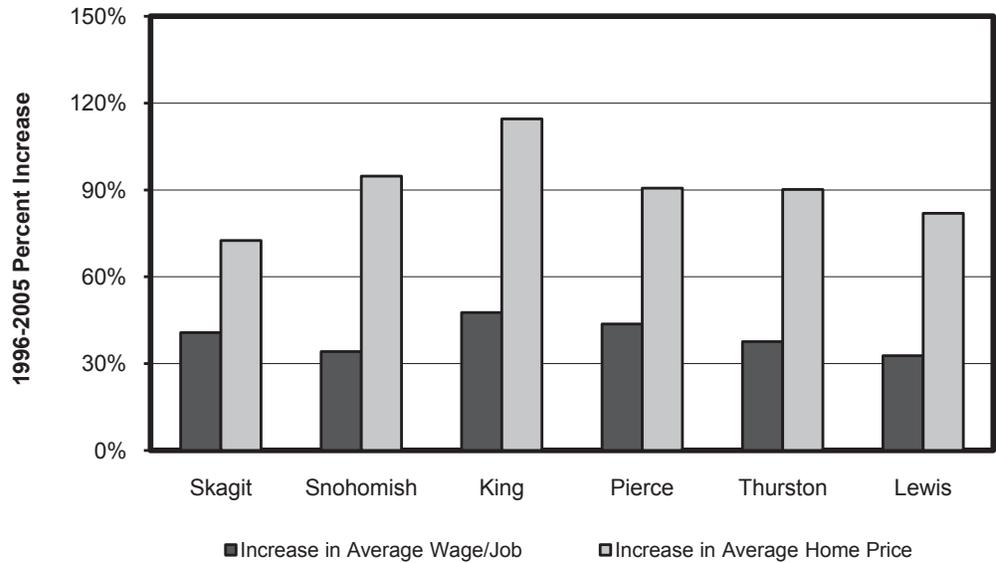
Source: Washington Center for Real Estate Research.

Figure II-4
Average Wage per Job, 1996 and 2005



Source: U.S. Department of Commerce, Bureau of Economic Analysis Regional Economic Information System (REIS).

Figure II-5
Comparison of the Change in Average Wage per Job and Average Home Price in Puget Sound Counties, 1996 and 2005



Sources: Washington Center for Real Estate Research; U.S. Department of Commerce, Bureau of Economic Analysis Regional Economic Information System (REIS).

Chapter III: Land Use

Related Growth Management Act (GMA) Goals

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

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

Indicators Used

- Urban Density
- Growth Shares in Mixed-Use Areas
- Densities in Infill Areas and Strategy Corridors
- Small Lot Creation
- Urban/Rural Growth
- Rural Densities

Related County-Wide Planning Policies

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

Thurston County and each city and town will concentrate development in growth areas by:

- encouraging infill
- phasing urban development outward from core areas
- establishing mechanisms to ensure average residential densities are sufficient to accommodate the 20-year population projections
- designate rural areas for low intensity, nonurban uses
- requiring development to be configured so urban growth areas may eventually infill and become urban.

Overview

Land use patterns provide insight into how our community is growing in relation to how it is expected to grow. This chapter provides some highlights on residential densities, and what is happening in special areas of interest such as high density corridors and mixed-use zoning districts.

List of Benchmarks found in this Chapter

Benchmark 1:

Urban Residential Densities Increase over Time

Benchmark 2:

Urban Mixed-Use Areas Receive an Increased Share of Growth over Time

Benchmark 3:

Achieved Residential Densities in Infill Areas and Strategy Corridors Occurs at Transit-Supportive levels

Benchmark 4:

The Percentage of Small Lots Created in Subdivisions in the Cities and UGAs Increases over Time

Benchmark 5:

The Percentage of Growth in Urban Areas Increases over Time compared to Rural Areas

Benchmark 6:

Rural Densities Decrease over Time

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**Benchmark
1**

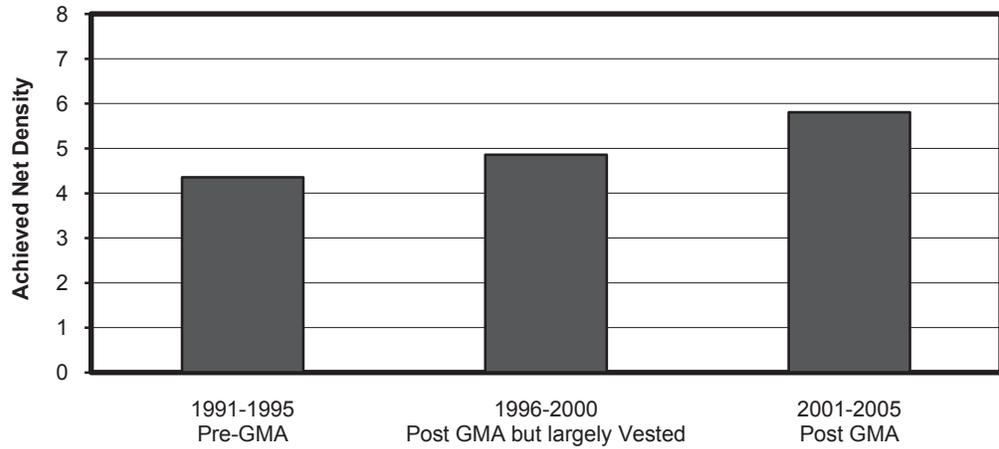
Urban Residential Densities Increase over Time

Outlook



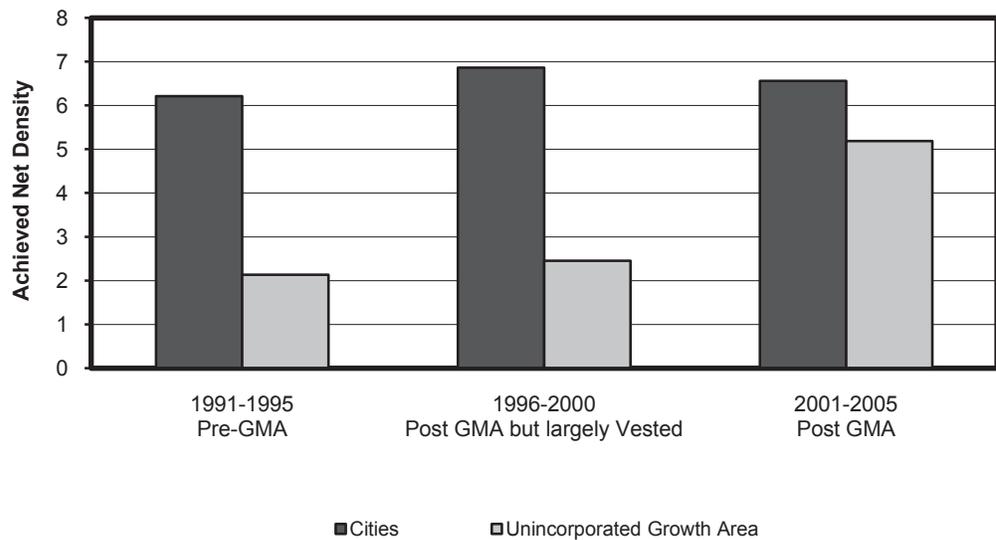
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Figure III-1: Achieved Net Residential Density for Urban Areas



Source: Table III-1.

Figure III-2: Achieved Net Residential Density by City and Unincorporated Urban Areas



Source: Table III-1.

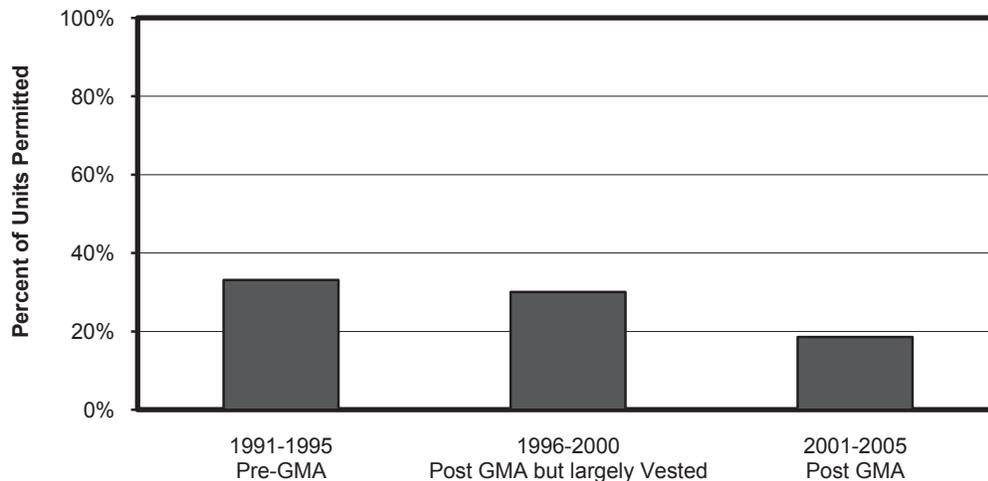
Assessment: Yes they have overall, but in the cities they have decreased slightly.

**Benchmark
1**

Key Observations:

- Net density has increased in Thurston County’s urban growth area since the implementation of GMA, resulting in land being used more efficiently.
- The greatest increase has been in the unincorporated urban areas where the greatest changes in zoning regulations have occurred.
- The cities overall are achieving slightly lower density than the previous reporting period. Much of this can be attributed to the Boardwalk Apartments in downtown Olympia raising densities during the 1996-2000 reporting period. All of the other urban cities saw an increase in achieved density, despite an overall decrease in multifamily housing construction.
- The decrease in multifamily housing construction is likely a result of the low interest rates in the early 2000s that made home ownership more affordable, and raised vacancy rates in the rental market (see housing chapter.)

Figure III-3: Multifamily Housing as a Percent of Total New Units Permitted in Urban Areas.



Source: Table III-2.

**Benchmark
2**

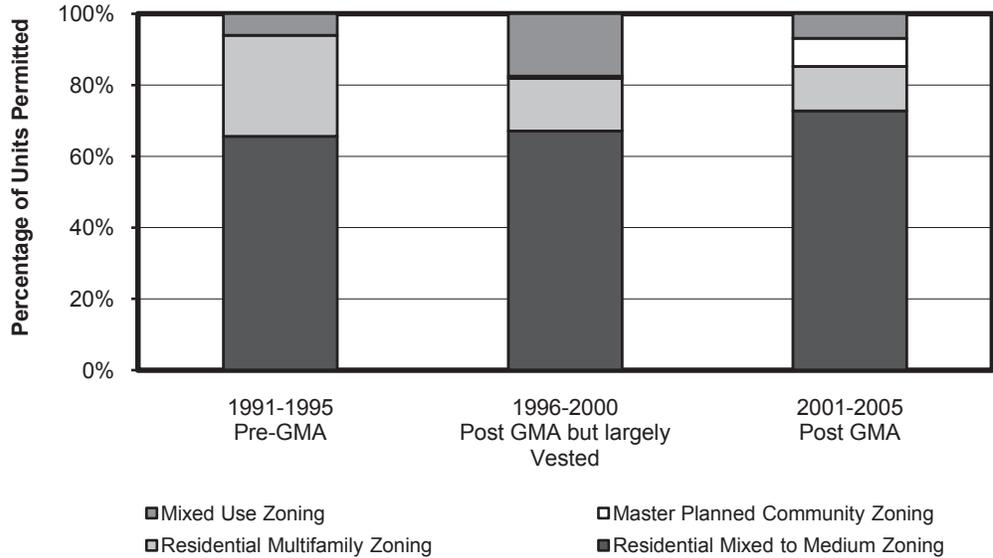
Urban Mixed-Use Areas Receive an Increased Share of Growth over Time

Outlook



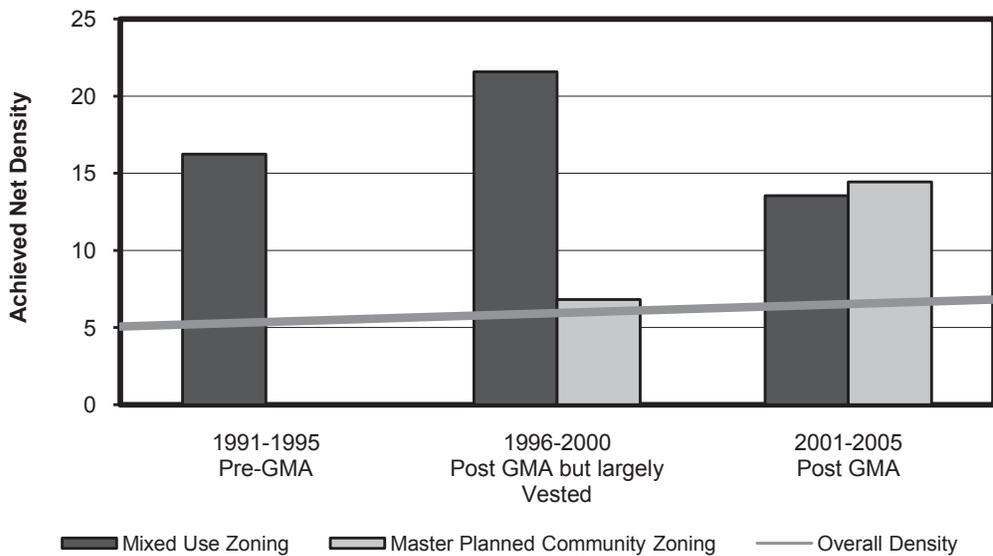
**stormy, concerns
for the future**

**Figure III-4: Location of Urban Development
by Generalized Zoning District**



Source: Table III-3.

**Figure III-5: Achieved Density – Mixed Use and Master
Planned Community Zoning Districts**



Source: Table III-3.

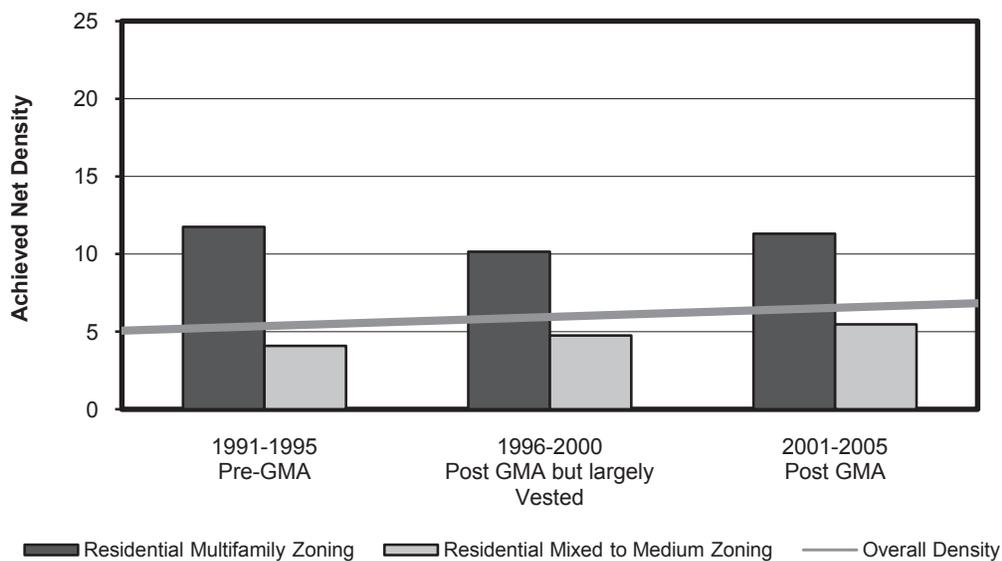
Assessment: Mixed-Use Areas have had a decreasing share of overall growth compared to the last evaluation period.

**Benchmark
2**

Key Observations:

- Mixed-use zoning districts such as downtown commercial zones and high density corridors receive a component of residential growth. For the most part, residential units in these zoning districts are condominiums or multifamily housing built at densities that support efficient transit service (15-30 units per acre).
- In the last evaluation period the percent of units permitted in mixed use zoning districts dropped, and the overall densities also dropped.
- At the same time, there was an increase in development in master planned communities. Achieved densities in these communities, which are typically a mixture of single-family and multifamily housing, was almost at transit-supportive levels.
- The share of housing built in the medium to mixed-density zoning districts, which are predominately single-family homes, has increased. The overall density achieved in these zones was not at transit-supportive levels, however it did increase over the last evaluation period.

Figure III-6: Achieved Density – Residential Multifamily and Mixed to Medium Zoning Districts



Source: Table III-3.

**Benchmark
3**

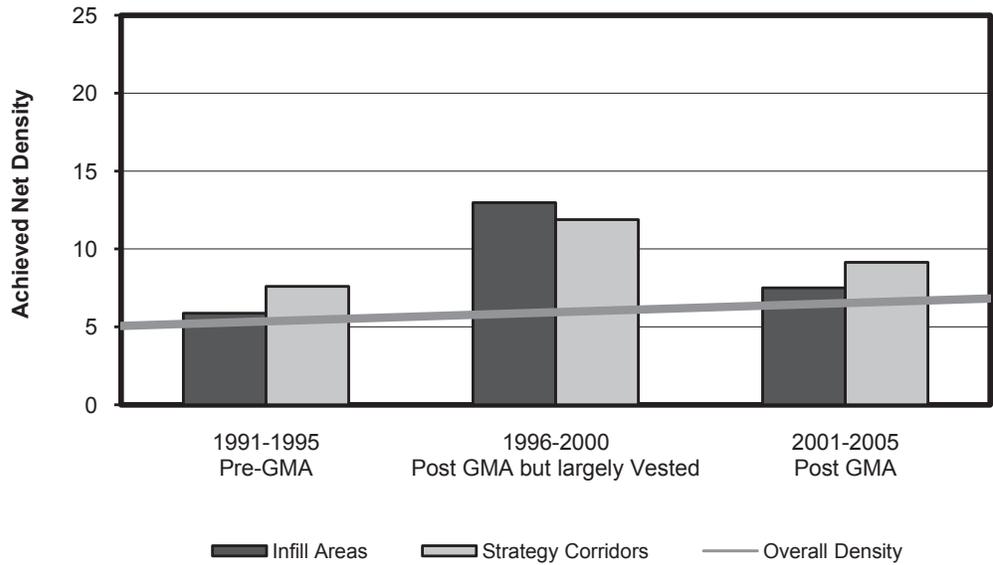
Achieved Residential Densities in Infill Areas and Strategy Corridors Occur at Transit-Supportive Levels

Outlook



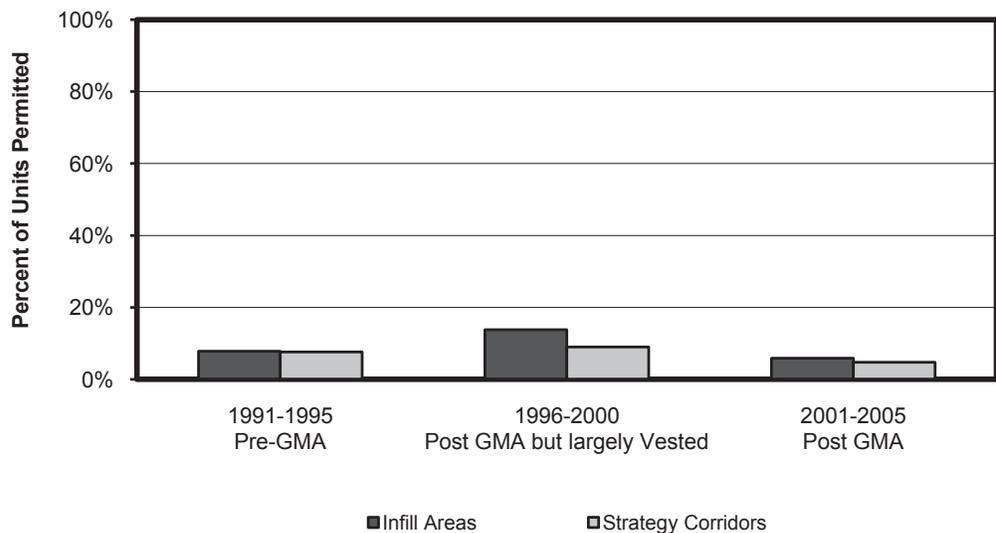
stormy, concerns for the future

Figure III-7: Achieved Net Density in Urban Infill Areas and Strategy Corridors



Source: Table III-3.

Figure III-8: Percent of Growth in Infill Areas and Strategy Corridors



Source: Table III-2.

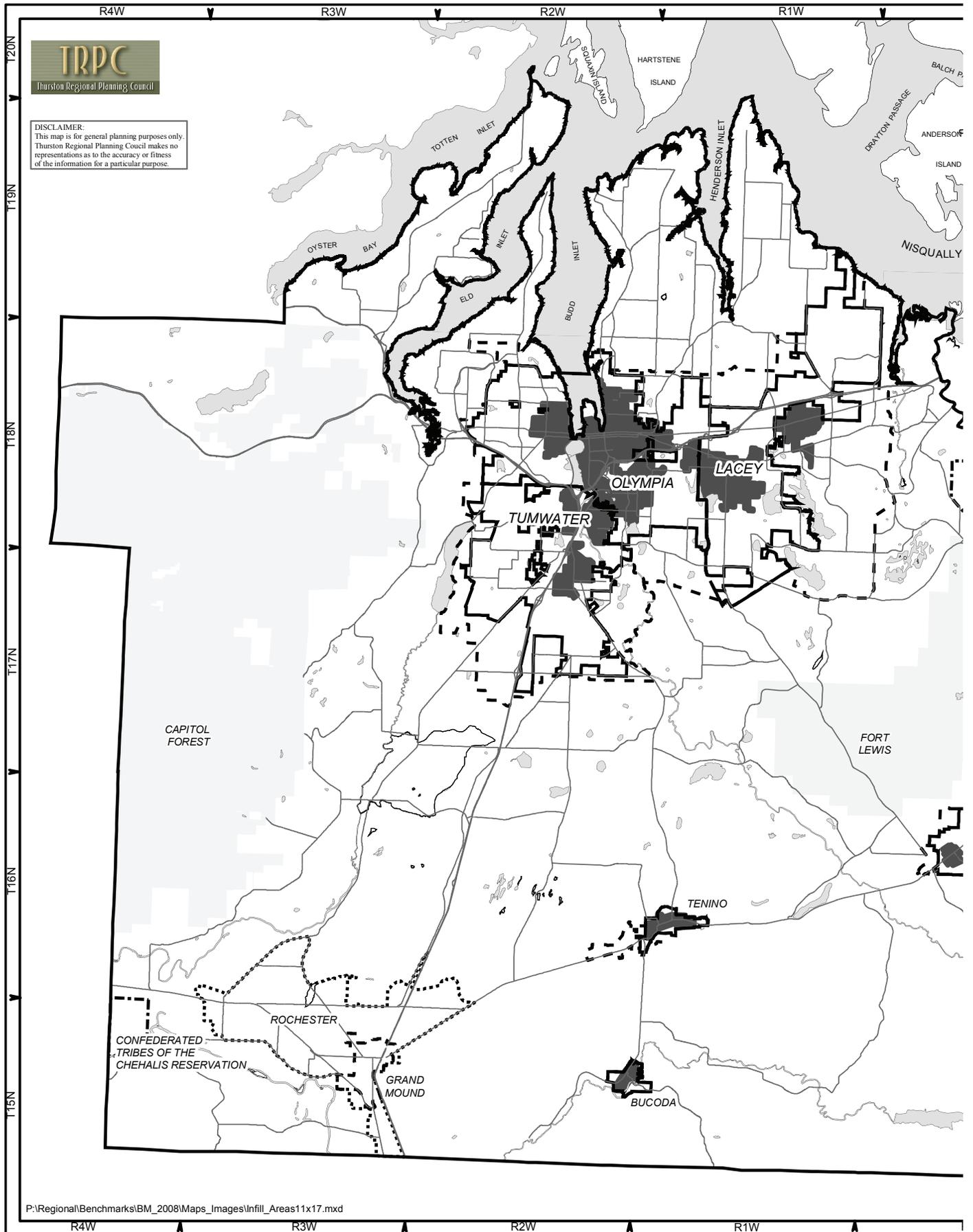
Assessment: While achieved densities in infill areas and strategy corridors are higher than the overall achieved density, they were not high enough to support efficient transit.

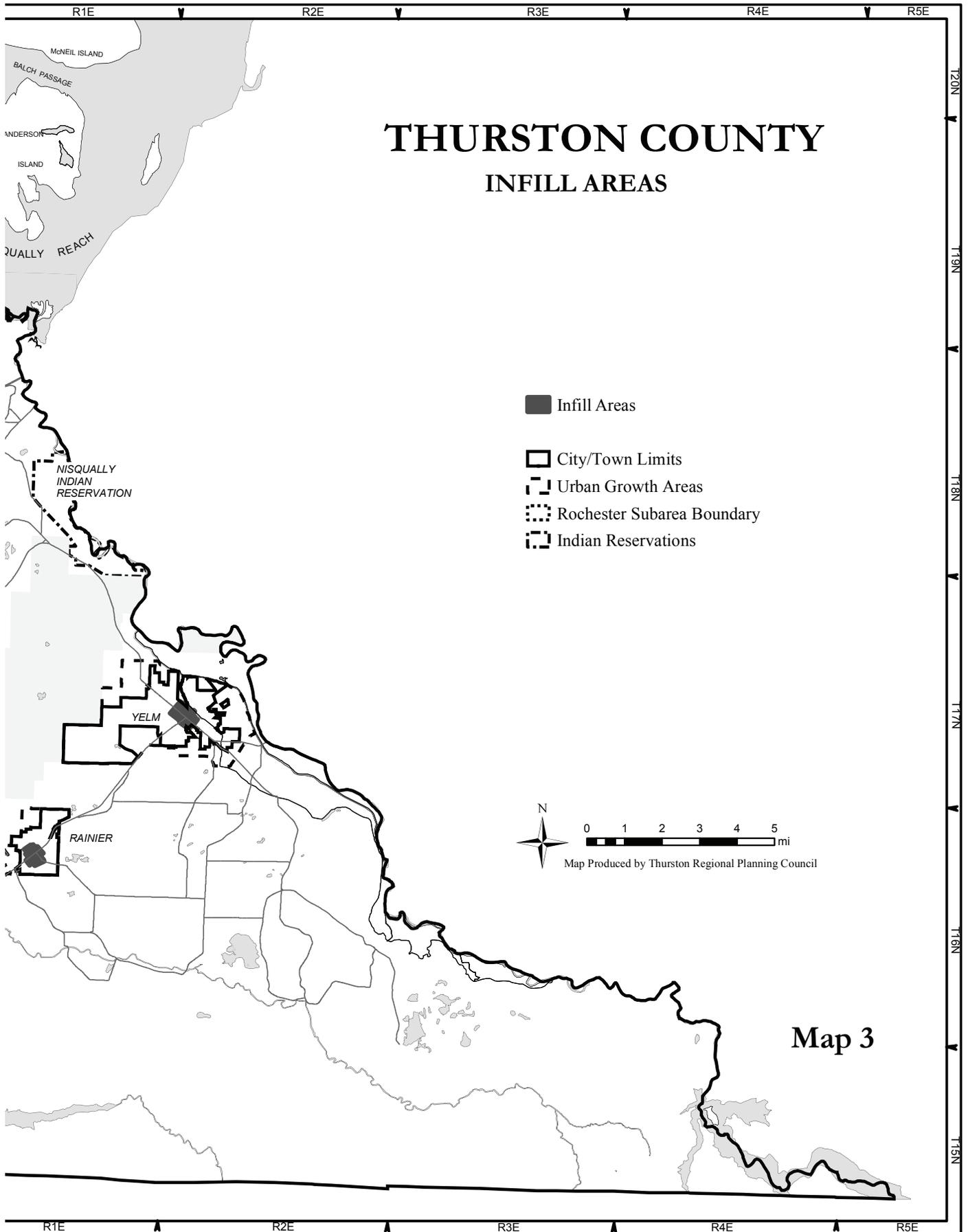
**Benchmark
3**

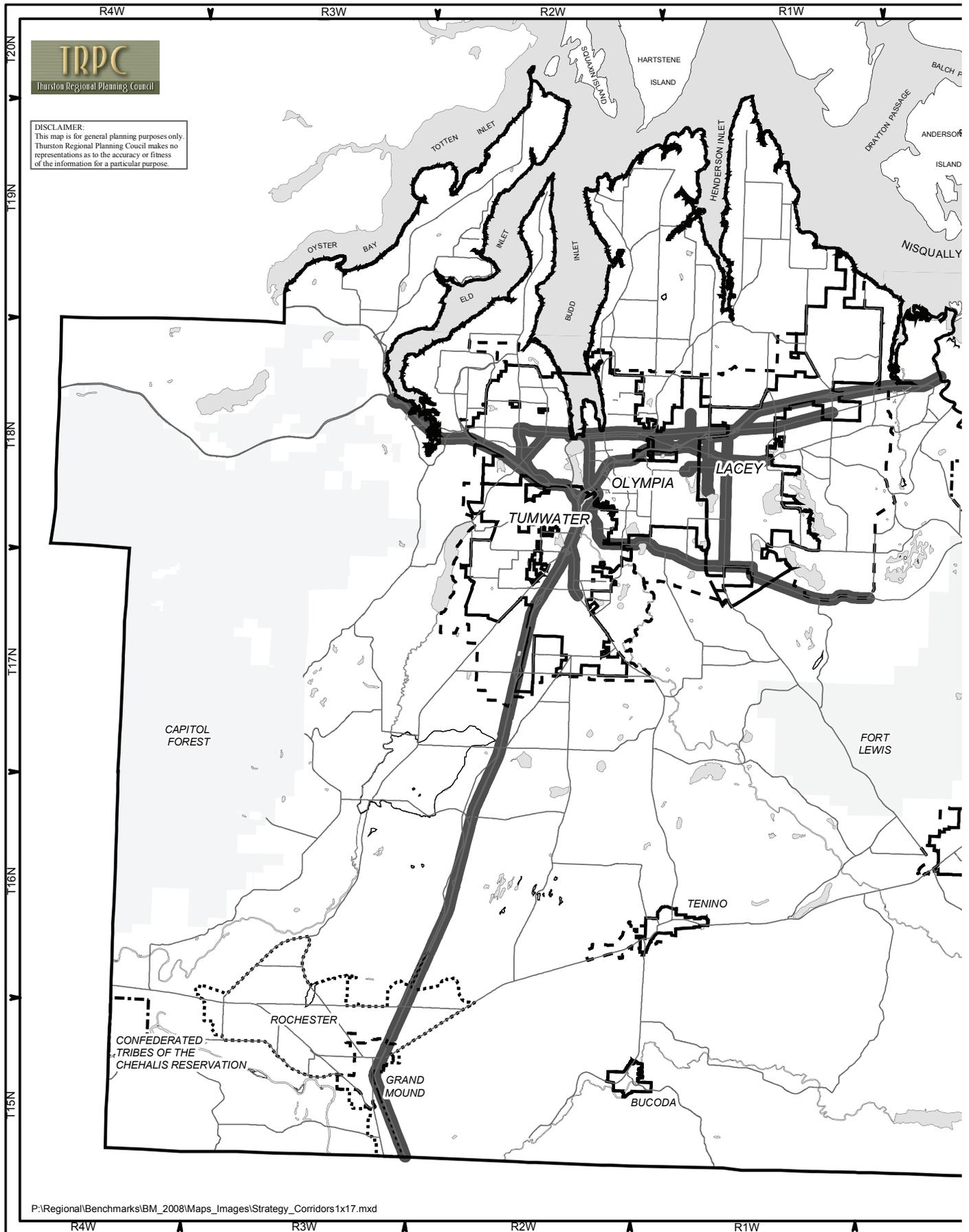
Key Observations:

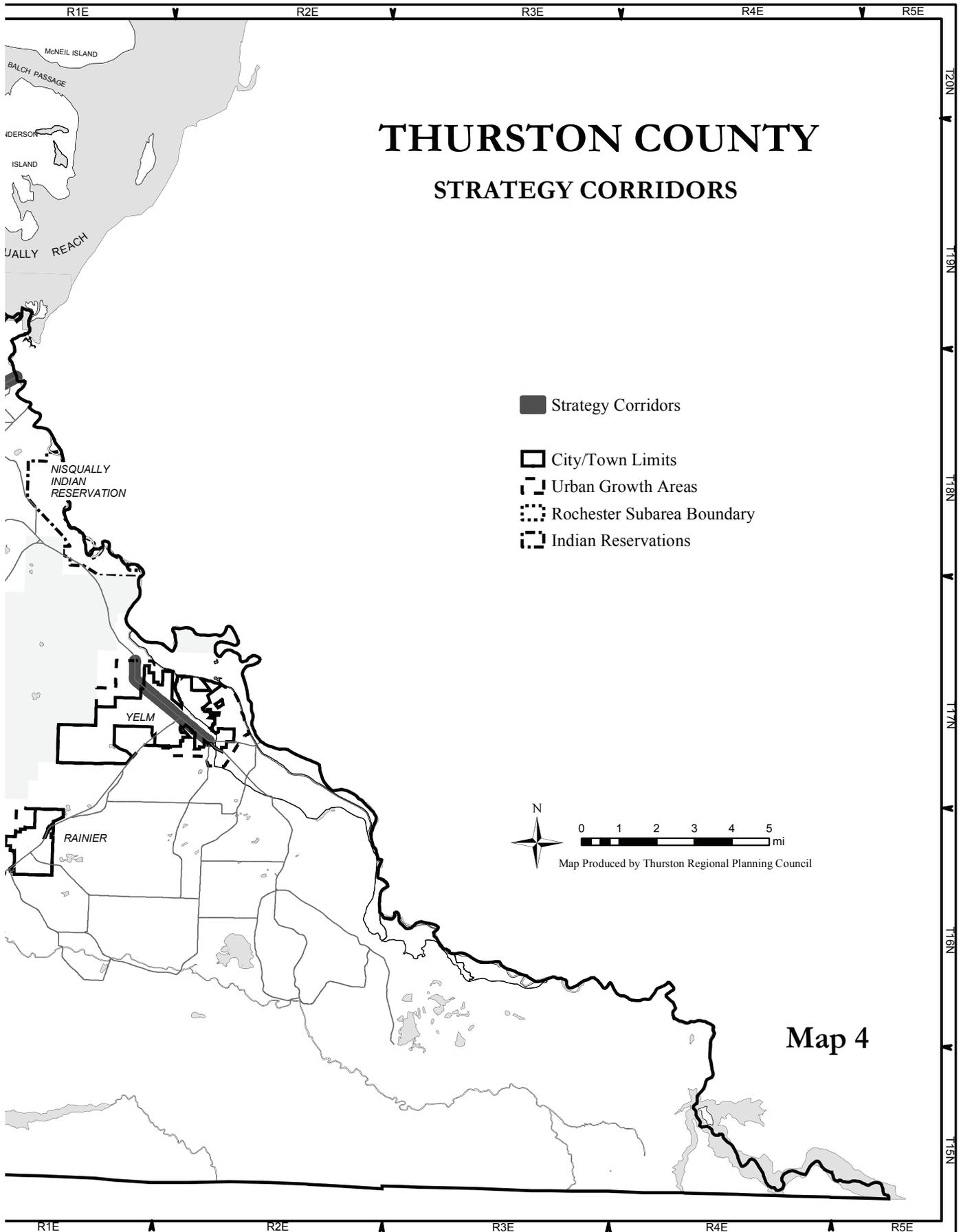
- Only a small percentage of new growth is occurring in infill areas and strategy corridors.
- This growth does not always occur at transit-supportive densities.

Infill Areas are those areas within the cities or urban growth area that were urban in nature by the 1970s. Strategy Corridors are corridors of regional significance in fairly built-out urban areas, where level of service requirements have been modified so that infill and redevelopment opportunities are not lost.









**Benchmark
4**

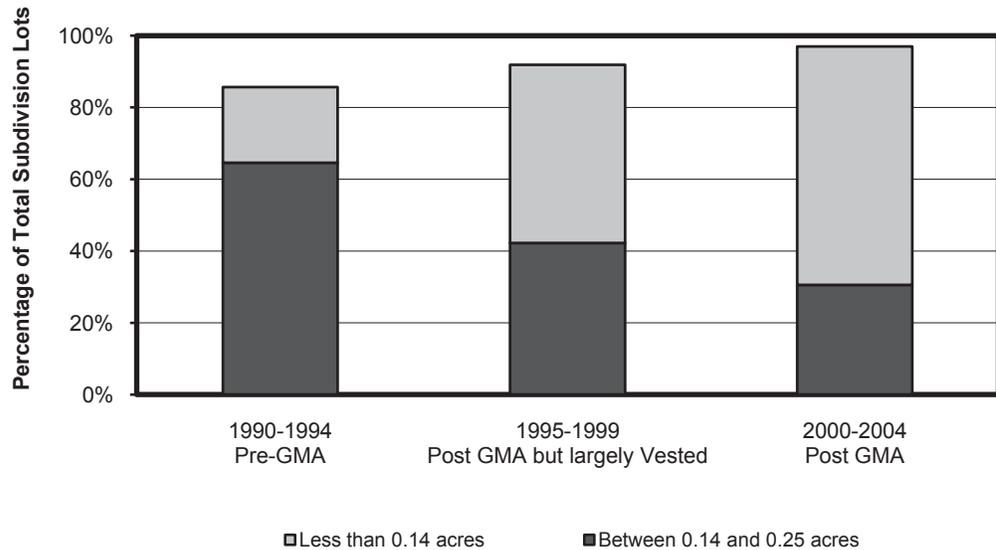
The Percentage of Small Lots Created in Subdivisions in the Cities and Urban Growth Areas Increases over Time

Outlook



sunny, overall positive results

Figure III-9: Percentage of Small Subdivision Lots Approved within City Limits



Source: Table III-5.

Figure III-10: Percentage of Small Subdivision Lots Approved within Unincorporated Growth Areas



Source: Table III-6.

Assessment: The percentage of small lots created in subdivisions has increased.

**Benchmark
4**

Key Observations:

- The effects of post-GMA zoning are now being seen in new subdivisions. The vast majority of new lots are created at less than 6,000 square feet, or less than 0.14 acres in size.
- The greatest increase is being seen in the unincorporated growth areas.
- There has also been substantial increase in the density of single-family homes in the cities.

**Benchmark
5**

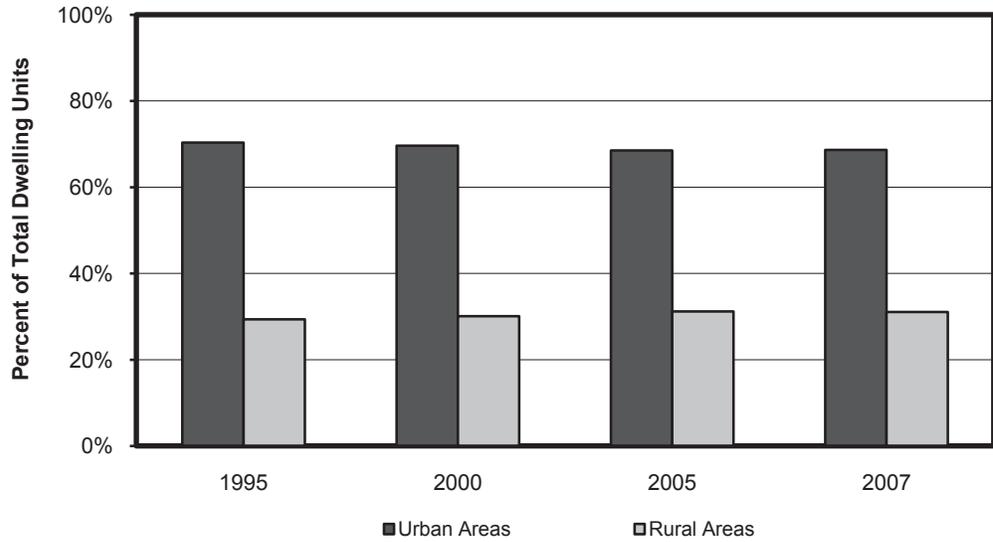
The Percentage of Growth in Urban Areas Increases over Time compared to Rural Areas

Outlook



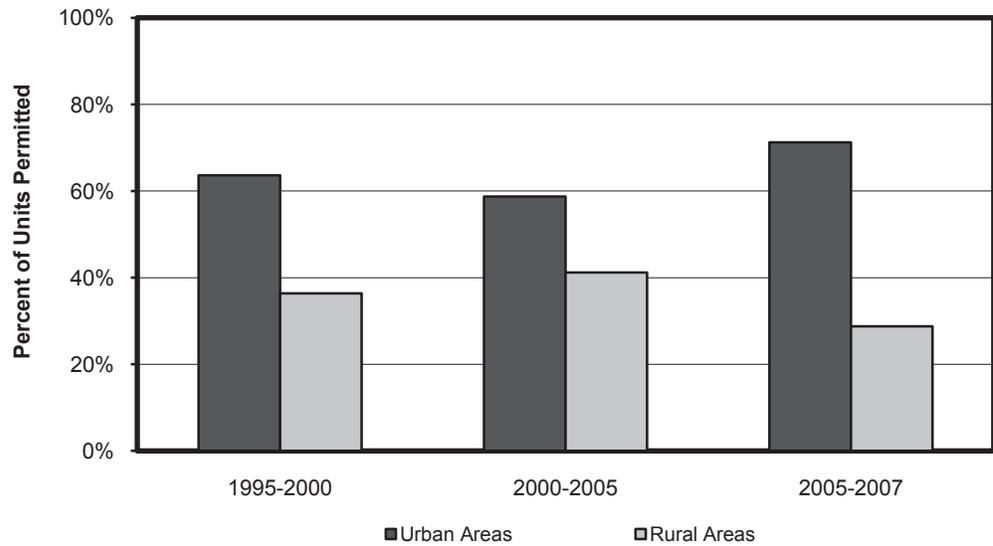
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partly cloudy

Figure III-11: Distribution of Housing Units in Thurston County



Source: Table III-7.

Figure III-12: Distribution of Growth in New Housing Units in Thurston County



Source: Table III-8.

Assessment: The share of housing in urban areas was decreasing, however in the last two years urban areas have seen an increased share in housing.

**Benchmark
5**

Key Observations:

- The share of housing in the urban areas of Thurston County has been decreasing over the last decade.
- In the last two years, however, the urban share of growth increased significantly. During much of this time a moratorium on new subdivision activity was in place in the rural County.
- A major rural rezone in the fall of 2007 will be monitored for its effect on the proportion of housing going to the rural areas.

**Benchmark
6**

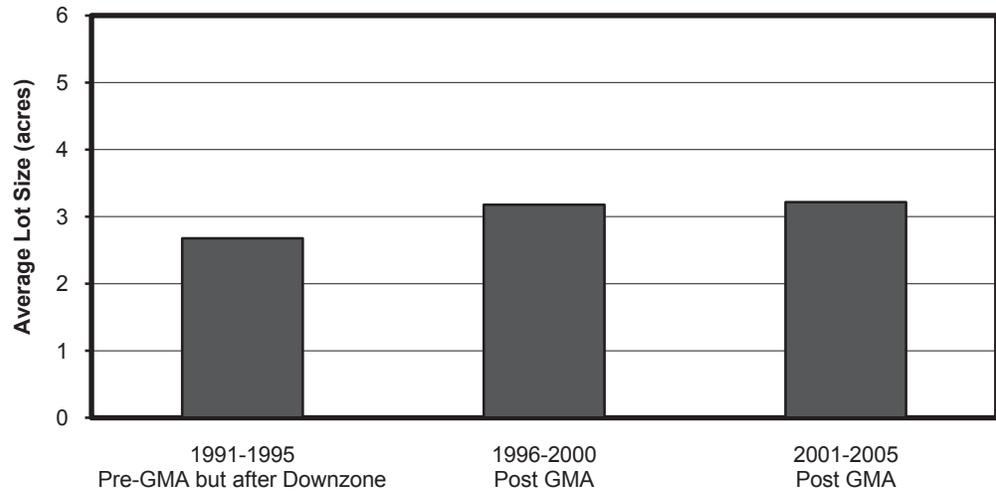
Rural Densities Decrease over Time

Outlook



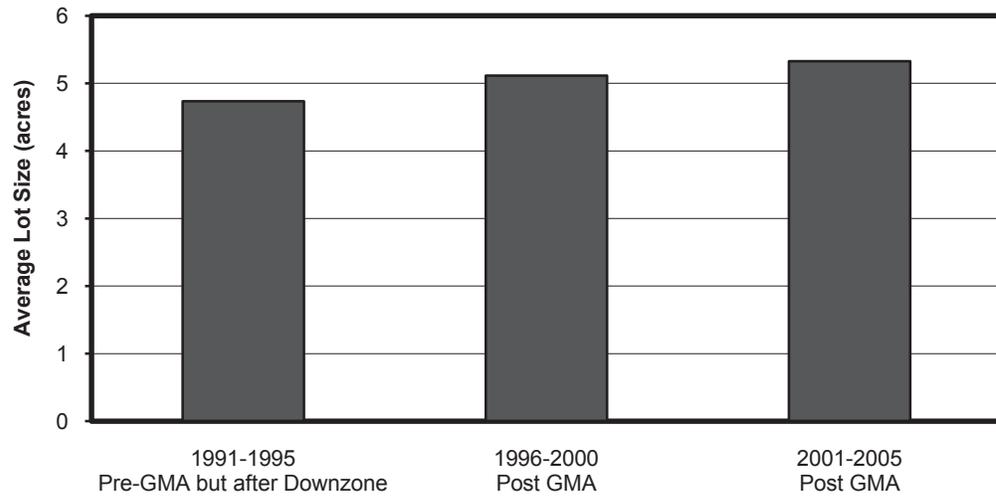
sunny, overall positive results

Figure III-13: Average Lot Size for Homes Permitted on Rural Lots



Source: Table III-9.

Figure III-14: Average Lot Size for Homes Permitted on Rural Large Lot, Short Plats, or Non-Platted Lots



Source: Table III-9.

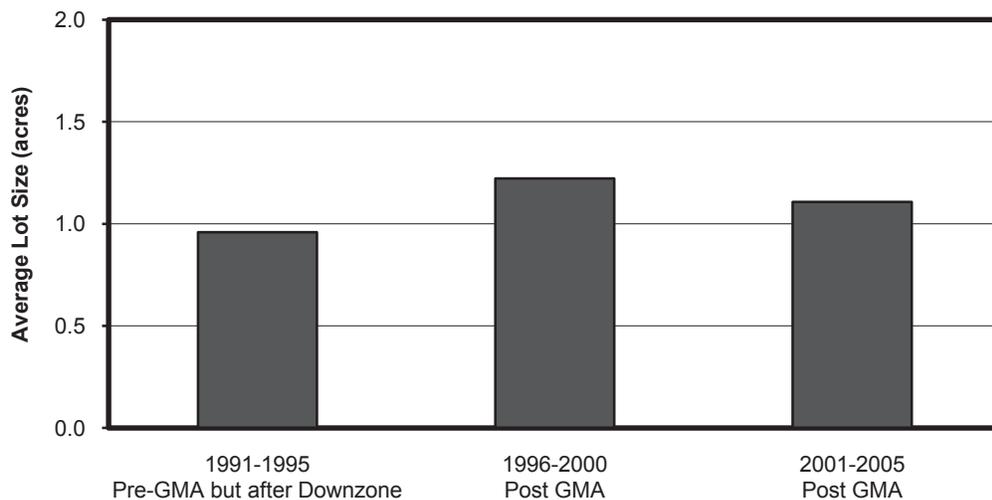
Assessment: Rural densities have decreased over time.

**Benchmark
6**

Key Observations:

- Average lot size in the rural County has decreased over time. Note: cluster lots and lots approved under urban zoning regulations were removed from the analysis.
- This is most likely attributed to an increase in lot size in Large Lot and Short Plat subdivisions and existing lots outside of subdivisions.
- A large percentage of growth still occurs on lots approved prior to the 1990 rural downzone.
- After the 1990 rural downzone, rural zoning still allowed for the creation of lots smaller than 5 acres in size in:
 - Various zoning districts including 1 unit per 2 acre, 1 unit per acre, and at higher densities
 - Cluster zoning
- In 2007 a major rezone of the County significantly reduced the amount of buildable land in zoning districts with higher densities than one unit per five acres.
- Cluster zoning has resulted in approximately 1,500 acres of land set aside for resource use or critical area protection.

Figure III-15: Average Lot Size for Homes Permitted on Rural Long Plat Lots



Source: Table III-9.

Table III-1
Average Achieved Net Density, by Jurisdiction

Jurisdiction	Pre-GMA			Post-GMA (but largely vested)			Post-GMA		
	Dwellings Built - 1991- 1995		Net Density	Dwellings Built - 1996 - 2000		Net Density	Dwellings Built - 2001 - 2005		Net Density
	New Dwellings	Acres		New Dwellings	Acres		New Dwellings	Acres	
Bucoda	6	2	3.3	25	17	1.5	8	8	1.0
Lacey	2,309	356	6.5	1,975	251	7.9	884	108	8.2
UGA	838	276	3.0	583	160	3.7	1,284	223	5.7
Total	3,147	632	5.0	2,558	411	6.2	2,168	332	6.5
Olympia	1,861	247	7.5	1,566	174	9.0	718	100	7.1
UGA	258	86	3.0	435	118	3.7	779	123	6.4
Total	2,119	332	6.4	2,001	292	6.8	1,497	223	6.7
Rainier	123	96	1.3	52	62	0.8	28	14	2.0
UGA	2	10	0.2	5	53	0.1	2	5	0.4
Total	125	106	1.2	57	116	0.5	30	19	1.5
Tenino	19	5	3.8	48	12	3.9	57	14	4.0
UGA	4	14	0.0	4	21	0.2	0	0	0.0
Total	23	19	1.2	52	33	1.6	57	14	4.0
Tumwater	728	95	7.7	274	51	5.4	498	91	5.5
UGA	274	127	2.2	220	80	2.7	449	67	6.7
Total	1,002	222	4.5	494	132	3.8	947	157	6.0
Yelm	95	28	3.4	373	60	6.2	449	67	6.7
UGA	76	138	0.5	31	83	0.4	18	64	0.3
Total	171	166	1.0	404	143	2.8	467	131	3.6
Grand Mound UGA	22	39	0.6	4	7	0.5	10	8	1.3
Total Cities	5,141	828	6.2	4,313	628	6.9	2,642	403	6.6
Total UGAs	1,474	691	2.1	1,282	523	2.5	2,542	490	5.2
Total Urban Areas	6,615	1,518	4.4	5,595	1,151	4.9	5,184	893	5.8
Rural Areas	3,591	9,612	0.37	2,989	9,416	0.32	2,921	8,148	0.36

Sources: Thurston Regional Planning Council; Thurston County Assessor's Office; Thurston County Auditor's Office.

Explanations: UGA is unincorporated Urban Growth Area. This table does not include residential lots created in mobile home parks, replacement units, accessory dwellings, or family member units (additional units on a lot with one existing home). For Lacey, UGA, Olympia, Olympia UGA, Tumwater, Tumwater UGA, and Yelm, only dwellings built on lots smaller than one acre are included, as larger lots will likely be subdivided in the future.

Table III-2
Residential Growth Patterns in Thurston County's
Large Urban Areas

Category	1991-1995 Pre-GMA	1996-2000 Post GMA but largely Vested	2001-2005 Post GMA
Mixed Use Zoning	385	949	332
- percent of total units	6%	18%	7%
Master Planned Community Zoning	0	33	383
- percent of total units	0%	1%	8%
Residential Multifamily Zoning	1,799	797	599
- percent of total units	28%	15%	12%
Residential Mixed to Medium Zoning	4,161	3,630	3,510
- percent of total units	66%	67%	73%
Total Units	6,345	5,409	4,824
Infill Areas	497	746	284
- percent of total units	8%	14%	6%
Strategy Corridors	484	488	230
- percent of total units	8%	9%	5%
Multifamily Units	2,102	1,627	896
- percent of total units	33%	30%	19%
Infill Areas	140	558	111
- percent of multifamily units	7%	34%	12%
Strategy Corridors	286	334	84
- percent of multifamily units	14%	21%	9%

Source: Thurston Regional Planning Council Data Program.

Table III-3
Achieved Density in Thurston County's Large Urban Areas

Category	1991-1995	1996-2000	2001-2005
	Pre-GMA	Post GMA but largely Vested	Post GMA
Mixed Use Zoning	16.2	21.6	13.5
Master Planned Community Zoning	---	6.8	14.4
Residential Multifamily Zoning	11.8	10.2	11.3
Residential Mixed to Medium Zoning	4.1	4.7	5.5
Overall Density	5.3	6.1	6.5
Infill Areas	5.9	13.0	7.5
Strategy Corridors	7.6	11.9	9.1

Source: Thurston Regional Planning Council Data Program.

**Table III-4
Number of Single-Family Residential Lots Created in Long Plat Subdivisions in Cities and Urban Growth Areas,
by Lot Size Thurston County, 1970, 1980, 1990 and 2000-2004**

Jurisdiction	> half an acre				half acre - qtr. acre				qtr. acre - 0.14 acres				< 0.14 acres				Total				
	70s	80s	90s	00-04	70s	80s	90s	00-04	70s	80s	90s	00-04	70s	80s	90s	00-04	70s	80s	90s	00-04	
Bucoda	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	0
Lacey	5	3	9	0	482	112	171	4	590	477	1,686	136	62	208	1,318	542	1,139	800	3,184	682	901
UGA	103	168	213	95	1,362	1,242	280	42	908	410	350	221	1	189	105	543	2,374	2,009	948	948	901
Total	108	171	222	95	1,844	1,354	451	46	1,498	887	2,036	357	63	397	1,423	1,085	3,513	2,809	4,132	1,563	1,563
Olympia	34	17	6	1	497	220	183	6	570	484	863	98	1	63	334	172	1,102	784	1,386	277	277
UGA	53	31	23	3	425	216	377	38	191	100	224	134	0	0	153	328	669	347	777	503	503
Total	87	48	29	4	922	436	560	44	761	584	1,087	232	1	63	487	500	1,771	1,131	2,163	780	780
Rainier	1	1	41	1	21	12	127	21	4	0	0	0	0	0	0	0	26	13	168	22	22
UGA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	1	41	1	21	12	127	21	4	0	0	0	0	0	0	0	26	13	168	22	22
Tenino	0	0	1	0	2	0	13	0	16	0	3	0	0	0	0	0	18	0	17	0	0
UGA	0	0	1	0	0	0	4	0	0	0	7	0	0	0	0	0	0	0	0	12	0
Total	0	0	2	0	2	0	17	0	16	0	10	0	0	0	0	0	18	0	29	0	0
Tumwater	12	18	3	0	74	206	63	1	129	202	223	51	0	28	104	52	215	454	393	104	104
UGA	31	38	130	1	180	161	304	1	17	12	54	61	0	0	41	371	228	211	529	434	434
Total	43	56	133	1	254	367	367	2	146	214	277	112	0	28	145	423	443	665	922	538	538
Yelm	1	2	5	0	60	9	28	11	50	6	362	173	0	0	50	229	111	17	445	413	413
UGA	8	42	6	0	20	29	0	0	0	18	0	0	0	0	0	0	28	89	6	0	0
Total	9	44	11	0	80	38	28	11	50	24	362	173	0	0	50	229	139	106	451	413	413
Grand Mound UGA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Cities	53	41	79	2	1,136	559	590	43	1,359	1,169	3,137	458	63	299	1,806	995	2,611	2,068	5,612	1,498	1,498
Total UGAs	195	279	373	99	1,987	1,648	965	81	1,116	540	635	416	1	189	299	1,242	3,299	2,656	2,272	1,838	1,838
Total Urban Areas	248	320	452	101	3,123	2,207	1,555	124	2,475	1,709	3,772	874	64	488	2,105	2,237	5,910	4,724	7,884	3,336	3,336

Sources: Thurston Regional Planning Council; Thurston County Assessor's Office; Thurston County Auditor's Office.

Explanation: UGA is unincorporated Urban Growth Area. Includes townhomes.

Table III-5
Number of Single-Family Residential Lots Created in Long Plat Subdivisions,
by Lot Size Cities and Urban Growth Areas, 1970-2004

Year	Cities					UGAs				
	> half acre	half to qtr. acre	qtr. to 0.14 acres	< 0.14 acres	Total	> half acre	half to qtr. acre	qtr. to 0.14 acres	< 0.14 acres	Total
1970	4	33	52	0	89	13	87	33	0	133
1971	12	203	240	0	455	23	249	261	1	534
1972	0	18	30	0	48	12	143	205	0	360
1973	3	127	99	0	229	1	111	2	0	114
1974	0	18	24	1	43	4	142	26	0	172
1975	4	27	45	0	76	10	69	213	0	292
1976	8	59	111	0	178	2	130	109	0	241
1977	1	86	110	2	199	32	236	62	0	330
1978	6	259	240	60	565	56	487	89	0	632
1979	15	306	408	0	729	42	333	116	0	491
1970s	53	1,136	1,359	63	2,611	195	1,987	1,116	1	3,299
1980	7	87	100	0	194	121	363	16	0	500
1981	3	28	16	22	69	1	162	86	0	249
1982	0	11	34	137	182	5	58	6	0	69
1983	4	5	4	10	23	16	67	2	0	85
1984	1	67	148	37	253	2	62	87	36	187
1985	1	35	122	27	185	12	309	116	145	582
1986	0	48	120	41	209	17	74	17	0	108
1987	18	150	268	24	460	38	369	117	8	532
1988	6	48	55	0	109	14	9	8	0	31
1989	1	80	302	1	384	53	175	85	0	313
1980s	41	559	1,169	299	2,068	279	1,648	540	189	2,656
1990	3	110	318	89	520	36	130	68	0	234
1991	31	127	293	43	494	56	173	33	0	262
1992	5	52	347	40	444	49	154	67	0	270
1993	7	84	535	205	831	46	117	38	0	201
1994	8	65	723	347	1,143	48	45	118	2	213
1995	19	37	136	283	475	14	91	0	0	105
1996	2	25	183	81	291	0	2	103	0	105
1997	0	23	288	254	565	47	140	24	15	226
1998	0	32	181	163	376	70	68	141	53	332
1999	4	35	133	301	473	7	45	43	229	324
1990s	79	590	3,137	1,806	5,612	373	965	635	299	2,272
2000	0	0	0	104	104	1	0	18	75	94
2001	0	17	89	125	231	8	31	75	14	128
2002	1	4	29	65	99	59	24	126	176	385
2003	1	11	131	255	398	0	12	138	551	701
2004	0	11	209	446	666	31	14	59	426	530
2000s	2	43	458	995	1,498	99	81	416	1,242	1,838
Total	175	2,328	6,123	3,163	11,789	946	4,681	2,707	1,731	10,065

Sources: Thurston Regional Planning Council; Thurston County Assessor's Office; Thurston County Auditor's Office.

Explanation: UGA is unincorporated Urban Growth Area. Includes townhomes.

Table III-6
Percentage of Single-Family Residential Lots Created in Long Plat Subdivisions,
by Lot Size Cities and Urban Growth Areas, 1970-2004

Year	Cities					UGAs				
	> half acre	half to qtr. acre	qtr. to 0.14 acres	< 0.14 acres	Total	> half acre	half to qtr. acre	qtr. to 0.14 acres	< 0.14 acres	Total
1970	4%	37%	58%	0%	100%	10%	65%	25%	0%	100%
1971	3%	45%	53%	0%	100%	4%	47%	49%	0%	100%
1972	0%	38%	63%	0%	100%	3%	40%	57%	0%	100%
1973	1%	55%	43%	0%	100%	1%	97%	2%	0%	100%
1974	0%	42%	56%	2%	100%	2%	83%	15%	0%	100%
1975	5%	36%	59%	0%	100%	3%	24%	73%	0%	100%
1976	4%	33%	62%	0%	100%	1%	54%	45%	0%	100%
1977	1%	43%	55%	1%	100%	10%	72%	19%	0%	100%
1978	1%	46%	42%	11%	100%	9%	77%	14%	0%	100%
1979	2%	42%	56%	0%	100%	9%	68%	24%	0%	100%
1970s	2%	44%	52%	2%	100%	6%	60%	34%	0%	100%
1980	4%	45%	52%	0%	100%	24%	73%	3%	0%	100%
1981	4%	41%	23%	32%	100%	0%	65%	35%	0%	100%
1982	0%	6%	19%	75%	100%	7%	84%	9%	0%	100%
1983	17%	22%	17%	43%	100%	19%	79%	2%	0%	100%
1984	0%	26%	58%	15%	100%	1%	33%	47%	19%	100%
1985	1%	19%	66%	15%	100%	2%	53%	20%	25%	100%
1986	0%	23%	57%	20%	100%	16%	69%	16%	0%	100%
1987	4%	33%	58%	5%	100%	7%	69%	22%	2%	100%
1988	6%	44%	50%	0%	100%	45%	29%	26%	0%	100%
1989	0%	21%	79%	0%	100%	17%	56%	27%	0%	100%
1980s	2%	27%	57%	14%	100%	11%	62%	20%	7%	100%
1990	1%	21%	61%	17%	100%	15%	56%	29%	0%	100%
1991	6%	26%	59%	9%	100%	21%	66%	13%	0%	100%
1992	1%	12%	78%	9%	100%	18%	57%	25%	0%	100%
1993	1%	10%	64%	25%	100%	23%	58%	19%	0%	100%
1994	1%	6%	63%	30%	100%	23%	21%	55%	1%	100%
1995	4%	8%	29%	60%	100%	13%	87%	0%	0%	100%
1996	1%	9%	63%	28%	100%	0%	2%	98%	0%	100%
1997	0%	4%	51%	45%	100%	21%	62%	11%	7%	100%
1998	0%	9%	48%	43%	100%	21%	20%	42%	16%	100%
1999	1%	7%	28%	64%	100%	2%	14%	13%	71%	100%
1990s	1%	11%	56%	32%	100%	16%	42%	28%	13%	100%
2000	0%	0%	0%	100%	100%	1%	0%	19%	80%	100%
2001	0%	7%	39%	54%	100%	6%	24%	59%	11%	100%
2002	1%	4%	29%	66%	100%	15%	6%	33%	46%	100%
2003	0%	3%	33%	64%	100%	0%	2%	20%	79%	100%
2004	0%	2%	31%	67%	100%	6%	3%	11%	80%	100%
2000s	0%	3%	31%	66%	100%	5%	4%	23%	68%	100%
Total	1%	20%	52%	27%	100%	9%	47%	27%	17%	100%

Sources: Thurston Regional Planning Council; Thurston County Assessor's Office; Thurston County Auditor's Office.

Explanation: UGA is unincorporated Urban Growth Area. Includes townhomes.

Table III-7
Estimates of Total Dwelling Units and Percent of Total Dwelling Units,
Thurston County

Jurisdiction		Total				Percent			
		1995	2000	2005	2007	1995	2000	2005	2007
Bucoda	City	215	235	245	245	0%	0%	0%	0%
	UGA	*	*	0	0	*	*	*	*
	Total	215	235	245	245	0%	0%	0%	0%
Lacey	City	11,035	13,160	14,255	15,910	14%	15%	15%	16%
	UGA	10,420	11,015	12,705	12,890	13%	13%	13%	13%
	Total	21,455	24,170	26,960	28,800	28%	28%	28%	29%
Olympia	City	18,140	19,740	20,260	20,720	23%	23%	21%	21%
	UGA	3,475	3,810	4,700	4,820	4%	4%	5%	5%
	Total	21,615	23,540	24,950	25,550	28%	27%	26%	25%
Rainier	City	490	550	590	665	1%	1%	1%	1%
	UGA	60	65	75	75	0%	0%	0%	0%
	Total	550	615	665	745	1%	1%	1%	1%
Tenino	City	570	615	645	665	1%	1%	1%	1%
	UGA	55	60	70	70	0%	0%	0%	0%
	Total	625	675	710	735	1%	1%	1%	1%
Tumwater	City	5,625	5,950	6,160	6,450	7%	7%	6%	6%
	UGA	2,845	3,090	3,670	3,720	4%	4%	4%	4%
	Total	8,470	9,040	9,830	10,170	11%	10%	10%	10%
Yelm	City	950	1,325	1,860	2,135	1%	2%	2%	2%
	UGA	410	425	460	465	1%	0%	0%	0%
	Total	1,360	1,750	2,320	2,600	2%	2%	2%	3%
Grand Mound UGA		305	315	335	370	0%	0%	0%	0%
Chehalis Reservation ¹		15	15	15	15	0%	0%	0%	0%
Nisqually Reservation ¹		210	210	215	220	0%	0%	0%	0%
Rochester Area		1,850	2,535	3,060	3,260	2%	3%	3%	3%
Other Rural		20,940	23,545	27,000	28,080	27%	27%	28%	28%
Total Cities		37,025	41,575	44,015	46,790	48%	48%	46%	46%
Total UGAs²		17,570	18,780	22,015	22,410	23%	22%	23%	22%
Total Reservations¹		225	225	230	235	0%	0%	0%	0%
Rural Unincorporated³		22,790	26,080	30,060	31,340	29%	30%	31%	31%
Thurston County		77,610	86,660	96,320	100,770	100%	100%	100%	100%

Source: Thurston Regional Planning Council Small Area Estimates.

Explanations: City and UGA boundaries may change over time due to annexations. Data are for April 1 of each year. Numbers may not add due to rounding.

Dwelling unit estimates incorporate housing starts data, however, the methodology also includes calibrating to U.S. Census and OFM data, includes demolitions, and does not include replacements and activity in manufactured home parks.

*Bucoda did not have an Urban Growth Area prior to 2004.

¹Data is for Thurston County portion of reservation only.

²UGA - Urban Growth Area. Unincorporated area designated to be annexed into city limits over 20 years time to accommodate urban growth.

³Rural unincorporated county is the portion of the unincorporated county that lies outside UGA and Reservation boundaries.

Table III-8
Estimates of New Dwelling Units, and Percent of New Dwelling Units,
Thurston County

Jurisdiction	New Dwelling Units			Percent			
	1995-2000	2000-2005	2005-2007	1995-2000	2000-2005	2005-2007	
Bucoda	City	20	10	0	0%	0%	0%
	UGA	*	*	*	*	*	*
	Total	20	10	0	0%	0%	0%
Lacey	City	2,125	1,095	1,655	23%	11%	37%
	UGA	595	1,690	185	7%	17%	4%
	Total	2,715	2,790	1,840	30%	29%	41%
Olympia	City	1,600	520	460	18%	5%	10%
	UGA	335	890	120	4%	9%	3%
	Total	1,925	1,410	600	21%	15%	13%
Rainier	City	60	40	75	1%	0%	2%
	UGA	5	10	0	0%	0%	0%
	Total	65	50	80	1%	1%	2%
Tenino	City	45	30	20	0%	0%	0%
	UGA	5	10	0	0%	0%	0%
	Total	50	35	25	1%	0%	0%
Tumwater	City	325	210	290	4%	2%	7%
	UGA	245	580	50	3%	6%	1%
	Total	570	790	340	6%	8%	8%
Yelm	City	375	535	275	4%	6%	6%
	UGA	15	35	5	0%	0%	0%
	Total	390	570	280	4%	6%	6%
Grand Mound UGA		10	20	35	0%	0%	1%
Chehalis Reservation ¹		0	0	0	0%	0%	0%
Nisqually Reservation ¹		0	5	5	0%	0%	0%
Rochester Area		685	525	200	8%	5%	4%
Other Rural		2,605	3,455	1,080	29%	36%	24%
Total Cities		4,550	2,440	2,775	50%	25%	62%
Total UGAs²		1,210	3,235	395	13%	33%	9%
Total Reservations¹		0	5	5	0%	0%	0%
Rural Unincorporated³		3,290	3,980	1,280	36%	41%	29%
Thurston County		9,050	9,660	4,450	100%	100%	100%

Source: Thurston Regional Planning Council Small Area Estimates.

Explanations: City and UGA boundaries may change over time due to annexations. Data are for April 1 of each year. Numbers may not add due to rounding.

Dwelling unit estimates incorporate housing starts data, however, the methodology also includes calibrating to U.S. Census and OFM data, includes demolitions, and does not include replacements and activity in manufactured home parks.

*Bucoda did not have an Urban Growth Area prior to 2004.

¹Data is for Thurston County portion of reservation only.

²UGA - Urban Growth Area. Unincorporated area designated to be annexed into city limits over 20 years time to accommodate urban growth.

³Rural unincorporated county is the portion of the unincorporated county that lies outside UGA and Reservation boundaries.

**Table III-9
Rural Development Trends, Thurston County**

Rural Trends	Interval when Units were Permitted		
	1991-1995 Pre-GMA but after Downzone	1996-2000 Post GMA	2001-2005 Post GMA
Total Units Permitted	3,591	2,989	2,921
Average Lot Size* (acres)	2.68	3.18	3.22
Large Lot, Short Plats, or non-platted lots			
Percent of Total Activity	45%	50%	42%
Number of Units	1,633	1,483	1,289
Average Lot Size	4.74	5.12	5.33
Long Plat Subdivisions			
Percent of Total Activity	55%	50%	58%
Number of Units	1,958	1,506	1,632
Average Lot Size	0.96	1.22	1.11
Long Plat Subdivisions by Lot Approval Interval			
Long Plat lots approved <i>before</i> 1990 Downzone	87%	70%	56%
Average Lot Size	0.96	1.34	1.15
Long Plat lots approved <i>after</i> 1990 Downzone	13%	30%	44%
Average Lot Size*	0.97	0.91	0.99

Source: Thurston Regional Planning Council Data Program.

Explanations: * Excluding cluster lots and lots vested under urban zoning Large Lot subdivisions divide property into two or more lots, any one of which is five acres in size or larger, but less than 40 acres in size. Short Plat subdivisions are those that, because of the small number of lots created (generally less than nine or five depending on the jurisdiction), or the lack of a need for public streets or other public facilities, can be approved in an expedited manner. Lots must be smaller than five acres in size. Long Plat subdivisions constitute a major subdivision of land, and require a more extensive review.

Chapter IV: Transportation

Related Growth Management Act (GMA) Goals

GMA Goal (3) Transportation. Encourage efficient multimodal transportation systems that are based on regional priorities and coordinated with county and city comprehensive plans.

Indicators Used

- Drive-Alone Commute Trips
- Transit Ridership per Capita
- Vehicles Miles Traveled (VMT) per Capita

Related County-Wide Planning Policies

Encourage efficient multimodal transportation systems that are based on regional priorities and coordinated with county and city comprehensive plans.

Overview

The Regional Transportation Plan (RTP) serves as a strategic blueprint for the region's transportation system. With adoption of the 2010 plan in 1993, the Thurston region embarked on a course of comprehensive and coordinated planning. The 2025 RTP was adopted in 2004, continuing the effort of regional transportation planning.

One of the principal philosophies underlying the RTP is to promote alternative modes of travel, reducing the need to drive alone and improving travel choice and mobility for people and goods. This is key to preserving limited system capacity and encouraging safe, efficient and cost-effective system operations over the long term. The RTP also encourages more compact, higher density development in the urban areas, and calls for preserving outlying areas for rural uses. This matches underlying values in the land use elements of local comprehensive plans and land use policies. The transportation benchmarks in this chapter underscore the relationship between transportation and land use, and help to monitor the effectiveness of regional policies and investments.

List of Benchmarks found in this Chapter

Benchmark 7:

The Share of Drive-Along Commute Trips at Large Work Sites Decreases over Time

Benchmark 8:

The Number of Transit Trips Per Capita Increases or Remains Steady over Time

Benchmark 9:

Vehicle Miles Traveled (VMT) Per Capita Decreases over Time

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**Benchmark
7**

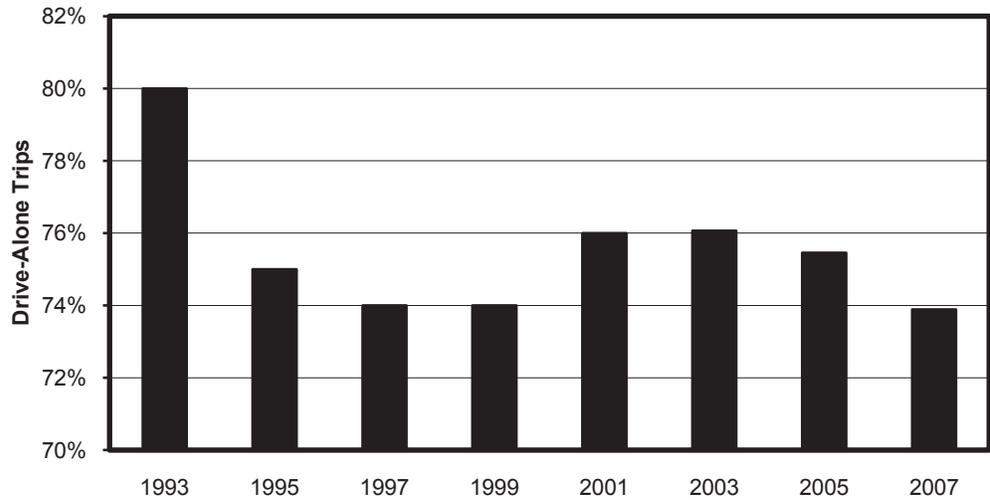
The Share of Drive-Along Commute Trips at Large Work Sites Decreases over Time

Outlook



partly sunny /
partly cloudy

Figure IV-1
Share of Drive-Along Commute Trips at Large Work Sites,
Thurston County, 1993-2007



Source: Table IV-1.

Assessment: The share of drive-alone commute trips at large work sites has decreased somewhat since 1993. However, this reduction is significantly below the 35 percent reduction target set by the state.

**Benchmark
7**

Key Observations:

Less than three in four commuters at Commute Trip Reduction (CTR) affected work sites were driving alone to work in 2007, compared to four in five commuters in 1993. This equates to about a five percent reduction in the share of drive-alone commute trips. Statewide, there has been three percent reduction during this same time period. Both are far from the 35 percent target established by the state.

However, no ground has been lost and trip reduction efforts have produced tangible benefits for the region.

The overwhelming majority of people who do not drive alone to work are carpooling to work. This accounts for as much of the commute trip as virtually all other modes and options combined. The third most common form of trip reduction is the compressed work week, whereby employees work an alternate schedule to the traditional “nine-to-five, Monday-through-Friday” routine. This typically results in four ten-hour days, or nine-hour days with an extra day off every other week.

For Further Information:

For more information on statewide CTR results and comparisons between Thurston and other counties, see WSDOT’s CTR Task Force – 2001 Report to the State Legislature. Historical data and additional information is available at the Travel Demand Management page of WSDOT’s website, at <http://www.wsdot.wa.gov/tdm/>.

**Benchmark
8**

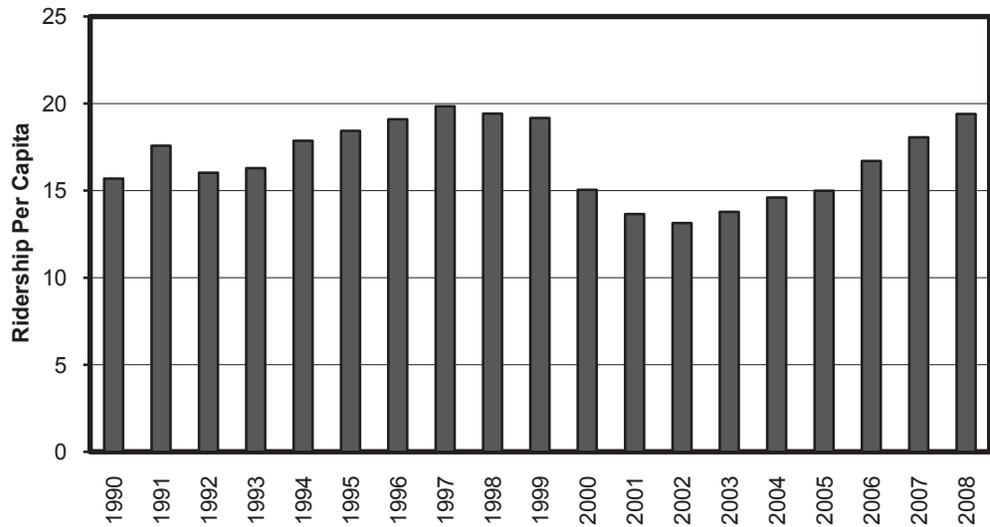
The Number of Transit Trips Per Capita Increases or Remains Steady over Time

Outlook



sunny, overall positive results

**Figure IV-2
Intercity Transit, Annual Ridership per Capita, 1990-2008**



Source: Table IV-2.

Assessment: Transit trips per person have increased in recent years due to an expansion in Intercity Transit's service area after several years of cuts.

**Benchmark
8**

Key Observations:

Intercity Transit is experiencing shifting needs in its transit service. In 2000, Intercity Transit was forced to reduce its service area in response to a 45 percent reduction in revenue due to the repeal of the motor vehicle excise tax. This resulted in a marked downturn in ridership per capita in 2000 through 2002.

In 2003, county residents supported a sales tax increase to sustain and expand Intercity Transit's service. After several years of service cuts, in 2003 Intercity Transit began expanding service by restoring routes, increasing frequency, and providing new service. These changes led to an upturn in ridership in 2003 and beyond.

For Further Information:

See Chapter VII in [The Profile](#).

**Benchmark
9**

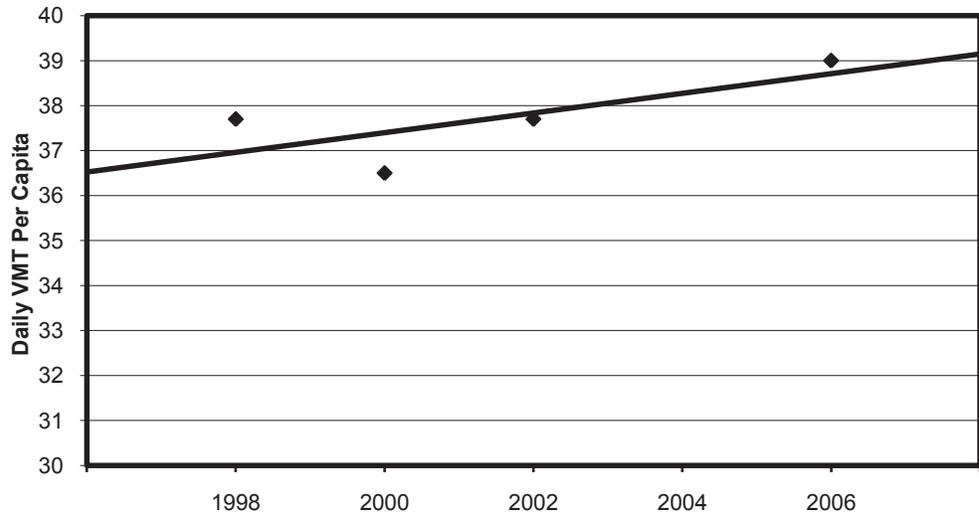
**Vehicle Miles Traveled (VMT) Per Capita Decreases
over Time**

Outlook



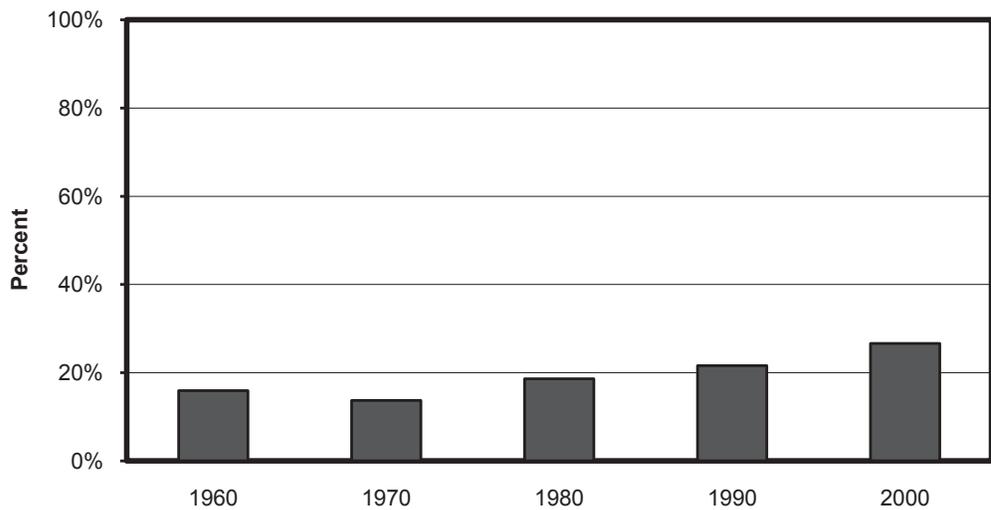
partly sunny /
partly cloudy

**Figure IV-3
Daily Vehicle Miles of Travel per Capita, Thurston County, 1998-2006**



Source: Table IV-3.

**Figure IV-4
Percent of Thurston County Resident Workers Commuting to Jobs
Outside of Thurston County, 1960-2000**



Source: Table IV-4.

Assessment: Vehicle miles traveled per capita has increased in recent years, however changes are slight.

**Benchmark
9**

Key Observations:

Changes in overall VMT per capita are valuable in understanding whether local and state land use policies are effective in helping to reduce travel need and increase the viability of alternatives to driving. As urban areas become more compact and diverse, biking, walking, and transit will account for an increased share of trips. And while most trips will still be made by driving, those trips should be shorter as urban areas become more city-like and unincorporated areas more rural-like.

Census data shows that a greater percent of Thurston County residents are commuting to jobs in other counties, increasing the amount of miles they travel to the workplace, and limiting opportunities for alternative modes of travel.

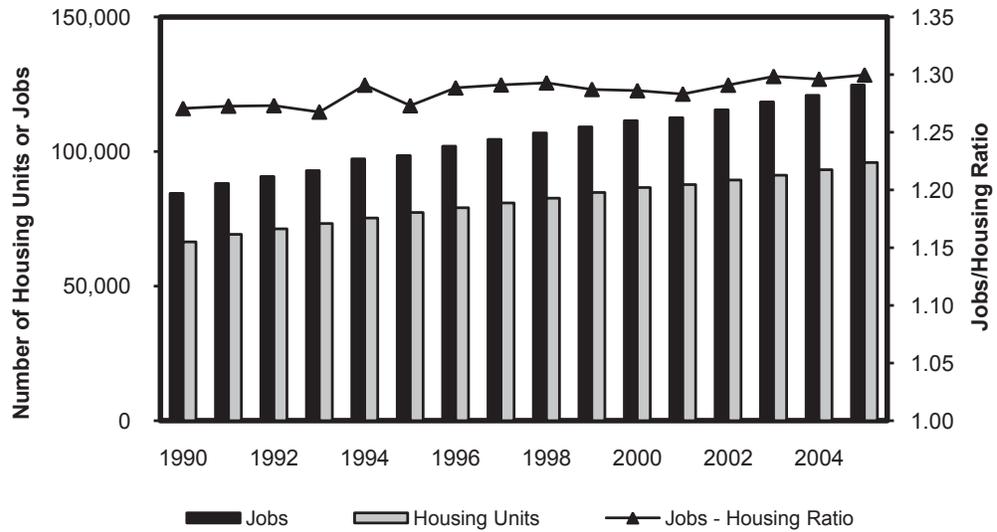
This is despite an overall increase in the amount of jobs compared to housing in Thurston County.

Clearly there are many factors that affect how people travel.

For Further Information:

See Chapter VII in [The Profile](#) for more information on trends at the state level.

Figure IV-5
Number of Jobs, Housing Units, and the Ratio between Jobs and Housing in Thurston County, 1990-2004



Source: Table IV-5.

Table IV-1
Mode Share at State Mandated Commute Trip Reduction Work Sites Thurston County, 1993-2007

	CTR Affected Locations		Commute Travel Mode								
	Worksites	Employees	Drive Alone	Carpool	Transit	CWW ¹	Walk	Bike	Vanpool	Telework	Other*
1993	121	25,293	79.8%	10.6%	2.1%	2.8%	1.6%	1.0%	0.8%	0.1%	1.1%
1995	71	21,988	74.8%	13.9%	2.8%	3.9%	1.5%	0.8%	1.1%	0.5%	0.6%
1997	81	20,575	73.8%	14.0%	3.0%	4.1%	1.8%	0.8%	1.1%	0.7%	0.8%
1999	83	21,400	73.5%	13.0%	2.9%	4.5%	1.6%	1.5%	1.2%	0.8%	1.1%
2001	91	23,545	75.7%	12.4%	2.4%	4.5%	1.5%	1.0%	1.1%	0.8%	0.5%
2003	95	25,962	76.1%	11.6%	2.4%	4.5%	1.7%	1.1%	1.2%	0.8%	0.5%
2005	91	24,457	75.5%	11.1%	2.7%	4.6%	1.4%	1.6%	1.6%	0.7%	0.8%
2007	73 ²	21,877 ²	73.9%	11.5%	3.2%	4.5%	1.5%	1.7%	1.9%	1.0%	0.9%

Source: Washington State Department of Transportation Commute Trip Reduction Office.

Explanations: Reported by work site location. The Washington State Commute Trip Reduction law stipulates that all employers with 100 or more employees arriving at a work site during the morning commute period must take measures to reduce the share of drive-alone trips and the number of vehicle miles traveled. Data are based on mandated employee surveys. CWW¹ refers to Compressed Work Week, whereby full-time employees compress their schedules into something less than the traditional 5-day work week. Numbers may not add due to rounding. * Other includes rail and other modes of transportation or working situations where employees traveled out-of-town on business, attended a conference or training off-site, or had other unusual work arrangements during the survey week. ²2007 data is currently being compiled by the Washington State Department of Transportation - data in table is information processed to date.

Table IV-2
Intercity Transit Ridership, 1990-2008

Year	Annual Ridership	Population	Ridership per Capita
1990	2,530,000	161,238	15.7
1991	2,970,000	168,996	17.6
1992	2,820,000	175,981	16.0
1993	2,950,000	181,131	16.3
1994	3,310,000	185,344	17.9
1995	3,520,000	190,944	18.4
1996	3,730,000	195,365	19.1
1997	3,950,000	199,081	19.8
1998	3,930,000	202,389	19.4
1999	3,940,000	205,557	19.2
2000	3,120,000	207,355	15.0
2001	2,870,000	210,200	13.7
2002	2,790,000	212,300	13.1
2003	2,960,000	214,800	13.8
2004	3,190,000	218,500	14.6
2005	3,360,000	224,100	15.0
2006	3,860,000	231,100	16.7
2007	4,300,000	238,000	18.1
2008	4,760,000	245,300	19.4

Sources: Intercity Transit, and the Washington State Office of Financial Management.

Table IV-3
Daily Vehicle Miles Traveled per Capita,
Thurston County, 1998-2006

Year	Average Daily Vehicle Miles Traveled	Population	Daily VMT Per Capita
1998	7,483,445	198,435	37.7
2000	7,561,890	207,355	36.5
2002	7,997,714	212,300	37.7
2004	N/A	N/A	N/A
2006	9,018,700	231,100	39.0

Sources: Thurston Regional Planning Council and Washington State Department of Licensing.

Explanations: 2004 data were not comparable to the rest of the data set; models used in this year were not calibrated to ground counts.

Table IV-4
Thurston County Resident Workers
Commuting to Jobs Outside of Thurston
County

Year	Total Resident Workers	Residents Commuting to Jobs Outside of Thurston County	Percent
1960	19,326	3,081	16%
1970	27,107	3,716	14%
1980	52,411	9,752	19%
1990	75,364	16,295	22%
2000	100,986	26,908	27%

Source: U.S. Bureau of the Census.

Table IV-5
Jobs, Housing Units, and Ratio of Jobs to
Housing Units Thurston County, 1990-2005

Year	Jobs	Housing Units	Jobs - Housing Ratio
1990	84,458	66,464	1.27
1991	88,097	69,217	1.27
1992	90,755	71,279	1.27
1993	92,908	73,293	1.27
1994	97,243	75,323	1.29
1995	98,516	77,379	1.27
1996	101,981	79,139	1.29
1997	104,484	80,922	1.29
1998	106,920	82,695	1.29
1999	109,142	84,786	1.29
2000	111,450	86,652	1.29
2001	112,568	87,723	1.28
2002	115,465	89,440	1.29
2003	118,440	91,209	1.30
2004	120,850	93,238	1.30
2005	124,661	95,910	1.30

Sources: Washington State Office of Financial Management; U.S. Department of Commerce, Bureau of Economic Analysis Regional Economic Information System (REIS).

Chapter V: Economy

Related Growth Management Act (GMA) Goals

GMA Goal (5) Economic Development. Encourage economic development throughout the state that is consistent with adopted comprehensive plans, promote economic opportunity for all citizens of this state, especially for unemployed and for disadvantaged persons, and encourage growth in areas experiencing insufficient economic growth, all within the capacities of the state's natural resources, public services, and public facilities.

Indicators Used

- Real Wages
- Unemployment Rate

Related County-Wide Planning Policies

Encourage sustainable economic development and support job opportunities and economic diversification that provide economic vitality and ensure protection of water resources and critical areas.

Support the retention and expansion of existing public sector and commercial development and environmentally sound, economically viable industrial development and resource uses.

Support recruitment of environmentally sound and economically viable economic development that helps to diversify or strengthen local economies.

Overview

Promoting economic vitality and diversity benefits the community as a whole. The data presented in this chapter provide a sampling of some of the possible measures of economic health that can be quantified. For more information on the economy of our region, please refer to [The Profile](#), published annually by the Thurston Region Planning Council.

List of Benchmarks found in this chapter

Benchmark 10:

Real Wages Increase over Time

Benchmark 11:

Unemployment Rate Declines or Remains Steady

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**Benchmark
10**

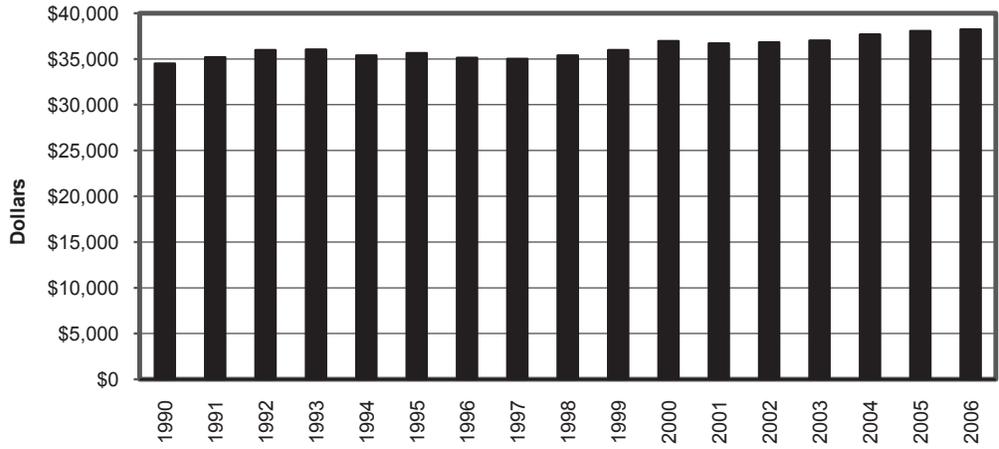
Real Wages Increase over Time

Outlook



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positive results**

**Figure V-1
Average Real Wage per Job, Thurston County, 1990-2006**



Source: Table V-3.

Assessment: Since 1990, real wages have increased in Thurston County.

**Benchmark
10**

Key Observations:

Real wages reflect wages adjusted for the effects of inflation. As a result it is a measurement that can be compared over time.

Thurston County saw an increase in real wages between 1990 and 2005, a time of moderate growth in the County's economy.

For Further Information:

See the Economics Chapter of [The Profile](#), published annually by Thurston Regional Planning Council.

2008 Economic Conditions were not reflected
in data available at time of publication.

**Benchmark
11**

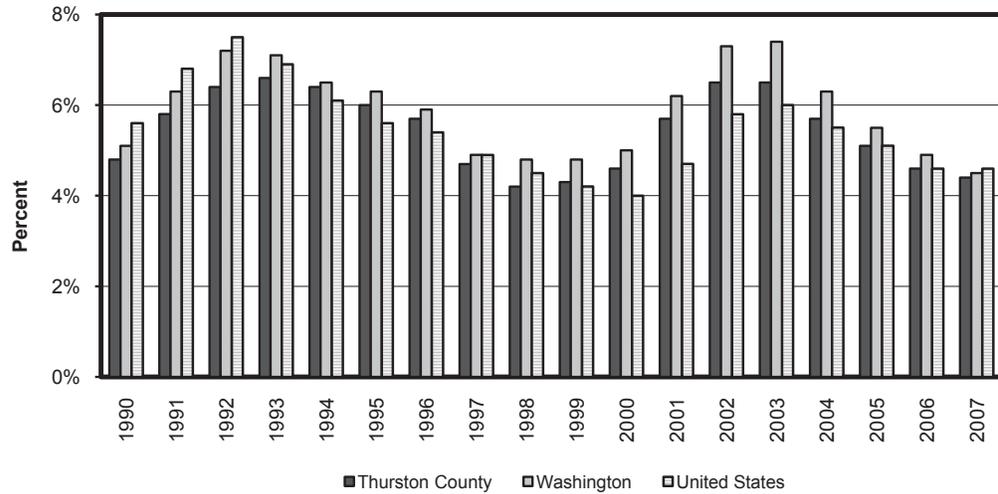
Unemployment Rate Declines or Remains Steady

Outlook



sunny, overall positive results

**Figure V-2
Unemployment Rates, Thurston County, Washington,
United States, 1990-2007**



Source: Table V-5.

Assessment: Thurston County's unemployment rate rose steadily between 1999 and 2002, but has declined every year beyond 2003. The County has had a lower unemployment rate than that of the State since 1990.

**Benchmark
11**

Key Observations:

The unemployment rate in Thurston County rose steadily from 1999 through 2002, when it was at its highest rate since 1993.

The 2006 unemployment rate for the County is lower than that of Washington State and the national average.

Unemployment rate trends are cyclical in nature. Over the last 50 years, the State's unemployment rates have generally tracked with national business cycles.

Similarly, Thurston County's unemployment rates have, for the most part, closely followed State trends.

For Further Information:

See of the Economics Chapter of The Profile, published annually by Thurston Regional Planning Council.

2008 Economic Conditions were not reflected
in data available at time of publication.

Table V-1
Average Wage per Job for Thurston County,
Washington and the United States, 1990-2006

	Thurston County	Washington State	United States
1990	21,080	22,832	23,326
1991	22,754	24,150	24,217
1992	24,119	25,864	25,478
1993	24,829	26,147	25,912
1994	25,216	26,777	26,543
1995	26,156	27,851	27,437
1996	26,665	29,283	28,513
1997	27,506	31,156	29,858
1998	28,606	33,486	31,411
1999	29,946	35,981	32,774
2000	31,912	37,423	34,718
2001	32,825	37,590	35,582
2002	33,585	38,381	36,150
2003	34,315	39,141	37,169
2004	35,356	40,349	38,810
2005	36,692	41,554	40,172
2006	38,228	43,727	41,991

Source: United States Bureau of Economic Analysis.

Note: Thurston County figures use Olympia Metropolitan Statistical Area data.

Table V-2
Annual Percentage Change of Wages per Job
for Thurston County, Washington and the
United States, 1990-2006

	Thurston County	Washington State	United States
1990-91	7.9%	5.8%	3.8%
1991-92	6.0%	7.1%	5.2%
1992-93	2.9%	1.1%	1.7%
1993-94	1.6%	2.4%	2.4%
1994-95	3.7%	4.0%	3.4%
1990-95	4.4%	4.1%	3.3%
1995-96	1.9%	5.1%	3.9%
1996-97	3.2%	6.4%	4.7%
1997-98	4.0%	7.5%	5.2%
1998-99	4.7%	7.5%	4.3%
1999-00	6.6%	4.0%	5.9%
1995-00	4.1%	6.1%	4.8%
2000-01	2.9%	0.4%	2.5%
2001-02	2.3%	2.1%	1.6%
2002-03	2.2%	2.0%	2.8%
2003-04	3.0%	3.1%	4.4%
2004-05	3.8%	3.0%	3.5%
2005-06	4.2%	5.2%	4.5%
2000-06	3.1%	2.6%	3.2%

Source: United States Bureau of Economic Analysis.

Table V-3
Average Real Wage per Job for Thurston
County, Washington and the United States,
1990-2006

	Thurston County	Washington State	United States
1990	34,497	37,364	35,957
1991	35,195	37,355	35,826
1992	35,976	38,578	36,594
1993	36,026	37,938	36,133
1994	35,384	37,575	36,075
1995	35,634	37,944	36,274
1996	35,133	38,583	36,634
1997	35,016	39,662	37,500
1998	35,390	41,427	38,867
1999	35,969	43,217	39,681
2000	36,962	43,346	40,653
2001	36,699	42,026	40,529
2002	36,812	42,069	40,528
2003	37,020	42,226	40,733
2004	37,691	43,013	41,414
2005	38,050	43,091	41,458
2006	38,228	43,727	41,991

Source: United States Bureau of Economic Analysis; Washington State Economic and Revenue Forecast Council.

Note: Real wages reflect wages adjusted for inflation, in constant 2005 dollars. Thurston County and Washington State figures derived from the Seattle Consumer Price Index. United States figures derived from the United States Consumer Price Index.

Table V-4
Annual Percentage Change of Real Wages per
job for Thurston County, Washington and the
United States, 1990-2006

	Thurston County	Washington State	United States
1990-91	2.0%	0.0%	-0.4%
1991-92	2.2%	3.3%	2.1%
1992-93	0.1%	-1.7%	-1.3%
1993-94	-1.8%	-1.0%	-0.2%
1994-95	0.7%	1.0%	0.6%
1990-95	0.7%	0.3%	0.2%
1995-96	-1.4%	1.7%	1.0%
1996-97	-0.3%	2.8%	2.4%
1997-98	1.1%	4.4%	3.6%
1998-99	1.6%	4.3%	2.1%
1999-00	2.8%	0.3%	2.4%
1995-00	0.7%	2.7%	2.3%
2000-01	-0.7%	-3.0%	-0.3%
2001-02	0.3%	0.1%	0.0%
2002-03	0.6%	0.4%	0.5%
2003-04	1.8%	1.9%	1.7%
2004-05	1.0%	0.2%	0.1%
2005-06	0.5%	1.5%	1.3%
2000-06	0.6%	0.1%	0.5%

Source: United States Bureau of Economic Analysis.

Note: Nominal Wages reflect wages without compensation for inflation. Real Wages reflect wages adjusted for the effects of inflation.

Table V-5
Civilian Average Annual Unemployment in Thurston County,
Washington, United States 1980, 1985, 1990-2007

Year	Thurston County		Washington State		United States	
	Unemployed	Rate	Unemployed	Rate	Unemployed	Rate
1980	4,500	8.2%	156,700	7.9%	7,637,000	7.1%
1985	5,200	7.9%	175,500	8.3%	8,312,000	7.2%
1990	3,900	4.8%	130,600	5.1%	7,047,000	5.6%
1991	4,800	5.8%	160,300	6.3%	8,628,000	6.8%
1992	5,500	6.4%	188,700	7.2%	9,613,000	7.5%
1993	5,800	6.6%	191,100	7.1%	8,940,000	6.9%
1994	5,700	6.4%	178,200	6.5%	7,996,000	6.1%
1995	5,600	6.0%	176,600	6.3%	7,404,000	5.6%
1996	5,500	5.7%	170,500	5.9%	7,236,000	5.4%
1997	4,700	4.7%	144,400	4.9%	6,739,000	4.9%
1998	4,400	4.2%	145,100	4.8%	6,210,000	4.5%
1999	4,500	4.3%	148,600	4.8%	5,880,000	4.2%
2000	4,900	4.6%	151,300	5.0%	5,692,000	4.0%
2001	6,200	5.7%	189,000	6.2%	6,801,000	4.7%
2002	7,300	6.5%	227,700	7.3%	8,378,000	5.8%
2003	7,500	6.5%	233,200	7.4%	8,774,000	6.0%
2004	6,900	5.7%	200,600	6.3%	8,149,000	5.5%
2005	6,200	5.1%	179,800	5.5%	7,591,000	5.1%
2006	5,800	4.6%	163,100	4.9%	7,001,000	4.6%
2007	5,600	4.4%	154,700	4.5%	7,078,000	4.6%

Source: United States Department of Labor, Bureau of Labor Statistics.

Chapter VI: Environment

Related Growth Management Act (GMA) Goals

GMA Goal (9) Open space, and recreation. Encourage the retention of open space and development of recreational opportunities, conserve fish and wildlife habitat, increase access to natural resource lands and water, and develop parks.

GMA Goal (10) Environment. Protect the environment and enhance the state's high quality of life, including air and water quality, and the availability of water.

Indicators Used

- Land in Parks and Preserves
- Land in Open Space Tax Program
- Recycling Rates
- Air Quality, Particulate Matter Levels

Related County-Wide Planning Policies

Fulfill the responsibilities of each generation as a trustee of the environment for succeeding generations; and assure a safe, healthful, and productive environment for local residents.

Recognize our interdependence on natural systems and maintain a balance between human uses and the natural environment.

Provide for parks and open space.

Establish a pattern and intensity of land and resource use in concert with the ability of land and resources to sustain such use.

Concentrate development in urban growth areas in order to conserve natural resources and enable continued resource use.

Encourage the reuse and recycling of materials and products, and reduction of waste to the maximum extent practicable.

Protect and enhance air quality.

Plan for the amount of population that can be sustained by our air, land, and water resources without degrading livability and environmental quality.

Overview

As our population grows, increasing demand is placed on our natural resources, impacting the quality of our water and air. Effects are often cumulative, and difficult to quantify. This report will provide some regional measurements of some changes that are quantifiable. It is by no means a comprehensive picture of the environmental health of our region, but rather an attempt to examine trends that may have long-term impacts on the region.

List of Benchmarks found in this chapter

Benchmark 12:

The Amount of Land Designated to Parks and Preserves per Capita Remains Constant or Increases

Benchmark 13:

Acres of Open Space Land Enrolled in the Open Space Tax Program Increase or Remains Steady over Time

Benchmark 14:

The Solid Waste Recycle Rate Per Capita Increases over Time

Benchmark 15:

Highest Annual Readings for Particulate Matter (PM10) Remain at or Below the National Standard of 150 Micrograms per Cubic Meter

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**Benchmark
12**

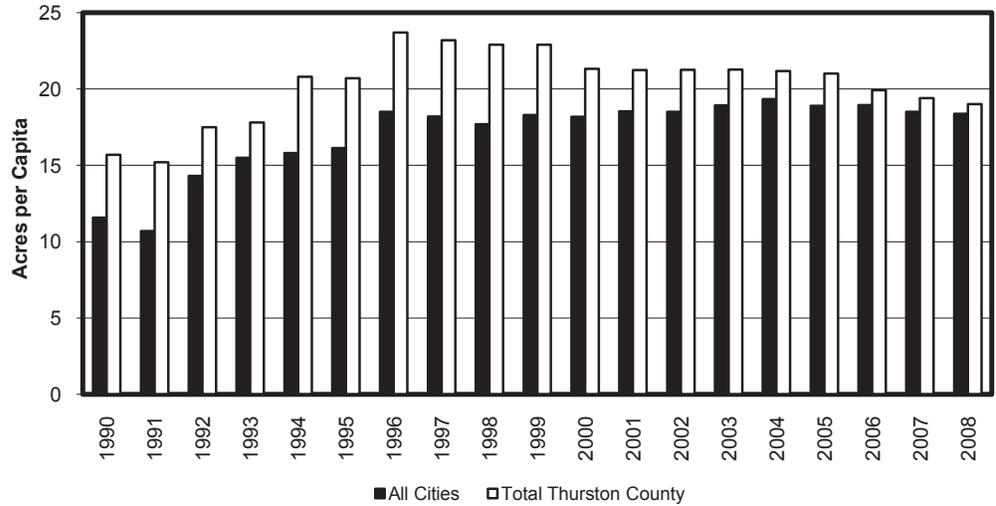
The Amount of Land Designated to Parks and Preserves per Capita Remains Constant or Increases

Outlook



partly sunny /
partly cloudy

**Figure VI-1
Park Acreage per Capita (1,000), Incorporated Areas and Total
Thurston County, 1990-2008**



Source: Table VI-3.

Note: Between 2005 and 2006 Thurston County sold the Off-Road Vehicle Sports Park, resulting in a decrease in park acreage in that year. This park is now owned by Grays Harbor County and available to the public.

Assessment: Since 1991, the amount of parks and preserves per capita has been increasing or remained steady in the incorporated areas, but has been decreasing overall.

**Benchmark
12**

Key Observations:

Total acres of parks and preserves per capita is a regional measure.

Many jurisdictions maintain a level of service monitoring of parks and open space in their comprehensive plans that is far more detailed than this regional measure. This may include miles of trails, acres in community parks, numbers of swimming pools, acres in golf courses, and other detailed measurements of recreational opportunities.

The sale of the off-road vehicle park in Thurston County to Grays Harbor County resulted in a decrease in park acreage owned by Thurston County. This park is still located in Thurston County and available to the public.

Urban parks and recreational opportunities often serve different functions than rural parks and preserves, which in turn serve different functions than state and federal parks.

Park usage crosses jurisdictional boundaries, and jurisdictions often measure regional needs for parks and facilities prior to investing their resources locally.

For Further Information:

See Chapter VIII of The Profile, published annually by Thurston Regional Planning Council.

**Benchmark
13**

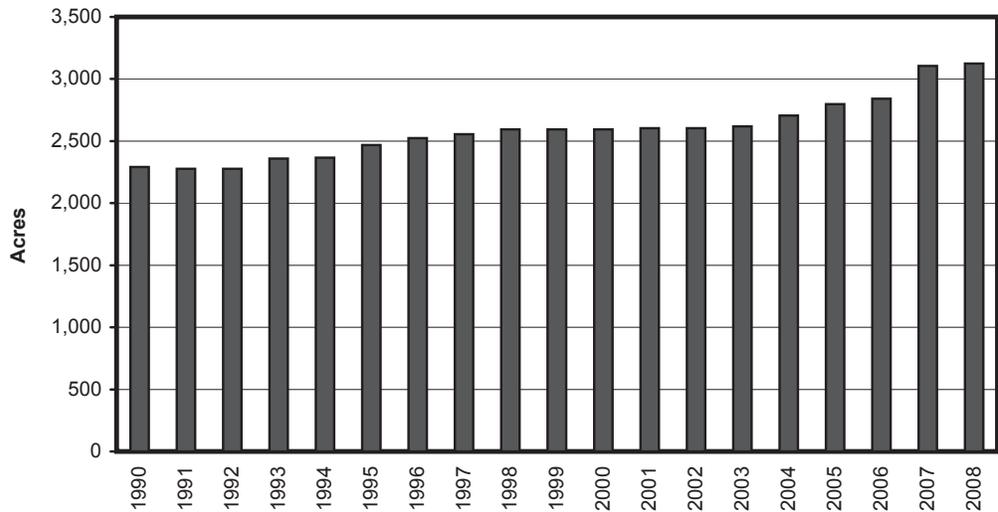
Acres of Open Space Land Enrolled in the Open Space Tax Program Increase or Remains Steady over Time

Outlook



sunny, overall positive results

**Figure VI-2
Acres of Open Space land enrolled in the Open Space Tax Program,
Thurston County Tax Years 1990-2008**



Source: Table VI-4.

Assessment: The amount of open space land enrolled in the open space tax program has been generally increasing over time.

**Benchmark
13**

Key Observations:

Parcels enrolled in the open space tax program are assessed at their current use value rather than their market value. This provides encouragement for landowners to keep their parcels in open space, rather than developing them.

For Further Information:

See Chapter VIII of The Profile, published annually by Thurston Regional Planning Council.

**Benchmark
14**

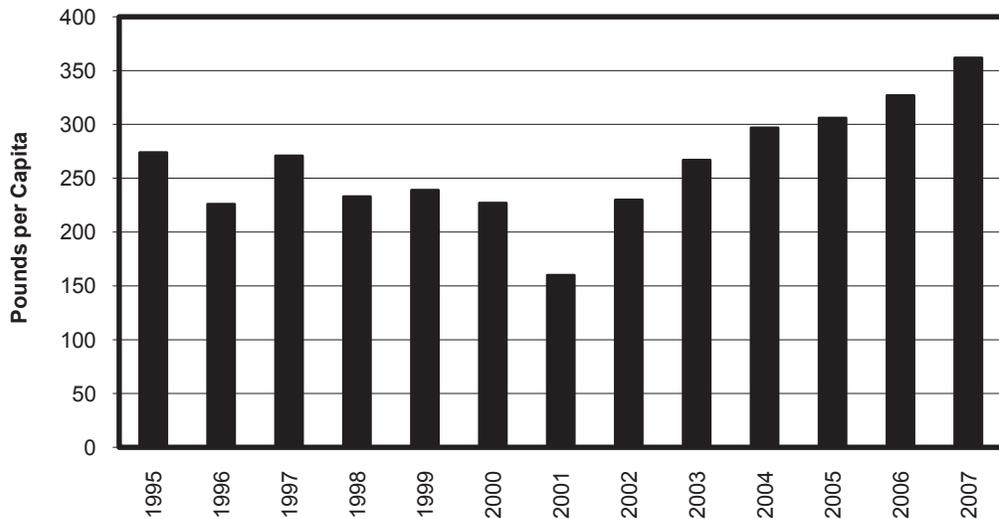
The Solid Waste Recycle Rate Per Capita Increases over Time

Outlook



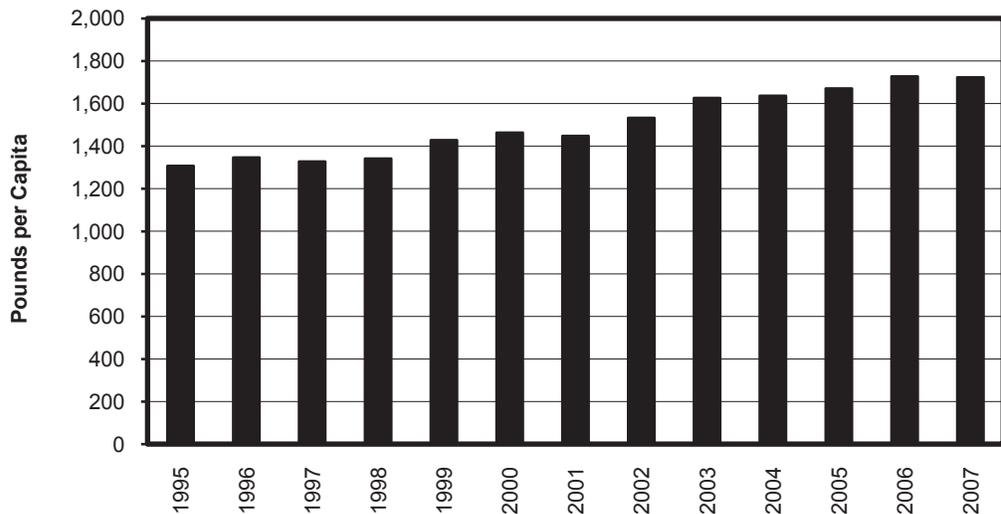
partly sunny /
partly cloudy

**Figure VI-3
Solid Waste Recycling, Pounds per Capita,
Thurston County, 1995-2007**



Source: Table VI-5.

**Figure VI-4
Solid Waste, Pounds per Capita, Thurston County, 1995-2007**



Source: Table VI-5.

Assessment: The recycle rate per capita has been increasing steadily since 2001, however the solid waste entering the landfill per capita has also increased steadily over time.

**Benchmark
14**

Key Observations:

Since 1993, Thurston County and the cities and towns of Thurston County have implemented many innovative waste reduction programs to support the 1993 Solid Waste Management Plan, which holds the mission to: “Significantly reduce the waste stream, emphasize recycling and recovery, and establish Thurston County as a center for waste reduction and recycling activities.” An update of the plan in 2001 reflects the changes in waste management practices that have occurred since 1983.

The recycling rate per capita was variable between 1995 and the early 2000s, but has been increasing steadily since then.

The amount of solid waste per capita placed in landfills has been rising steadily.

For Further Information:

See Chapter VIII of The Profile, and the Thurston County Solid Waste Management Plan Five Year Summary Report, Thurston County.

**Benchmark
15**

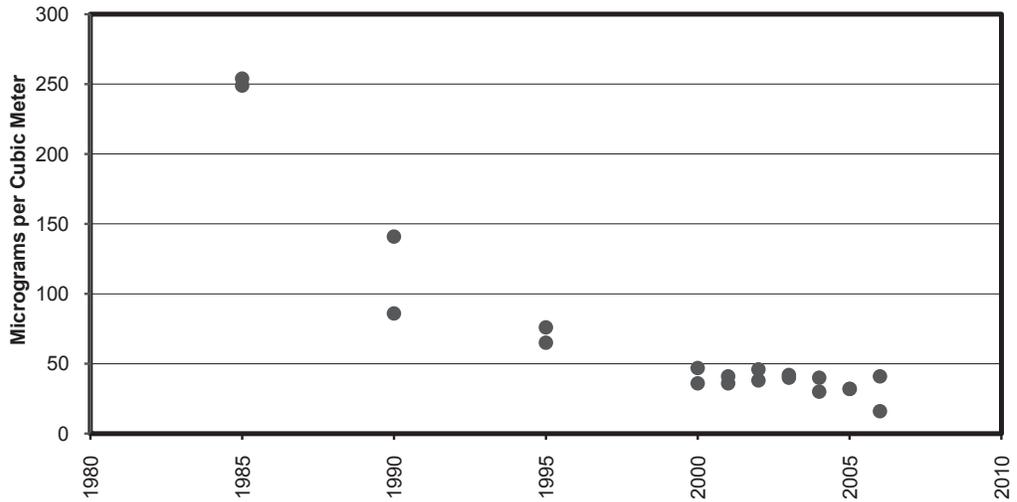
**Highest Annual Readings for Particulate Matter (PM10)
Remain at or Below the National Standard of 150
Micrograms per Cubic Meter**

Outlook



**sunny, overall
positive results**

**Figure VI-5
Air Quality, 1985, 1990, 1995, 2000-2006 Particulate Matter (PM10)**



Source: Table VI-6.

Explanation: Particulate Matter 10 micrometers or smaller in diameter. 1st and 2nd maximums refer to the two days of the year which had the highest and second highest reading for the pollutant.

Assessment: The highest annual reading for particulate matter has remained below the national standard since 1990.

**Benchmark
15**

Key Observations:

The highest annual reading for particulate matter has generally decreased since 1990, and is well below the national standard.

The reduction in large part is due to restrictions on outdoor burning and through the use of more efficient wood stoves.

For Further Information:

See Air Quality Data Summary, Washington State Department of Ecology (www.ecy.wa.gov/ecology) and Chapter VIII of The Profile.

Table VI-1
Municipal Parks in Acres, Jurisdiction for Thurston County, 1990-2008

Year	Bucoda	Lacey	Olympia	Rainier	Tenino	Tumwater ¹	Yelm	Inc. Thurston County	Uninc. Thurston County	Total Thurston County
1990	14	72	531	6	35	109	12	777	1,754	2,531
1991	14	120	465	6	35	109	12	759	1,795	2,554
1992	14	204	660	6	35	118	12	1,047	1,979	3,026
1993	14	204	776	6	35	119	16	1,168	1,992	3,160
1994	14	273	776	6	35	119	16	1,238	2,547	3,785
1995	14	333	781	6	35	119	25	1,312	2,547	3,859
1996	14	337	786	6	35	345	25	1,554	2,950	4,504
1997	14	338	794	6	35	345	25	1,564	2,955	4,519
1998	14	338	795	8	35	345	25	1,567	2,978	4,545
1999	14	436	795	8	35	345	25	1,665	2,978	4,643
2000	14	436	825	8	35	345	25	1,696	2,725	4,421
2001	14	436	870	8	35	345	25	1,741	2,725	4,466
2002	14	468	844	8	35	345	25	1,747	2,765	4,512
2003	14	494	855	8	35	345	25	1,804	2,765	4,569
2004	17	494	912	8	35	347	25	1,838	2,765	4,603
2005	17	494	912	8	35	347	25	1,838	2,797	4,635
2006	17	503	930	8	45	347	25	1,875	2,721	4,596
2007	17	505	945	8	45	350	25	1,895	2,721	4,616
2008	17	535	963	8	45	350	25	1,943	2,721	4,664

Sources: TRPC Survey of Thurston County Parks Department, Tumwater, Olympia and Lacey Parks Departments, Cities/Towns of Bucoda, Rainier, Tenino and Yelm.

Note: ¹Tumwater Municipal Golf Course was purchased by the City of Tumwater in 1996, and is included in Tumwater's park land. Between 2005 and 2006 Thurston County sold the Off-Road Vehicle Sports Park, resulting in a decrease in park acreage in that year.

Table VI-2
Population by Jurisdiction, Thurston County, 1990-2008

Year	Bucoda	Lacey	Olympia	Rainier	Tenino	Tumwater	Yelm	Inc. Thurston County	Uninc. Thurston County	Total Thurston County
1990	536	19,279	33,729	991	1,292	9,976	1,337	67,140	94,098	161,238
1991	540	20,894	35,082	1,111	1,293	10,429	1,384	70,733	96,930	167,663
1992	557	21,583	35,813	1,209	1,292	11,129	1,498	73,081	99,344	172,425
1993	582	22,889	36,455	1,337	1,298	11,220	1,512	75,293	101,765	177,058
1994	611	24,653	36,984	1,432	1,312	11,306	2,013	78,311	103,404	181,715
1995	599	25,878	37,734	1,422	1,390	12,053	2,295	81,371	105,048	186,419
1996	606	27,021	38,714	1,451	1,405	12,166	2,487	83,850	106,559	190,409
1997	621	28,310	39,473	1,488	1,434	12,233	2,586	86,145	108,295	194,440
1998	623	29,151	40,487	1,507	1,444	12,354	2,813	88,379	110,056	198,435
1999	627	30,538	41,467	1,501	1,447	12,531	3,075	91,186	111,981	203,167
2000	628	31,226	42,514	1,492	1,447	12,698	3,289	93,294	114,061	207,355
2001	635	31,660	42,530	1,485	1,460	12,770	3,420	93,900	116,300	210,200
2002	640	31,860	42,690	1,490	1,470	14,730	3,485	94,365	117,935	212,300
2003	645	32,240	42,860	1,515	1,495	12,740	3,830	95,325	119,475	214,800
2004	645	32,530	43,040	1,540	1,480	12,850	4,150	96,235	122,265	218,500
2005	650	33,180	43,330	1,585	1,500	12,950	4,455	97,650	126,450	224,100
2006	650	34,060	43,740	1,665	1,515	13,100	4,565	99,295	131,804	231,100
2007	655	35,870	44,460	1,705	1,520	13,340	4,845	102,390	135,604	238,000
2008	660	38,040	44,800	1,740	1,525	13,780	5,150	105,700	139,615	245,300

Sources: U.S. Bureau of the Census; Washington State Office of Financial Management.

Table VI-3
Parks per Capita (1,000), Thurston County Jurisdictions, 1990-2008

Year	Bucoda	Lacey	Olympia	Rainier	Tenino	Tumwater ¹	Yelm	All Cities	Thurston County ²	Total Thurston County
1990	26.1	3.7	15.7	5.5	27.1	10.9	9.0	11.6	18.6	15.7
1991	25.9	5.7	13.3	5.4	27.1	10.5	8.7	10.7	18.5	15.2
1992	25.1	9.5	18.4	5.0	27.1	10.6	8.0	14.3	19.9	17.5
1993	24.1	8.9	21.3	4.5	27.0	10.6	10.6	15.5	19.6	17.8
1994	22.9	11.1	21.0	4.2	26.7	10.5	7.9	15.8	24.6	20.8
1995	23.4	12.9	20.7	3.9	25.2	9.8	10.9	16.1	24.2	20.7
1996	23.1	12.5	20.3	4.1	24.9	28.4	10.1	18.5	27.7	23.7
1997	22.5	11.9	20.1	4.0	24.4	28.2	9.7	18.2	27.3	23.2
1998	22.5	11.6	19.6	5.3	24.2	27.9	8.9	17.7	27.1	22.9
1999	22.3	14.3	19.2	5.3	24.2	27.5	8.1	18.3	26.6	22.9
2000	22.3	14.0	19.4	5.4	24.2	27.2	7.6	18.2	23.9	21.3
2001	22.0	13.8	20.5	5.4	24.0	27.0	7.3	18.5	23.4	21.2
2002	21.9	14.7	19.8	5.4	23.8	23.4	7.2	18.5	23.4	21.3
2003	21.7	15.3	19.9	5.3	23.4	27.1	6.5	18.9	23.1	21.3
2004	25.9	15.2	21.2	5.2	23.6	27.0	6.0	19.1	22.6	21.1
2005	25.7	14.9	21.0	5.0	23.3	26.8	5.6	18.8	22.1	20.7
2006	25.7	14.8	21.3	4.8	29.7	26.5	5.5	18.9	20.6	19.9
2007	25.5	14.1	21.3	4.7	29.6	26.2	5.2	18.5	20.1	19.4
2008	25.8	14.1	21.5	4.6	29.5	25.4	4.9	18.4	19.5	19.0

Sources: Tables VI-1 and VI-2.

Note: ¹Tumwater Municipal Golf Course was purchased by the City of Tumwater in 1996, and is included in Tumwater's park land. ²The Thurston County Comprehensive Plan states that "the county focuses on providing parks, trails and preserves that contain special features intended to be used by all residents of the county, inside and outside cities." Therefore, Thurston County parks per capita reflect County-owned parks and preserves compared to total county population, rather than the unincorporated portion of the County.

Table VI-4
Acres of Open Space Enrolled in the
Open Space Tax Program, Thurston
County 1990-2008

Tax Year	Open Space Tax Program (acres)
1990	2,291
1991	2,278
1992	2,278
1993	2,358
1994	2,366
1995	2,468
1996	2,524
1997	2,556
1998	2,594
1999	2,594
2000	2,594
2001	2,603
2002	2,603
2003	2,619
2004	2,705
2005	2,798
2006	2,840
2007	3,106
2008	3,125

Source: Thurston County Assessor's Office.

Explanation: Includes open space lands subject to current use assessments under the Open Space Taxation Act (CH. 84.34 RCW).

**Table VI-5
Solid Waste, Thurston County, 1995-2007**

	1995	1996	1997	1998	1999	2000 ¹	2001	2002	2003	2004	2005	2006	2007
Recycling (tons)													
Compost Center	7,102	6,805	7,347	4,715	6,918	6,000	10,524 ³	10,002	10,687	12,560	13,079	16,107	17,687
Curbside Compost - Olympia	1,743	1,874	2,268	2,786	2,491	2,500	N/A	N/A	2,707	3,025	3,294	3,414	3,622
Regional Drop Box	1,972	2,198	2,473	2,099	1,618	1,585	1,582	1,587	1,542	1,599	1,948	2,066	1,991
Curbside - Thurston County	10,172	6,359	9,749	7,678	7,388	7,225	8,841	7,330	8,251	8,784	9,508	9,615	13,169
Curbside - Olympia	3,194	3,145	3,270	4,477	4,405	4,400	4,149	3,899	3,854	4,977	4,989	5,103	5,115
Recycle Center	1,736	1,443	1,656	1,559	1,372	1,500	2,240	1,611	1,602	1,516	1,504	1,502	1,438
Total Recycling²	25,919	21,824	26,763	23,314	24,192	23,210	16,812	24,429	28,643	32,461	34,322	37,807	43,022
Landfill Solid Waste (tons)	123,771	130,098	131,189	133,951	144,803	149,842	152,174	162,731	174,772	178,788	187,214	199,693	205,103
Population	189,201	193,100	197,600	199,700	202,700	204,700	210,200	212,300	214,800	218,500	224,100	231,100	238,000
Recycling Pounds per Capita	274	226	271	233	239	227	160	230	267	297	306	327	362
Landfill Waste Pounds per Capita	1,308	1,347	1,328	1,342	1,429	1,464	1,448	1,533	1,627	1,637	1,671	1,728	1,724

Source: Thurston County Solid Waste.

Explanations: ¹Some 2000 data estimated. ² Waste recycled through the Commercial Recycling Program and Backyard Composting is not included in this table. ³Compost Center tons for 2001 include City of Olympia materials.

**Table VI-6
Air Quality, Thurston County, 1985, 1990, 1995, 2000-2006**

Pollutant	National Standards	Readings									
		1985	1990	1995	2000	2001	2002	2003	2004	2005	2006
Particulate Matter ¹ (PM10) 24 Hour Average	150 micrograms per cubic meter	254	141	76	47	41	46	42	40	32	41 ⁶
		249	86	65	36	36	38	40	30	32	16 ⁶
Particulate Matter ² (PM10) 24 Hour Average	150 micrograms per cubic meter	N/A	N/A	N/A	51	43	49	45	44	35	43 ⁶
		N/A	N/A	N/A	39	39	41	44	32	35	17 ⁶
Particulate Matter (PM2.5) 24 Hour Average	65 micrograms per cubic meter	N/A	N/A	N/A	46.3	45.6	49.1	39.4	20.5 ⁵	47.6 ⁵	47.3 ⁵
		N/A	N/A	N/A	40.8	40.8	41.2	25.9	20.1 ⁵	36.1 ⁵	39.3 ⁵
Particulate Matter (PM2.5) Annual Average	15 micrograms per cubic meter	N/A	N/A	N/A	10.34	9.58	9.49	7.74	11.93 ¹	8.7 ⁵	N/A ⁵
Carbon Monoxide (CO) 8 Hour Average ³	9 parts per million	N/A	N/A	6.0	6.6	4.4	3.5 ⁴	N/A ⁴	N/A ⁴	N/A ⁴	N/A ⁴
		N/A	N/A	5.5	5.4	4.1	3.4 ⁴	N/A ⁴	N/A ⁴	N/A ⁴	N/A ⁴
Ozone 1 Hour Average	0.12 parts per million	N/A	N/A	N/A	0.086	0.087	0.086	0.088	0.080	0.074	0.093
		N/A	N/A	N/A	0.079	0.072	0.076	0.086	0.078	0.070	0.081
Ozone 8 Hour Average	0.08 parts per million	N/A	N/A	N/A	0.073	0.071	0.071	0.076	0.069	0.063	0.084
		N/A	N/A	N/A	N/A	N/A	N/A	0.072	0.061	0.059	0.068

Source: Olympic Region Clean Air Agency, www.orcaa.org (formerly the Olympic Air Pollution Control Authority).

Note: ¹Particulate Matter 10 micrometers or smaller in diameter at standard conditions. ²Particulate Matter 10 micrometers or smaller in diameter at local conditions. ³No permanent site to measure CO prior to 1992. ⁴CO sampling discontinued July 16, 2002. ⁵Reference Method sampling discontinued February 27, 2004 and replaced with continuous method sampling. ⁶PM10 sampling discontinued in April 2006 under the direction of the US EPA and WA State Department of Ecology.

Chapter VII: Water

Related Growth Management Act (GMA) Goals

GMA Goal (10) Environment. Protect the environment and enhance the state's high quality of life, including air and water quality, and the availability of water.

Indicators Used

- Salmon Production
- River Water Levels
- Shellfish Beds - Puget Sound Health
- Marine Water Quality

Related County-Wide Planning Policies

Fulfill the responsibilities of each generation as a trustee of the environment for succeeding generations; and assure a safe, healthful, and productive environment for local residents.

Recognize our interdependence on natural systems and maintain a balance between human uses and the natural environment.

Protect ground and surface water and the water of the Puget Sound from further degradation by adopting and participating in comprehensive, multi-jurisdictional program to protect and monitor water resources for all uses.

Plan for the amount of population that can be sustained by our air, land, and water resources without degrading livability and environmental quality.

Overview

As our population grows, increasing demand is placed on our natural resources, impacting the quality of our water. Effects are often cumulative, and difficult to quantify. This report will provide some regional measurements of some changes that are quantifiable. It is by no means a comprehensive picture of the water quality and quantity in our region, but rather an attempt to examine trends that may have long-term impacts on the region.

List of Benchmarks found in this chapter

Benchmark 16:

Coho Salmon Production in the Deschutes River Increases or Remains Steady over Time

Benchmark 17:

Seven-day Minimum River Flows Increase or Remain Steady over Time

Benchmark 18:

Shellfish Bed Health in Puget Sound Inlets Increases over Time

Benchmark 19:

Marine Water Quality Health Improves over Time

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**Benchmark
16**

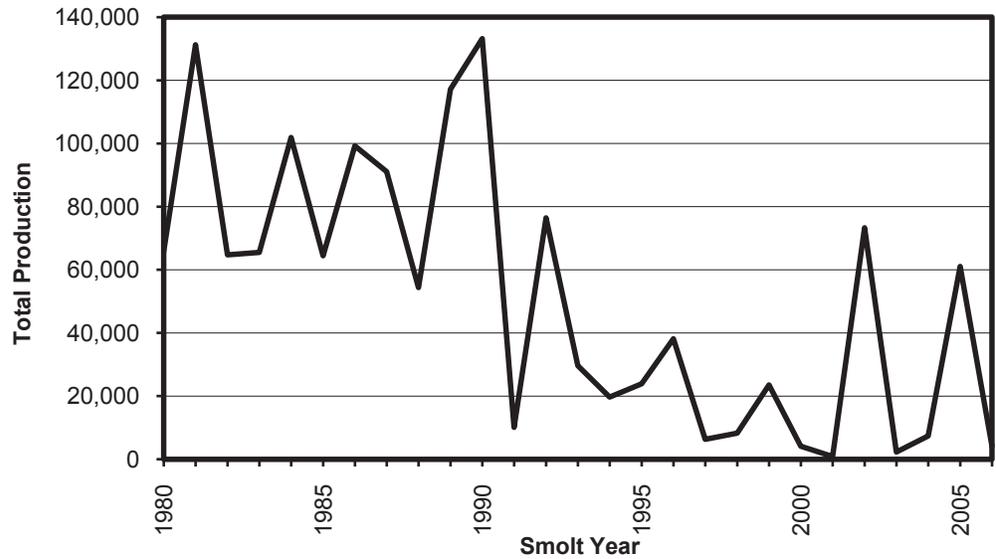
**Coho Salmon Production in the Deschutes River
Increases or Remains Steady over Time**

Outlook



**stormy, concerns
for the future**

**Figure VII-1
Deschutes River Coho Salmon Smolt Production, 1980-2006**



Source: Table VII-I.

Assessment: Coho salmon smolt production in the Deschutes River has dropped over time.

**Benchmark
16**

Key Observations:

Coho salmon smolt production in the Deschutes River has dropped over time.

Causes for the drop in smolt production include habitat degradation in the watershed, severe winter storms, and extremely poor marine survival.

After a peak of 133,198 in 1990, coho salmon smolt production fell to a low of 892 for 2001. Since then production in two years of each of the three year cycles has been low. Note – the return cycle for coho salmon is three years.

The Washington Department of Fish and Wildlife annually measures coho salmon smolt production, marine survival, and adult spawners.

For Further Information:

See Table VII-7 or contact the Washington Department of Fish and Wildlife at (360) 902-2200 or their website <http://www.wa.gov/wdfw/>, and Chapter VIII of The Profile.

**Benchmark
17**

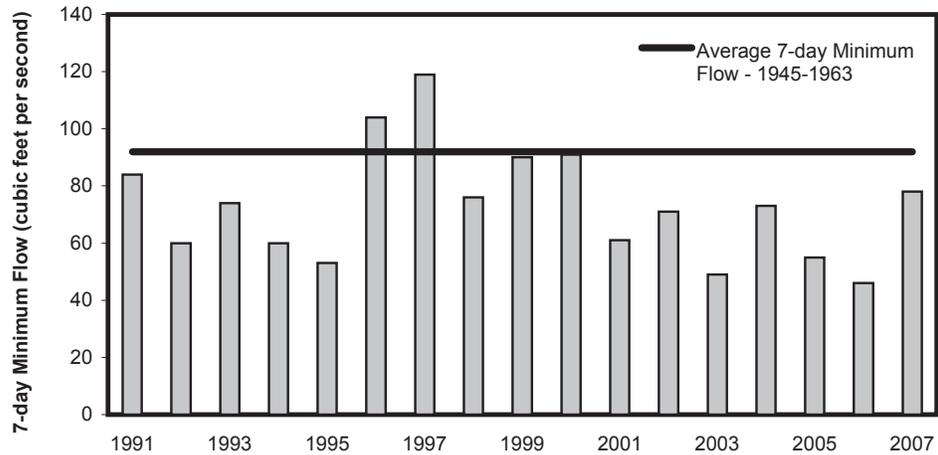
Seven-day Minimum River Flows Increase or Remain Steady over Time

Outlook



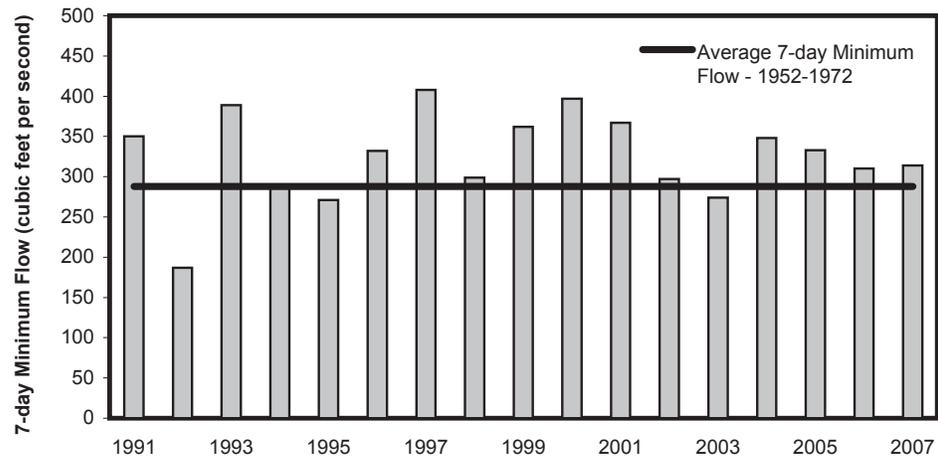
partly sunny /
partly cloudy

**Figure VII-2
Average Seven-day Minimum Flows for the Deschutes River in Tumwater**



Source: Table VII-2.

**Figure VII-3
Average Seven-day Minimum Flows for the Chehalis River in Porter**



Source: Table VII-2.

Note: Minor effect from regulation on Skookumchuck River by Skookumchuck Dam since January 1971, which feeds into the Chehalis River upstream from Porter.

Assessment: Flows have been lower in the Deschutes River, but higher in the Chehalis and Nisqually Rivers than the recent historic records.

**Benchmark
17**

Key Observations:

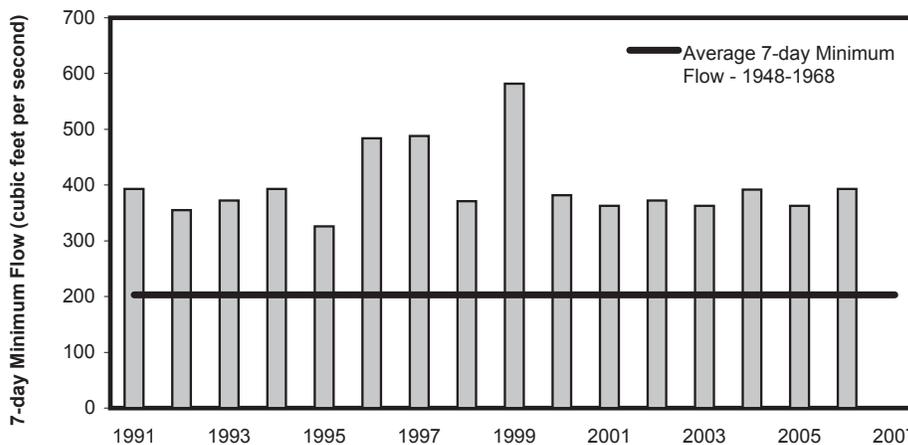
Seven-day minimum flows in the Deschutes River (measured at Tumwater’s E Street Bridge) fluctuate. In general they have been lower than the average measured between 1945-1963. The river is fed by both rainwater and groundwater in this section of the Deschutes River. Groundwater provides much of the drinking water for Thurston County.

Much of the decline could be attributed to a shift in climate cycle. The time period between 1945 and 1963 coincided with a wet-period Pacific Decadal Oscillation (PDO) while the more recent period coincides with a dry-period PDO.

In the Chehalis River flows are also closely tied to both ground water and rainwater. In general seven-day minimum flows have been slightly higher than the period between 1952 and 1972. A small portion of the flows are regulated by the Skookumchuck Dam.

On the Nisqually River upstream of Alder Dam, flows have been regulated since 1945 when the dam was built. The seven-day minimum flows have been consistently higher in the last fifteen years than the average minimum flows measured between 1948-1968.

**Figure VII-4
Average Seven-day Minimum Flows for the Nisqually River in McKenna**



Source: Table VII-2.

Note: Flows in this portion of the Nisqually River has been regulated by the Alder Dam since 1945.

**Benchmark
18**

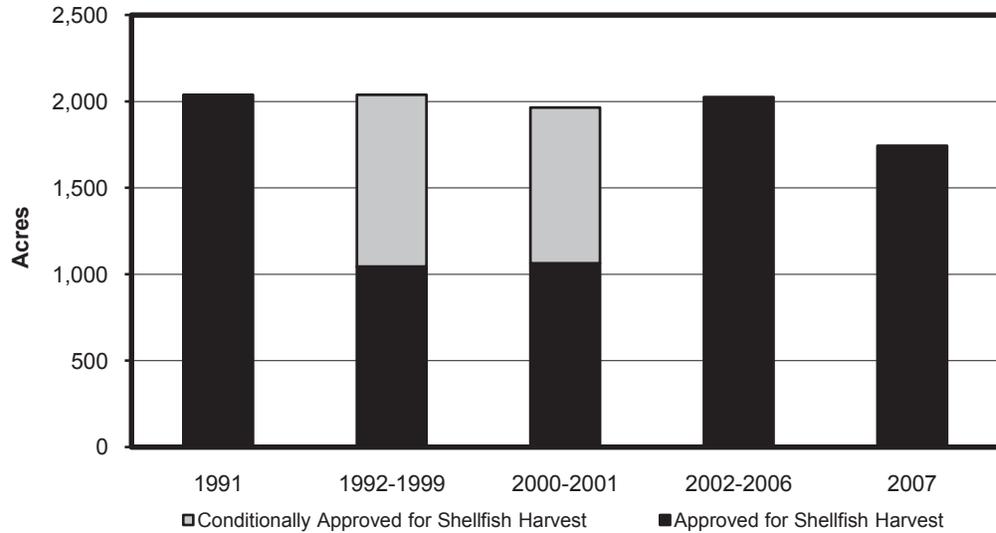
Shellfish Bed Health in Puget Sound Inlets Increases over Time

Outlook



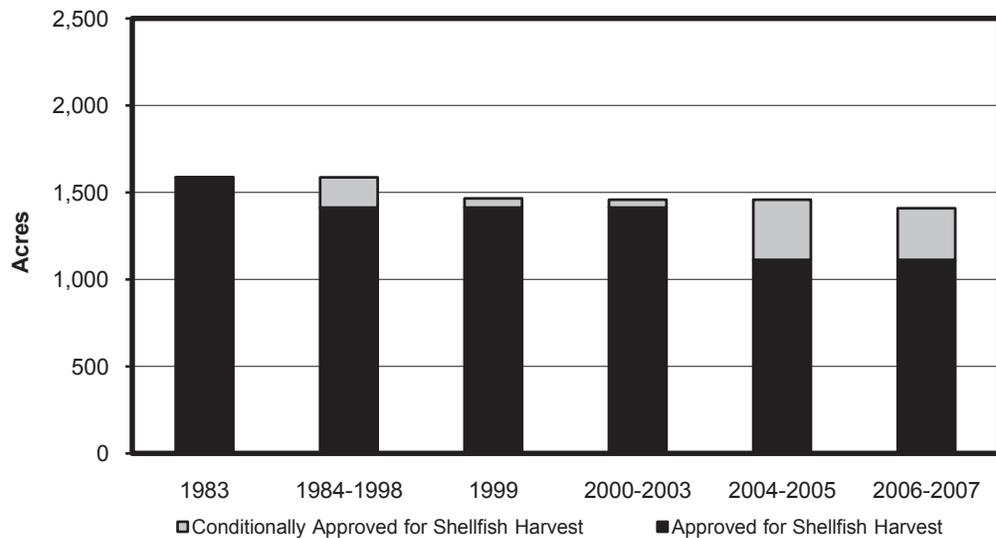
**stormy, concerns
for the future**

**Figure VII-5
Acres of Shoreland where Water Quality is High Enough for Commercial Shellfish Harvest - Nisqually Reach, 1991-2007**



Source: Table VII-3.

**Figure VII-6
Acres of Shoreland where Water Quality is High Enough for Commercial Shellfish Harvest - Henderson Inlet, 1983-2007**



Source: Table VII-4.

Assessment: Shellfish bed water quality has decreased over time in Henderson Inlet and the Nisqually Reach.**Benchmark
18****Key Observations:**

The Washington State Department of Health (DOH) monitors levels of fecal coliform bacteria in marine waters to determine suitability for shellfish harvesting. Four of the five Inlets in Thurston County are classified for shellfish harvest. The fifth, Budd Inlet, has been closed for decades. Eld Inlet and Totten Inlets, the least developed of Thurston County's shorelines, are approved for shellfish harvest. In the remaining two inlets water quality is a concern.

Some notable successes were made in Nisqually Reach on improving water quality in recent years, with upgrades to shellfish harvesting areas in 2002 from conditional to approved status (900 acres) and restricted to approved (60 acres) due to targeted cleanup efforts. The most recent inventory (2006), however, downgraded 317 acres from approved to prohibited due to elevated fecal coliform in freshwater discharges to the shoreline.

In Henderson Inlet improving water quality has been a challenge due to the scale and complexity of pollution problems, and the continued population growth and urbanization in the watershed. The inlet has seen a continuous degradation in water quality, and corresponding series of downgrades to approved shellfish harvesting areas. Water quality problems are believed to be related to stormwater discharge, on-site septic systems, and animal keeping practices. Thurston County is continuing their efforts to identify and correct pollution problems.

For Additional Information:

See Washington State Department of Health's Shellfish Program.

**Benchmark
19**

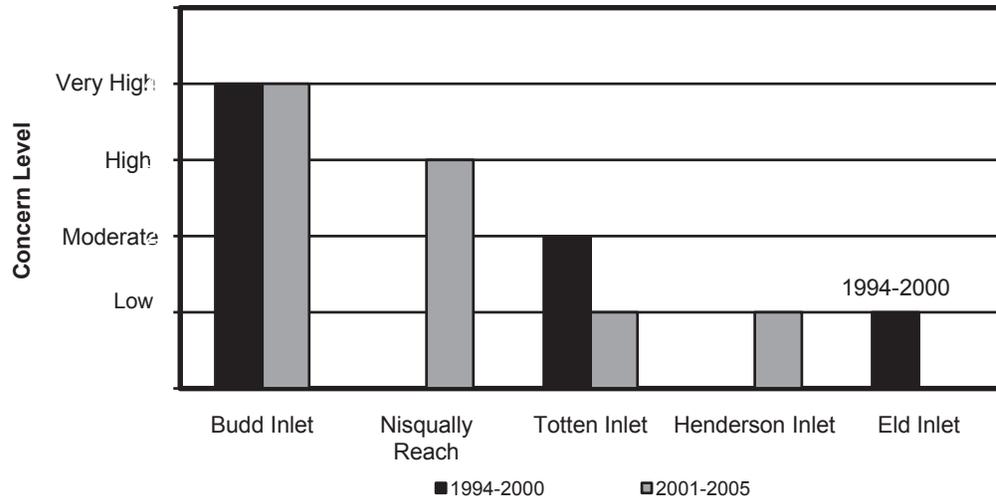
Marine Water Quality Health Improves over Time

Outlook



**stormy, concerns
for the future**

**Figure VII-7
Water Quality Concern Index for South Puget Sound Inlets,
1994-2000 and 2001-2005**



Source: Table VII-5.

Assessment: There remains a very high level of concern over water quality in Budd Inlet, and a high level of concern for Nisqually Reach.

**Benchmark
19**

Key Observations:

The Department of Ecology uses five indicators to calculate an index of water quality concern:

1. Fecal coliform bacteria levels
 - High levels indicate the presence of a nearby contaminant source.
2. Concentrations of dissolved inorganic nitrogen (DIN)
 - Low levels indicate that phytoplankton growth may be nutrient-limited and, therefore, the water body may be sensitive to the effects of eutrophication.
3. Ammonium (NH₄) levels
 - High concentrations indicate the presence of a nutrient source.
4. Dissolved Oxygen (DO) concentration
 - Low DO is often associated with a combination of strong stratification and high productivity driven by high nutrient availability.
5. Persistence of stratification
 - Strong and persistent stratification indicates that mixing of surface and bottom waters is reduced both spatially and temporally.

Based on these indicators, the level of concern remains very high for Budd Inlet, and is high for Nisqually reach. The concern level has dropped for Totten Inlet from moderate to low.

Note: Stations are scored by assigning points to each of five indicators. Highest values are given to very low DO, strong stratification, low DIN, high ammonium (NH₄), and high fecal coliform levels (FCB). Scores are summed to determine a relative level of diminished water quality, with stations of the highest concern scoring in two or more of these indicators.

For Additional Information:

Contact the Washington State Department of Ecology.

**Table VII-1
Deschutes River Coho Salmon
Smolt Production**

Smolt Year	Total Production
1980	65,776
1981	131,261
1982	64,757
1983	65,518
1984	101,901
1985	64,452
1986	99,241
1987	91,057
1988	54,397
1989	117,164
1990	133,198
1991	10,101
1992	76,438
1993	29,652
1994	19,686
1995	23,912
1996	38,197
1997	6,356
1998	8,259
1999	23,535
2000	4,144
2001	892
2002	73,299
2003	2,340
2004	7,423
2005	61,090
2006	4,215

Source: Washington Department of Fish and Wildlife.

Table VII-2
Seven-day Minimum Annual Flow -
Deschutes, Chehalis, and Nisqually Rivers

Year	Deschutes River	Chehalis River	Nisqually River
	E-Street	Porter	McKenna
(Cubic Feet per Second)			
1991	85	350	393
1992	62	187	355
1993	74	389	372
1994	60	286	393
1995	53	271	326
1996	105	332	484
1997	120	408	488
1998	77	299	371
1999	91	362	582
2000	91	397	382
2001	61	367	363
2002	70	297	372
2003	49	274	363
2004	63	348	392
2005	55	333	363
2006	46	310	393
2007	78	314	n/a
Average	73	325	400
Historic	1945-1963 ¹	1952-1972	1948-1968
Average	93	288	203

Source: United States Geologic Survey Steamflow data - <http://waterdata.usgs.gov/WA/nwis/current/?type=flow>.

Explanations: ¹Missing data for years 1955-57.

**Table VII-3
Nisqually Reach - Acres of Land Classified for Commercial
Harvest based on Water Quality**

Class	1991	1992-1999	2000-2001	2002-2006	2007
Approved	2,038	1,044	1,064	2,024	1,744
Conditional	0	994	900	0	0
Restricted	35	35	109	49	12
Prohibited	1,563	1,563	1,563	1,563	1,880
Total	3,636	3,636	3,636	3,636	3,636

Source: Washington State Department of Health.

Note: Approved - shellfish growing area approved for commercial harvest; Conditional - shellfish growing area approved under predictable conditions (i.e. could be closed during times of high rainfall); Restricted - limited pollution but does not meet standard for Approved Classification; Prohibited - fecal material, pathogenic microorganisms, or poisonous or deleterious substances may be present in dangerous concentrations therefore the area must be closed to commercial shellfish harvest.

**Table VII-4
Henderson Inlet - Acres of Land Classified for Commercial Harvest
based on Water Quality**

Class	1983	1984-1998	1999	2000-2003	2004-2005	2006-2007
Approved	1,586	1,413	1,413	1,413	1,113	1,113
Conditional	0	173	53	45	345	296
Restricted	0	0	0	0	0	0
Prohibited	83	83	203	211	211	260
Total	1,669	1,669	1,669	1,669	1,669	1,669

Source: Washington State Department of Health.

Explanations: Approved - shellfish growing area approved for commercial harvest; Conditional - shellfish growing area approved under predictable conditions (i.e. could be closed during times of high rainfall); Restricted - limited pollution but does not meet standard for Approved Classification; Prohibited - fecal material, pathogenic microorganisms, or poisonous or deleterious substances may be present in dangerous concentrations therefore the area must be closed to commercial shellfish harvest.

**Table VII-5
Water Quality Concern Index, select Puget Sound Inlets**

Inlet	Year	DO	FCB	DIN	NH4	Stratif	Concern
Budd Inlet	1994-2000	Very Low	High	Low	High	P	Very High
Budd Inlet - South Port	2001-2005	Very Low	High	High	High	SI	Very High
Budd Inlet - Olympia Shoal	2001-2005	Very Low	High	Moderate	Moderate	MI	Very High
Nisqually Reach	2001-2005	Very Low	Low	High	Moderate	WI	High
Totten Inlet	1994-2000	-	-	Moderate	Moderate	E	Moderate
Totten Inlet	2001-2005	High	Low	High	Moderate	MI	Low
Henderson Inlet	2001-2005	Low	Low	High	Low	WI	Low
Eld Inlet	1994-2000	-	-	Moderate	-	S	Low

Source: Department of Ecology, Water Quality - http://www.ecy.wa.gov/programs/eap/mar_wat/flight_examples.html (1994-2000) and http://www.psp.wa.gov/downloads/SOS07/2007_PS_Update.pdf (2000-2005).

Notes: DO indicates when waters have had low (<5 mg/L) or very low (<3 mg/L) oxygen concentrations, which can be harmful to some marine organisms, such as fish.

FCB refers to where fecal coliform bacteria are been detected at moderate (>14 orgs/100 mL once or more), high (chronic >14 or >50 once), or very high levels (chronic and >50 orgs/100 mL), which can often be indicative of sewage or agricultural contamination.

DIN refers to where nitrogen dissolved nutrients are at presumably limiting concentrations for consecutive months (3 mo = moderate; 5 mo = low), indicating areas that would be susceptible to added nutrients from point and non-point sources, resulting in reduced water quality.

NH4 relates the finding of high (>0.14 mg/L) or moderate (0.07 mg/L) concentrations of ammonium, which is sometimes indicative of human sources of organic waste, such as sewage or agricultural runoff.

Stratif stands for the natural amount of density stratification that the location has, which influences how readily pollutants will be mixed out or low oxygen concentrations persist. For 1994-2000 data - P=persistent; S=seasonal; E=episodic; W=weak.

For 2001-2005 data: SP = Strong and persistent; SI = Strong and intermittent; MI = Moderate and infrequent; M Int = Moderate and intermittent; WI = Weak and infrequent.

Chapter VIII: Housing Affordability

Related Growth Management Act (GMA) Goals

GMA Goal (4) Housing Affordability. Encourage the availability of affordable housing to all economic segments of the population of this state, promote a variety of residential densities and housing types, and encourage preservation of existing housing stock.

Indicators Used

- Household Income to Average Housing Sale Price
- Housing Affordability Index
- Apartment Vacancy Rates

Related County-Wide Planning Policies

Encourage the availability of affordable housing for all incomes and needs and ensure that each community includes a fair share of housing for all economic segments of the population.

Explore ways to reduce the costs of housing.

Encourage a range of housing types and costs commensurate with the employment base and income levels of jurisdictions populations, particularly for low, moderate, and fixed income families.

Overview

Housing affordability can be measured in a number of different ways. In this chapter, benchmarks were selected to provide an indication of both home ownership and home rental affordability. For more information on housing and real estate in Thurston County, please refer to [The Profile](#).

List of Benchmarks found in this chapter

Benchmark 20

Median Household Income Keeps Pace with Average Housing Sale Price

Benchmark 21:

The Housing Affordability Index for First Time Buyers Increases and the Affordability Index for All Buyers Remains Above 100

Benchmark 22:

The Apartment Vacancy Rate Remains at or Around Five Percent

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**Benchmark
20**

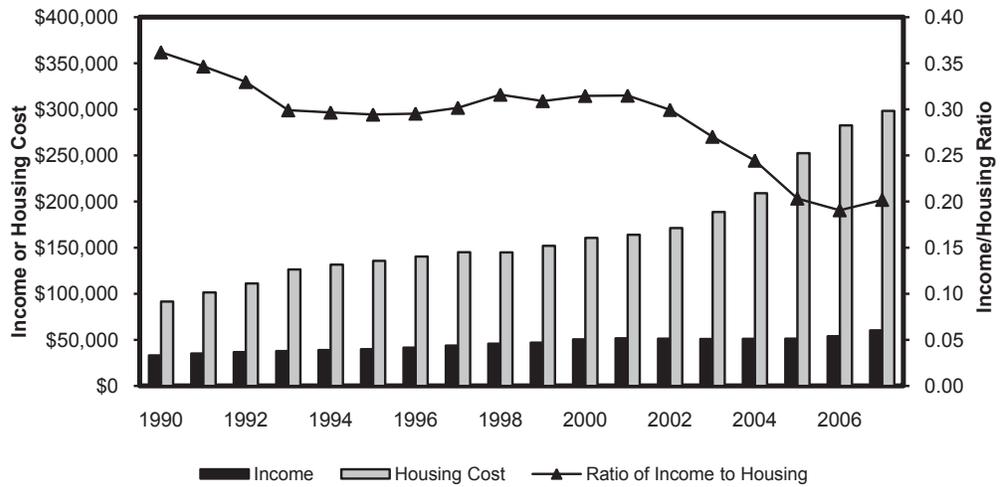
**Median Household Income Keeps Pace with Average
Housing Sale Price**

Outlook



**stormy, concerns
for the future**

**Figure VIII-1
Ratio Comparing Medium Household Income and Single-Family
Home Sale Price, Thurston County, 1990-2007**



Source: Tables VIII-1.

Assessment: In the last five years, the rise in home costs has outpaced the rise in median household income.

**Benchmark
20**

Key Observations:

Between 1991 and 2001, income was keeping pace with housing costs.

In the last five years housing costs have increased dramatically, outpacing increases in income.

Currently, housing costs are stabilizing or decreasing nationwide, which should lead to a change in the trend in coming years.

For Further Information:

See Chapters III and IV of The Profile, published annually by Thurston Regional Planning Council.

**Benchmark
21**

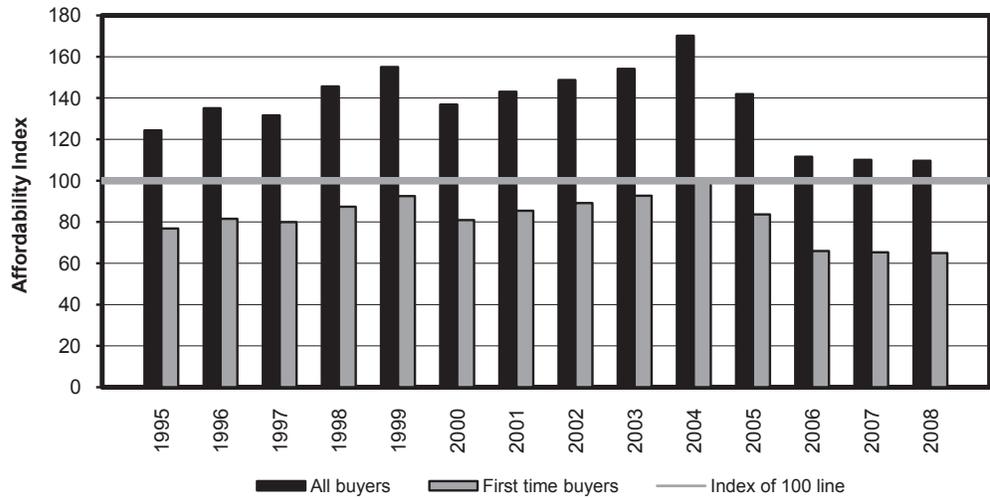
**The Housing Affordability Index for First Time Buyers
Increases and the Affordability Index for All Buyers
Remains Above 100**

Outlook



partly sunny /
partly cloudy

**Figure VIII-2
Housing Affordability Index for Thurston County, 1995-2008**



Source: Table VIII-2.

Assessment: The housing affordability index has remained above 100 for all buyers, but has been decreasing lately. It was increasing for first time buyers until 2004, when it began to decrease steadily.

**Benchmark
21**

Key Observations:

Home ownership was becoming more affordable in Thurston County in the early part of the 2000s, likely in part due to a decrease in interest rates that occurred over this time period.

Since 2004 home affordability has decreased steadily, as housing prices and interest rates began to rise.

Affordability index measures the ability of a typical family to make payments on median price resale home, assuming a 20 percent down payment. All loans are assumed to be 30-year loans. It is assumed 25 percent of income can be used for principal and interest payments. An index of 100 indicates that a balance exists between the family's ability to pay and housing costs. A higher index indicates that housing is more affordable; a lower index indicates that housing is less affordable.

For Further Information:

See Chapter III of The Profile, published annually by Thurston Regional Planning Council, and information from the Washington Center for Real Estate Research (<http://www.wcrer.wsu.edu/>).

**Benchmark
22**

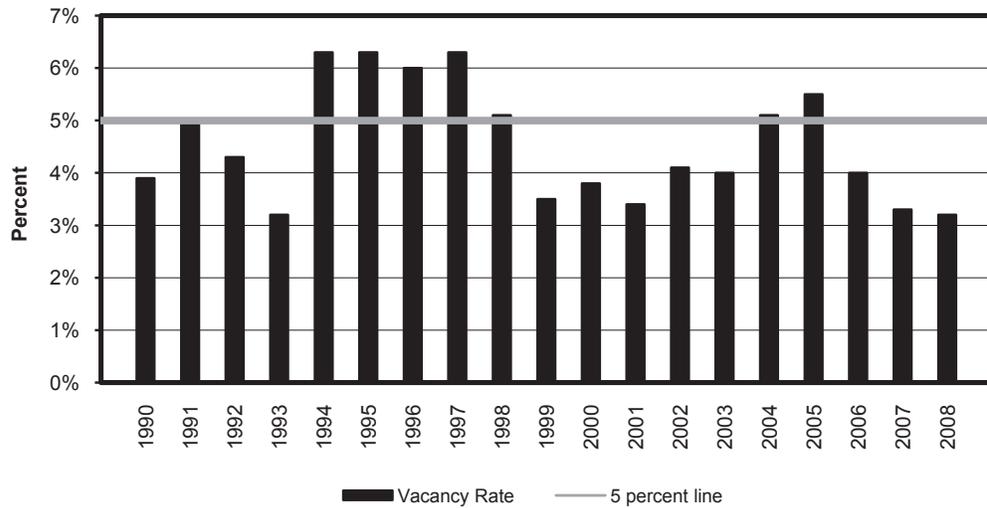
The Apartment Vacancy Rate Remains at or Around Five Percent

Outlook



**sunny, overall
positive results**

**Figure VIII-3
Apartment Vacancy Rate 1990-2008**



Source: Table VIII-3.

Assessment: The apartment vacancy rate in Thurston County has remained at or around five percent.

**Benchmark
22**

Key Observations:

Vacancy rate shows a cyclical pattern in Thurston County, hovering around the 5 percent mark.

In the early part of the 2000s during the nationwide recession, apartment vacancy rates were low, as very few new units were built. Vacancy rates began to increase in 2004 as new units came on the market, and interest rates continued to be low. In the last few years vacancy rates have dropped again.

Low vacancy rates suggest that pressure on existing apartment units is high, thereby driving up rents. High rates suggest that there is extra capacity on the market, which might drive down rents. A vacancy rate of five percent is generally regarded as a normal market rate.

New apartment complexes generally add a large number of units to the market in a short period of time, making vacancy rates fluctuate greatly. Low interest rates also generally correspond to high vacancy rates in apartments, as home ownership becomes more affordable.

For Further Information:

See Chapter III of The Profile, published annually by Thurston Regional Planning Council, and information from the Washington Center for Real Estate Research (<http://www.wcrer.wsu.edu/>).

Table VIII-1
Average Sale Price of Single-Family Homes and Median Household
Income, Thurston County, 1990-2007

Year	County Median Household Income	Average Sale Price of a Single-Family Home				
		Thurston County	Olympia	Tumwater	Lacey	
1990	\$33,137	\$91,568	\$95,300	\$101,840	\$78,622	
1991	\$34,846	\$101,403	\$110,686	\$113,180	\$85,673	
1992	\$36,667	\$111,258	\$119,247	\$121,456	\$98,600	
1993	\$37,754	\$126,318	\$137,281	\$139,175	\$114,906	
1994	\$38,924	\$131,574	\$139,642	\$138,737	\$123,225	
1995	\$39,952	\$135,744	\$176,404	\$142,510	\$121,275	
1996	\$41,475	\$140,406	\$157,562	\$146,616	\$125,314	
1997	\$43,772	\$145,082	\$165,302	\$145,694	\$127,952	
1998	\$45,797	\$144,963	\$159,974	\$142,505	\$129,245	
1999	\$46,975	\$152,030	\$169,804	\$152,119	\$136,150	
2000	\$50,527	\$160,606	\$174,397	\$160,956	\$142,209	
2001	\$51,632	\$163,989	\$175,627	\$167,846	\$142,664	
2002	\$51,301	\$171,360	\$190,644	\$178,806	\$153,204	
2003	\$50,983	\$188,628	\$206,995	\$189,534	\$168,047	
2004	\$51,111	\$209,165	\$227,605	\$228,632	\$194,668	
2005	\$55,766	\$252,451	\$284,052	\$262,078	\$238,647	
2006	\$57,431	\$282,585	\$307,935	\$286,549	\$266,082	
2007	\$60,209	\$298,290	\$319,933	\$307,272	\$280,692	
Average Annual Rate of Change 1990-2006						
	3.6%	#	7.2%	7.4%	6.7%	7.8%

Sources: Olympic Multiple Listing Service; Washington State Office of Financial Management.

Explanations: Thurston County data includes all jurisdictions.

Household income data for 2005 is a preliminary estimate.

Household income data for 2006 is a projection.

Thurston County includes all sales countywide; sales through the Olympic Multiple Listing service cover approximately 75-80 percent of County sales activity.

Table VIII-2
Housing Affordability Index and Mortgage
Rates, Thurston County, 1995-2008

First Quarter	All Buyers Index	First Time Buyers Index	Mortgage Rate
1995	124.3	76.8	8.12%
1996	135.1	81.5	7.34%
1997	131.6	79.9	7.72%
1998	145.6	87.4	7.22%
1999	155.0	92.5	6.95%
2000	136.8	80.9	8.02%
2001	143.0	85.4	7.21%
2002	148.7	89.2	6.71%
2003	154.1	92.7	5.90%
2004	170.2	99.4	5.64%
2005	141.9	83.7	5.77%
2006	111.6	65.9	6.39%
2007	110.1	65.3	6.42%
2008	109.6	65.0	6.03%

Source: Washington Center for Real Estate Research.

Explanation: Housing Affordability Index measures the ability of a middle income family to carry the mortgage payments on a median price home. When the index is 100 there is a balance between the family's ability to pay and the cost. Higher indexes indicate housing is more affordable. First-time buyer index assumes the purchaser's income is 70% of the median household income. Home purchased by first-time buyers is 85% of area's median price. All loans are assumed to be 30 year loans. All buyer index assumes 20% down payment. First-time buyer index assumes 10% down. It is assumed 25% of income can be used for principal and interest payments. Data includes all jurisdictions within Thurston County.

**Table VIII-3
Apartment Rents and
Vacancies in Thurston County
1990-2008**

Year	Average Rent	Vacancy Rate
1990	\$408	3.9%
1991	\$451	5.0%
1992	\$470	4.3%
1993	\$501	3.2%
1994	\$523	6.3%
1995	\$515	6.3%
1996	\$533	6.0%
1997	\$547	6.3%
1998	\$550	5.1%
1999	\$556	3.5%
2000	\$578	3.8%
2001	\$590	3.4%
2002	\$615	4.1%
2003	\$662	4.0%
2004	\$674	5.1%
2005	\$700	5.5%
2006	\$719	4.0%
2007	\$737	3.3%
2008	\$786	3.2%

Source: Data from 1990-2000 are from Dupre + Scott Apartment Advisors; data from 2001-2008 are from Washington Center for Real Estate Research.