

# **Washington State Economic Climate Study**



**Office of the Forecast Council  
September 2003  
Volume VIII**

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# Washington State Economic Climate Study

Prepared by the  
Office of the Forecast Council

September 2003  
Volume VIII

**Washington State**  
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## **Editor's Note**

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The 1996 Legislature passed Substitute House Bill 2758 creating the Economic Climate Council (ECC). The ECC is responsible for selecting a series of benchmarks that characterize the competitive environment of the state. The benchmarks are indicators of the quality of life, education and skills of the work force, infrastructure, and the costs of doing business.

To ensure public participation, the ECC established an advisory committee of six members to assist in the selection of the benchmarks. The advisory committee, along with staff of the House of Representatives, Senate, Office of Financial Management and other state agencies, including the staff of the Office of the Forecast Council, assisted in the preparation of the first report. The Economic and Revenue Forecast Council continues to function as the ECC. Each year the Office of the Forecast Council updates and publishes the Climate Study. This is the eighth annual Economic Climate Study.

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# Executive Summary

This report updates the State of Washington's Economic Climate Study, last published September 2002. The study provides information about Washington's competitive standing in relation to the other U.S. states. It is based on the premise that, while improving productivity is primarily the domain of Washington's business sector, appropriate state and local policies, particularly those relating to education, public safety, infrastructure, cost of doing business, and the environment, are essential to promote higher standards of living.

The benchmarks considered in this study focus on the four themes specified in the Substitute House Bill 2758, RCW 82.33A: quality of life, education and skills of the workforce, infrastructure, and the cost of doing business. These guidelines are specified in the legislation because state and local policies can affect their overall performance. In addition, this study also presents economic performance indicators related to income, employment, population, research and development expenditures, and foreign trade. Overall, forty-one indicators are presented.

## **Recent Performance**

In this year's climate study, thirty-eight of the forty-one benchmarks and indicators were updated. In terms of the number of indicators showing improvement, Washington fared well. Of the thirty-six updated benchmarks and indicators that include ranks relative to the other states, Washington's rank improved in twenty-three cases, regressed in eleven, and stayed the same in two. Of the thirty-seven updated benchmarks and indicators that indicate year-to-year performance, the state improved in twenty-six cases, worsened in ten and stayed the same in one. Three indicators and benchmarks were not updated due to the unavailability of updated data at the time of publication.

Were it not for the specific circumstances of the national recession that began in March 2001, Washington would have fared even better in this year's study, as seven out of the eleven declines in rank and seven out of the ten performance declines were in the category of Economic Performance. Due to its higher concentration of information technology/"dot-com" jobs, Washington's downturn began sooner than that of many other states, as the downturn in these fields began well before the March peak. In addition, the high rates of employment and income growth that the boom in these fields brought in the years prior to 2001 worsened the state's subsequent employment declines and brought income to levels difficult to grow from. To make matters worse, just as the national recovery began in November 2001 (according to the National Bureau of Economic Research), layoffs began in the state's aerospace sector, with a loss of fourteen thousand jobs between December of 2001 and 2002. Regardless of the recent economic woes, however, Washington's levels of income and earnings still rank highly in comparison to the other states and the national averages.

While Washington's Economic Performance rankings suffered in this year's study, its performance in the other study categories showed broad improvement. The state's performance increased in all of

the Quality of Life benchmarks that were updated this year and its rank only decreased in one. Its performance and rank also increased in all but one of the updated Education and Skills of the Workforce benchmarks, and the state only showed one decline in rank and performance in each of the Infrastructure and Cost of Doing Business categories

The following table is a snapshot of Washington's performance and ranking compared to last year's climate study. The analysis of the Washington's economic climate relative to the other forty-nine states and the nation as a whole begins on page six. The description of each indicator and benchmark is followed by their associated tables and charts. In each case, the ranking is from best to worst with one being the best.



<b>Indicator/Benchmark</b>	<b>Performance</b>	<b>Rank</b>
<i><b>Economic Performance</b></i>		
Total Employment Growth Rate	Worsened	Worsened
Median Household Income	Worsened	Worsened
Per Capita Personal Income	Improved	No Change
Per Capita Personal Income Growth Rate	Improved	Improved
High Wage Industries' Share of Total Employment Growth	No Update	No Update
Annual Earnings Per Job	Improved	Worsened
Annual Earnings Per Job Growth Rate	Worsened	Worsened
Migration Rate	Worsened	Worsened
Foreign Exports	Worsened	No Change
Foreign Exports Excluding Transportation Equipment	Worsened	Worsened
Per Capita University Research and Development Spending	Improved	Worsened
Per Capita Industry Research and Development Spending	Improved	Improved
Per Capita Total Research and Development Spending	Improved	Improved
Unemployment Rate	Worsened	Improved
<i><b>Quality of Life</b></i>		
Homicide	Improved	Improved
Violent Crime	Improved	Improved
Arrest Rates for Violent Crime	Improved	Improved
Air Quality	Improved	Worsened
Drinking Water	Improved	Improved
Toxins Released	Improved	Improved
State Health Index	Improved	Improved
State Parks and Recreation Areas	Improved	Improved
State Arts	Improved	Improved
Public Library Service	Improved	Improved
Housing Opportunity Index	No Update	No Update
<i><b>Education and Skills of the Workforce</b></i>		
Fourth Grade Reading	Improved	Improved
Fourth Grade Math	No Update	No Update
Tenth Grade WASL Scores	Improved	n/a
Student to Teacher Ratio	Improved	Improved
Education Attainment: Completed Four Years of High School or More	Improved	Improved
Education Attainment: Completed Bachelor's Degree or More	Improved	Improved
Total Public Two and Four Year Combined Participation Rate	Worsened	Worsened
Value Added per Hour of Labor in Manufacturing	Improved	Improved
<i><b>Infrastructure</b></i>		
Interstate Miles in Poor Condition	Worsened	Worsened
Urban Roadway Congestion Index	No Change	Improved
FAA Air Traffic	Improved	Improved
<i><b>Cost of Doing Business</b></i>		
State and Local Tax Collections Per \$1,000 Personal Income	Improved	Improved
Unemployment Insurance Costs	Worsened	Worsened
Workers' Compensation Premium Costs	Improved	Improved
Electricity Costs	Improved	Improved
Average Wage by Sector	n/a	n/a

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# **Economic Performance**

# Total Employment Growth Rate

The longest expansionary period on record for the U.S. economy ended in March 2001, exactly ten years after it began. Concurrent with the end of the expansion, national payroll employment began to decline as well. This decline has continued into 2002. While half of the states managed to avoid a decline in their annual employment from 2000 to 2001, only ten states avoided such an employment decline in 2002.

As the Boeing Company is one of Washington's largest employers, the state's employment growth rate has historically followed the fluctuations of the aerospace cycle. The period from 1999 through 2001, however, was more strongly influenced by the information technology/"dot-com" boom and subsequent bust. Strong growth in these sectors managed to keep the state's employment growth near or above the national average rate in 1999 and 2000 even though aerospace jobs declined by over 20 percent during the same period. This boom, however, ended in Washington in January 2001. As the current decline in aerospace employment did not begin in earnest until December of that year, the 2001 employment decline was due mainly to the information technology bust as well as declines in construction and manufacturing other than aerospace. Declines in all of these sectors continued into 2002, when they were augmented by the loss of 14,000 aerospace jobs between December of 2001 and 2002. These losses increased the state's employment decline to 1.5 percent for the year, ranking 41<sup>st</sup> among the states. Despite the state's higher than average employment losses for the last two years, however, its average employment growth rate for the years 1998 to 2002 of 1.1 percent was very close to the national average of 1.2 percent, ranking 26<sup>th</sup> among the states.

Total Washington Payroll Employment					
1998	1999	2000	2001	2002	
2,594,900	2,648,700	2,711,300	2,697,800	2,656,800	

Chart 1  
Total Employment Growth Rate

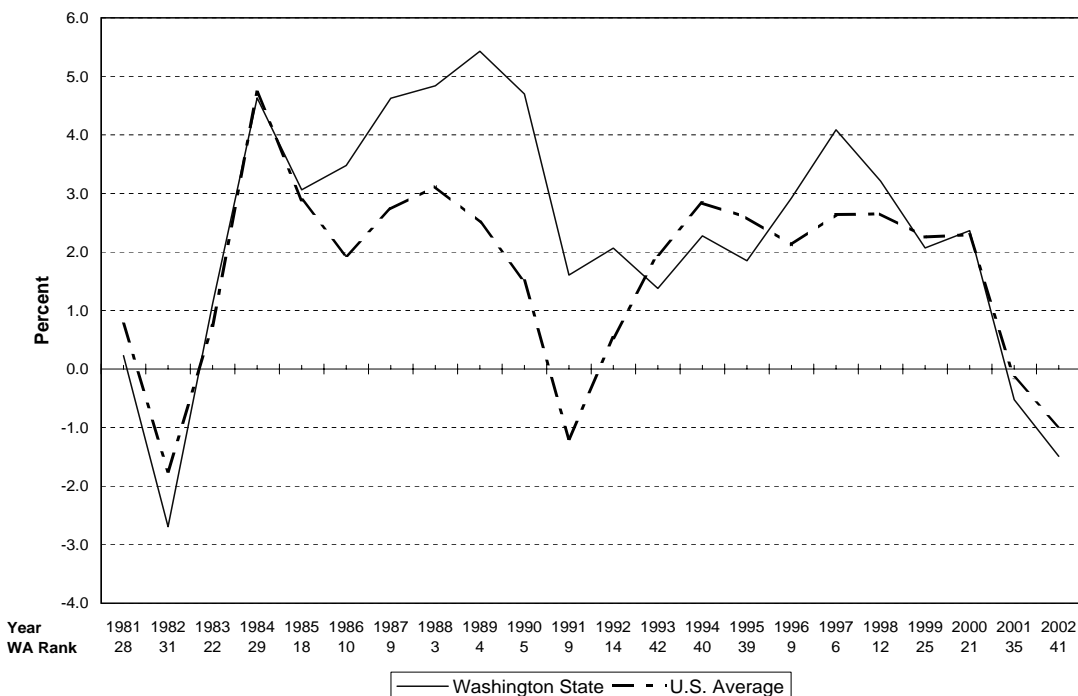


Table 1  
 Economic Performance  
**Total Employment Growth Rate**  
 (Percent)

	1998	1999	2000	2001	2002	1998-02
Alabama	1.7	1.1	0.6	-1.2	-1.2	0.2
Alaska	2.3	1.0	2.2	1.9	2.2	1.9
Arizona	4.5	4.3	3.7	1.0	-0.0	2.7
Arkansas	1.6	1.7	1.5	-0.4	-0.5	0.8
California	3.6	2.9	3.5	0.8	-0.9	2.0
Colorado	3.9	3.6	3.8	0.6	-1.9	2.0
Connecticut	1.9	1.6	1.4	-0.7	-0.8	0.7
Delaware	3.2	3.2	1.7	-0.1	-1.5	1.3
Florida	3.5	2.9	3.7	1.3	0.5	2.4
Georgia	3.5	3.0	2.5	-0.2	-1.0	1.6
Hawaii	-0.1	0.7	3.0	0.7	0.1	0.9
Idaho	2.3	3.3	3.8	1.5	-0.1	2.2
Illinois	2.2	1.0	1.5	-0.8	-1.7	0.4
Indiana	2.1	1.8	1.0	-2.2	-1.4	0.2
Iowa	2.5	1.8	0.7	-0.9	-1.3	0.6
Kansas	3.5	1.1	1.3	0.2	-0.7	1.1
Kentucky	2.4	2.4	1.6	-1.1	-1.0	0.9
Louisiana	2.1	0.4	1.2	-0.1	-0.9	0.5
Maine	2.8	3.0	2.9	0.8	-0.3	1.8
Maryland	2.5	2.7	2.7	0.7	0.2	1.8
Massachusetts	2.2	1.8	2.7	0.2	-2.4	0.9
Michigan	1.4	1.6	2.0	-2.5	-1.8	0.1
Minnesota	2.6	2.3	2.4	0.2	-1.1	1.3
Mississippi	2.4	1.7	0.0	-2.0	-0.3	0.4
Missouri	1.7	1.6	0.8	-0.8	-1.6	0.3
Montana	2.2	1.9	1.9	1.1	1.0	1.6
Nebraska	2.6	1.9	1.8	0.5	-0.8	1.2
Nevada	3.9	6.2	4.5	2.4	-0.2	3.4
New Hampshire	3.3	2.9	2.7	0.8	-1.4	1.6
New Jersey	2.1	2.6	2.4	0.1	-0.1	1.4
New Mexico	1.6	1.4	2.1	1.7	1.2	1.6
New York	2.1	2.7	2.1	-0.5	-1.8	0.9
North Carolina	3.0	2.6	1.6	-1.0	-1.4	1.0
North Dakota	1.7	1.4	1.2	0.6	-0.0	1.0
Ohio	1.7	1.5	1.1	-1.5	-1.7	0.2
Oklahoma	3.5	1.4	1.9	1.0	-1.5	1.3
Oregon	1.7	1.5	2.0	-0.8	-1.3	0.6
Pennsylvania	1.6	1.7	1.9	-0.2	-0.5	0.9
Rhode Island	1.8	1.6	2.4	0.4	0.1	1.3
South Carolina	3.7	2.7	1.6	-1.9	-0.8	1.0
South Dakota	2.3	2.8	1.2	0.2	-0.2	1.3
Tennessee	2.1	1.8	1.6	-1.5	-0.8	0.6
Texas	3.9	2.5	3.0	0.9	-1.0	1.8
Utah	3.0	2.5	2.6	0.5	-0.8	1.6
Vermont	2.0	2.3	2.4	1.1	-0.7	1.4
Virginia	2.7	2.8	3.1	0.0	-0.6	1.6
<b>Washington</b>	<b>3.2</b>	<b>2.1</b>	<b>2.4</b>	<b>-0.5</b>	<b>-1.5</b>	<b>1.1</b>
West Virginia	1.6	0.9	1.3	-0.1	-0.3	0.7
Wisconsin	2.3	2.4	1.8	-0.7	-1.3	0.9
Wyoming	1.7	2.1	2.7	2.5	0.9	2.0
U.S. Average	2.7	2.3	2.3	-0.1	-1.0	1.2
<b>Washington's Rank</b>	<b>12</b>	<b>25</b>	<b>21</b>	<b>35</b>	<b>41</b>	<b>26</b>

U.S. Bureau of Labor Statistics, June 2003. ([www.bls.gov](http://www.bls.gov))

# Median Household Income

A state's median household income is the level of income (before taxes) at which exactly half of that state's households earn more than that amount and half earn less. While it is related to average or per capita household income, an increase in average household income does not necessarily mean that median household income will increase and vice versa. Median income measures offer the advantage over average measures that they are not upwardly biased by the income levels of the highest-income households. Typically, the average or per capita household income of a state is higher than the median.

Median household income estimates for the states are produced annually by the U.S. Bureau of the Census and are published in Money Income in the United States. These estimates are derived from the annual Current Population Survey. As this survey's primary purpose, however, is to arrive at national income and demographic numbers, estimates for individual states have substantial margins of error. To minimize these errors, the Census Bureau reports and recommends using two or three year moving averages for state median household income estimates. The resulting margins of error are reported by the Census Bureau and should be taken into account when making year-to-year or state-to-state comparisons. The 90 percent confidence interval for Washington's 1999-2001 median household income estimate is plus or minus \$1,108 and the interval for the years 1998-2000 is plus or minus \$1,239.

While Washington's median household income estimate of \$44,835 for 1999-2001 was lower than that of the previous period, it was still substantially above the national median of \$42,873. The state's average median income for the years 1997-2001 (in year 2001 dollars) of \$46,957 was also well above the national median for that period of \$42,385, ranking 13<sup>th</sup>. Washington's median household income has been higher than that of the nation for all of the years that the Current Population Survey has reported state estimates.

Chart 2  
Median Household Income

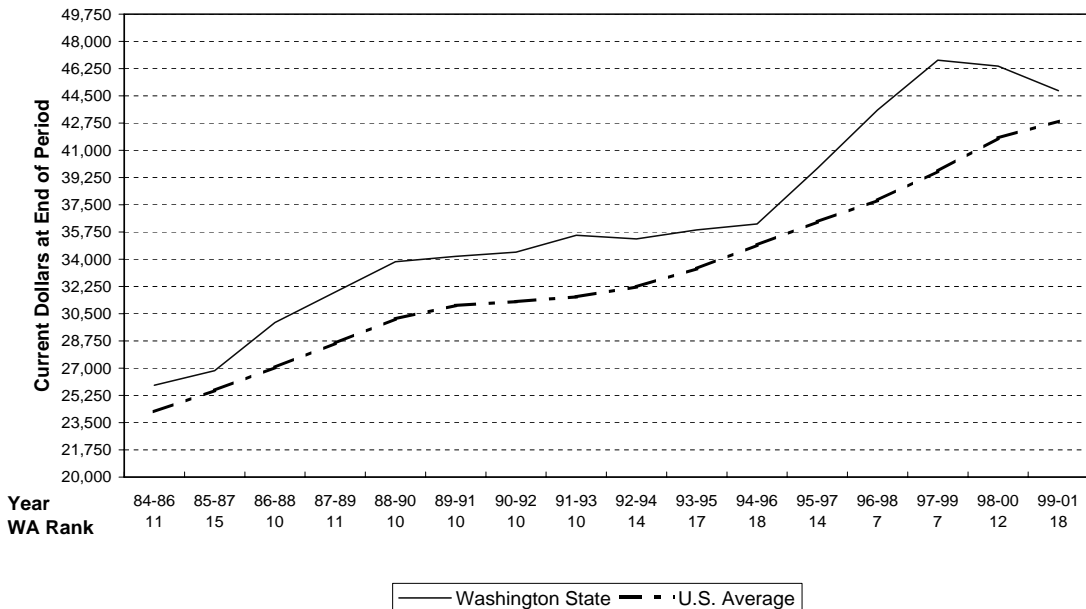


Table 2  
Economic Performance  
**Median Household Income**  
(Current Dollars at End of Period)

	1995-97	1996-98	1997-99	1998-00	999-2001	1997-2001*
Alabama	30,103	33,394	35,478	36,268	36,693	36,449
Alaska	50,829	51,421	51,046	52,492	55,426	54,438
Arizona	32,535	34,402	36,337	39,653	40,965	40,222
Arkansas	27,031	27,471	28,398	30,082	31,798	30,994
California	39,458	40,522	42,262	45,070	47,243	46,009
Colorado	42,664	44,349	46,950	49,216	50,053	49,774
Connecticut	43,151	44,978	47,997	50,647	52,887	51,612
Delaware	40,009	42,000	44,627	47,438	50,301	48,673
Florida	31,708	33,234	35,081	37,305	38,141	37,454
Georgia	35,272	36,553	39,003	41,481	42,508	42,190
Hawaii	42,931	41,932	42,864	45,657	49,232	46,680
Idaho	34,441	35,554	36,023	37,760	38,310	38,308
Illinois	40,613	42,065	44,459	46,649	47,578	47,115
Indiana	36,667	38,580	40,635	41,315	41,921	42,139
Iowa	35,054	35,276	38,047	41,560	42,255	41,282
Kansas	33,919	35,867	37,618	38,393	41,097	40,010
Kentucky	32,668	34,633	35,226	36,826	37,184	37,783
Louisiana	31,217	32,317	33,218	32,500	33,194	34,048
Maine	34,641	34,989	36,459	39,815	38,733	39,110
Maryland	44,970	47,711	50,630	52,846	55,013	53,602
Massachusetts	41,016	42,017	43,697	45,769	49,018	47,951
Michigan	39,076	40,639	43,066	46,034	46,929	45,951
Minnesota	41,482	44,579	46,802	50,088	52,804	50,821
Mississippi	27,912	28,592	30,628	31,963	33,305	32,034
Missouri	36,093	37,640	40,166	44,247	43,884	43,624
Montana	29,262	30,348	31,280	32,553	32,929	32,949
Nebraska	34,722	35,661	37,338	39,029	42,518	40,449
Nevada	38,760	39,751	40,882	43,262	45,493	44,337
New Hampshire	40,854	42,511	44,891	48,029	50,866	48,935
New Jersey	47,612	49,303	50,234	51,739	52,137	52,861
New Mexico	27,707	29,386	31,981	34,035	34,599	34,255
New York	35,601	36,845	38,479	40,822	42,157	41,500
North Carolina	35,312	36,407	37,057	38,413	39,040	39,232
North Dakota	31,496	31,717	32,238	33,769	35,830	34,972
Ohio	35,928	37,005	38,970	41,972	42,631	42,218
Oklahoma	29,042	31,357	33,311	34,020	34,554	35,022
Oregon	37,287	37,922	39,768	41,915	42,701	42,325
Pennsylvania	36,525	37,791	38,938	41,394	42,320	42,509
Rhode Island	36,623	38,150	40,213	43,428	44,825	43,608
South Carolina	33,446	34,692	35,376	36,671	38,362	37,724
South Dakota	30,349	31,205	33,438	35,986	38,407	36,682
Tennessee	30,896	32,397	34,393	35,874	36,542	36,042
Texas	34,216	35,254	37,320	39,296	40,547	40,148
Utah	39,694	42,073	45,257	46,539	48,378	47,611
Vermont	34,592	36,196	39,419	40,908	41,888	41,125
Virginia	40,405	42,572	44,884	47,701	49,085	48,947
<b>Washington</b>	<b>39,846</b>	<b>43,593</b>	<b>46,788</b>	<b>46,412</b>	<b>44,835</b>	<b>46,957</b>
West Virginia	26,505	26,950	28,420	29,217	30,342	30,020
Wisconsin	41,215	41,032	43,055	45,441	46,734	45,832
Wyoming	32,764	33,783	36,039	38,291	40,007	38,936
U.S. Average**	36,399	37,779	39,657	41,789	42,873	42,385
<b>Washington's Rank</b>	<b>14</b>	<b>7</b>	<b>7</b>	<b>12</b>	<b>18</b>	<b>13</b>

Source: U.S. Department of Commerce, Bureau of the Census

\* Average of yearly estimates in 2001 dollars

\*\*U.S. average includes the District of Columbia

# Per Capita Personal Income

The Bureau of Economic Analysis defines personal income as the sum of earnings, dividends, interest, rent, and transfer payments. Per capita personal income is derived by dividing the total personal income of a region by its population. In 2002, Washington had a total personal income of \$198.32 billion and a population of 6.07 million, for a per capita personal income of \$32,677. This level of income ranked 13<sup>th</sup> among the states and was well above the national average of \$30,941. While Washington's per capita personal income increased \$701 from 2001 to 2002, its ranking among the states stayed constant at 13th.

Most of Washington's personal income derives from earnings, which consists mainly of wages and salaries but also includes proprietor's income and other labor income. In 2002, earnings by Washington residents net of personal contributions to social insurance totaled \$133.68 billion, or 67.4 percent of total personal income, according to the annualized results from 2002 quarterly personal income.\* Income from transfer payments was \$27.71 billion, and income from dividends, interest, and rent was \$36.92 billion. These income sources represented 14.0 and 18.6 percent of total personal income respectively.

\*The 2002 figures are the average of the Bureau of Economic Analysis' quarterly preliminary 2002 figures, which will be finalized in April of 2004

Chart 3  
Per Capita Personal Income

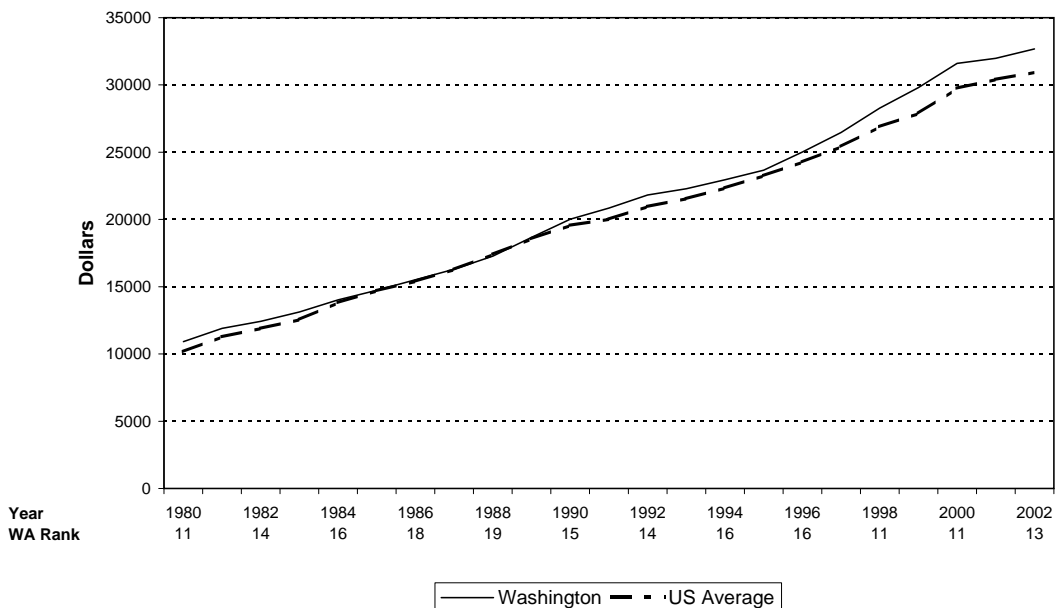




Table 3  
Economic Performance  
**Per Capita Personal Income**  
(Dollars)

	1998	1999	2000	2001	2002	1998-2002
Alabama	21,904	22,668	23,694	24,477	25,128	23,574
Alaska	27,645	28,170	29,960	31,027	32,151	29,791
Arizona	23,118	23,939	25,361	25,878	26,183	24,896
Arkansas	20,479	21,087	22,000	22,750	23,512	21,966
California	28,240	29,712	32,363	32,655	32,996	31,193
Colorado	28,764	30,380	33,060	33,455	33,276	31,787
Connecticut	37,108	38,560	41,446	42,377	42,706	40,439
Delaware	28,662	29,312	31,092	32,166	32,779	30,802
Florida	26,161	26,978	28,366	29,048	29,596	28,030
Georgia	25,447	26,536	28,103	28,523	28,821	27,486
Hawaii	26,201	26,957	28,354	29,034	30,001	28,109
Idaho	21,612	22,656	23,987	24,506	25,057	23,564
Illinois	29,505	30,246	32,297	32,990	33,404	31,688
Indiana	24,891	25,543	27,010	27,522	28,240	26,641
Iowa	24,555	24,989	26,540	27,225	28,280	26,318
Kansas	25,519	26,134	27,439	28,432	29,141	27,333
Kentucky	22,118	22,702	24,258	24,878	25,579	23,907
Louisiana	21,948	22,205	23,185	24,454	25,446	23,448
Maine	23,404	24,218	25,732	26,853	27,744	25,590
Maryland	30,455	31,851	34,060	35,279	36,298	33,589
Massachusetts	32,714	34,360	38,034	38,864	39,244	36,643
Michigan	26,860	27,906	29,408	29,629	30,296	28,820
Minnesota	29,092	30,194	32,231	33,059	34,071	31,729
Mississippi	19,635	20,082	20,920	21,653	22,372	20,932
Missouri	25,171	25,857	27,493	28,221	28,936	27,136
Montana	21,225	21,621	22,961	24,044	25,020	22,974
Nebraska	25,541	26,569	27,781	28,861	29,771	27,705
Nevada	28,069	28,655	29,794	30,128	30,180	29,365
New Hampshire	29,187	30,377	33,266	33,969	34,334	32,227
New Jersey	33,640	34,547	37,734	38,625	39,453	36,800
New Mexico	20,551	20,865	21,788	23,081	23,941	22,045
New York	31,478	32,638	35,041	35,878	36,043	34,216
North Carolina	24,661	25,468	26,939	27,308	27,711	26,417
North Dakota	22,716	23,046	24,990	25,798	26,982	24,706
Ohio	25,921	26,849	28,130	28,699	29,405	27,801
Oklahoma	21,930	22,551	24,007	24,945	25,575	23,802
Oregon	25,446	26,247	27,836	28,222	28,731	27,296
Pennsylvania	27,008	27,916	29,759	30,752	31,727	29,432
Rhode Island	26,837	27,645	29,257	30,256	31,319	29,063
South Carolina	22,115	22,914	24,209	24,840	25,400	23,896
South Dakota	23,453	24,576	25,815	26,566	26,894	25,461
Tennessee	24,101	25,014	26,290	26,808	27,671	25,977
Texas	25,398	26,244	27,992	28,472	28,551	27,331
Utah	21,594	22,203	23,410	24,033	24,306	23,109
Vermont	24,547	25,757	27,465	28,756	29,567	27,218
Virginia	27,968	29,246	31,210	32,338	32,922	30,737
<b>Washington</b>	<b>28,285</b>	<b>29,807</b>	<b>31,605</b>	<b>31,976</b>	<b>32,677</b>	<b>30,870</b>
West Virginia	20,234	20,682	21,821	22,862	23,688	21,857
Wisconsin	26,004	26,926	28,389	29,196	29,923	28,088
Wyoming	24,714	26,294	27,941	29,587	30,578	27,823
U.S. Average*	26,893	27,880	29,760	30,413	30,941	29,177
<b>Washington's Rank</b>	<b>11</b>	<b>10</b>	<b>11</b>	<b>13</b>	<b>13</b>	<b>11</b>

\*The U.S. Average includes Washington D.C., which makes it higher than the 50 State Average  
Source: Bureau of Economic Analysis, U.S. Department of Commerce, June 2, 2003

# Per Capita Personal Income Growth Rate

The growth rate of per capita personal income is affected by the growth rate of the components of total personal income as well as the growth rate of population. From 2001 to 2002, Washington total personal income grew by 3.5 percent while population grew at 1.4 percent. As a result, per capita personal income grew by 2.2 percent, which ranked 31<sup>st</sup> among the states. During the same period, U.S. total personal income grew by 2.8 percent while its population grew at 0.2 percent, for a per capita personal income growth rate of 1.5 percent.

In the period between 2001 and 2002, most of the difference between the growth rates of Washington and U.S. total personal income was the result of a growth increase in net earnings by place of residence.\* From 2001 to 2002, despite a 1.5% decrease in employment, Washington net earnings per capita grew at 0.9 percent while U.S. total earnings grew at a smaller 0.8 percent. Another contributing factor to the personal income increase was Washington's growth in transfer payments vis-à-vis the United States, which was a result of higher unemployment in the state. From 2001 to 2002, the United States experienced a 8.9 percent increase in per capita transfer payments, while Washington observed a much higher 12.9 percent increase. Washington's average per capita growth in personal income over the past five years is 4.3 percent, which is higher than the US average of 4.0 percent and is ranked 14<sup>th</sup> among the 50 states.

\*The 2002 figures are derived using the average of the Bureau of Economic Analysis' quarterly preliminary 2002 figures, which will be finalized in April of 2004.

Chart 4  
Per Capita Personal Income Growth Rate

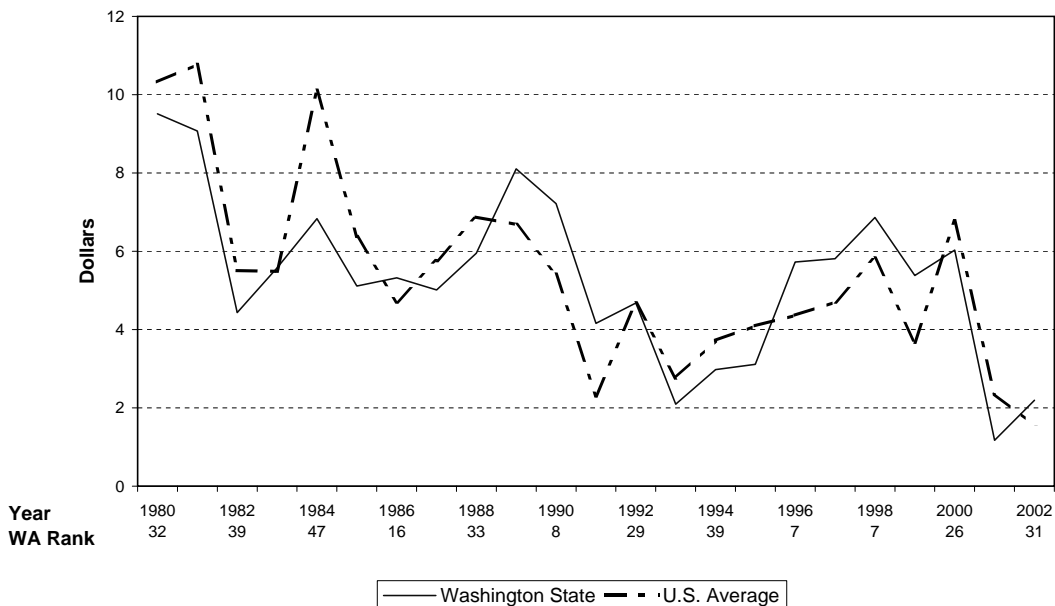


Table 4  
 Economic Performance  
**Per Capita Personal Income Growth Rate**  
 (Percent)

	1998	1999	2000	2001	2002	1998-02
Alabama	4.8	3.5	4.5	3.3	2.7	3.8
Alaska	2.8	1.9	6.4	3.6	3.6	3.6
Arizona	5.6	3.6	5.9	2.0	1.2	3.7
Arkansas	4.3	3.0	4.3	3.4	3.3	3.7
California	6.5	5.2	8.9	0.9	1.0	4.5
Colorado	6.3	5.6	8.8	1.2	-0.5	4.3
Connecticut	6.8	3.9	7.5	2.2	0.8	4.2
Delaware	6.9	2.3	6.1	3.5	1.9	4.1
Florida	5.2	3.1	5.1	2.4	1.9	3.6
Georgia	6.4	4.3	5.9	1.5	1.0	3.8
Hawaii	1.7	2.9	5.2	2.4	3.3	3.1
Idaho	5.2	4.8	5.9	2.2	2.2	4.1
Illinois	5.6	2.5	6.8	2.1	1.3	3.7
Indiana	6.3	2.6	5.7	1.9	2.6	3.8
Iowa	4.5	1.8	6.2	2.6	3.9	3.8
Kansas	5.5	2.4	5.0	3.6	2.5	3.8
Kentucky	5.4	2.6	6.9	2.6	2.8	4.1
Louisiana	5.1	1.2	4.4	5.5	4.1	4.1
Maine	5.7	3.5	6.3	4.4	3.3	4.6
Maryland	5.5	4.6	6.9	3.6	2.9	4.7
Massachusetts	6.3	5.0	10.7	2.2	1.0	5.0
Michigan	5.3	3.9	5.4	0.8	2.3	3.5
Minnesota	7.4	3.8	6.7	2.6	3.1	4.7
Mississippi	5.7	2.3	4.2	3.5	3.3	3.8
Missouri	5.2	2.7	6.3	2.6	2.5	3.9
Montana	6.6	1.9	6.2	4.7	4.1	4.7
Nebraska	5.8	4.0	4.6	3.9	3.2	4.3
Nevada	4.8	2.1	4.0	1.1	0.2	2.4
New Hampshire	7.2	4.1	9.5	2.1	1.1	4.8
New Jersey	6.1	2.7	9.2	2.4	2.1	4.5
New Mexico	4.6	1.5	4.4	5.9	3.7	4.0
New York	6.1	3.7	7.4	2.4	0.5	4.0
North Carolina	5.1	3.3	5.8	1.4	1.5	3.4
North Dakota	10.7	1.5	8.4	3.2	4.6	5.7
Ohio	4.6	3.6	4.8	2.0	2.5	3.5
Oklahoma	5.7	2.8	6.5	3.9	2.5	4.3
Oregon	4.4	3.1	6.1	1.4	1.8	3.3
Pennsylvania	5.4	3.4	6.6	3.3	3.2	4.4
Rhode Island	4.7	3.0	5.8	3.4	3.5	4.1
South Carolina	5.3	3.6	5.7	2.6	2.3	3.9
South Dakota	7.2	4.8	5.0	2.9	1.2	4.2
Tennessee	5.6	3.8	5.1	2.0	3.2	3.9
Texas	6.9	3.3	6.7	1.7	0.3	3.8
Utah	4.8	2.8	5.4	2.7	1.1	3.4
Vermont	6.6	4.9	6.6	4.7	2.8	5.1
Virginia	6.0	4.6	6.7	3.6	1.8	4.5
<b>Washington</b>	<b>6.9</b>	<b>5.4</b>	<b>6.0</b>	<b>1.2</b>	<b>2.2</b>	<b>4.3</b>
West Virginia	4.6	2.2	5.5	4.8	3.6	4.1
Wisconsin	6.2	3.5	5.4	2.8	2.5	4.1
Wyoming	5.8	6.4	6.3	5.9	3.3	5.5
U.S. Average*	5.8	3.7	6.8	2.4	1.5	4.0
<b>Washington's Rank</b>	<b>7</b>	<b>3</b>	<b>26</b>	<b>47</b>	<b>31</b>	<b>14</b>

\*The U.S. Average includes Washington D.C.

Source: Bureau of Economic Analysis, U.S. Department of Commerce, June 12, 2003

# High Wage Industries' Share of Total Employment Growth

(Not updated due to unavailability of data)

Washington's high wage employment growth is highly correlated to the aerospace and technology sectors. Washington has historically ranked moderately well in the area of high wage employment growth. Aerospace expansion coupled with continued growth in software boosted state performance between 1996 and 1998; 1996-97 was an exceptional period with 50.4 percent of job growth occurring in high wage sectors. This expansion, however, reversed itself over the next two years as average aerospace employment declined 12 percent in 1998-99 and 13 percent in 1999-2000. As a result, Washington's 1999-2000 share of high wage industry employment growth as a percent of total employment growth was 19.6 percent, ranking 47<sup>th</sup> among the states and well below the national average of 35.2 percent.

Absent the aerospace cycle, Washington's recent rankings would have improved considerably. Nevertheless, over the five year period preceding 2000 Washington's high wage industries' share of total employment growth was above the national average, ranking 20<sup>th</sup> among the states.

Chart 5  
High Wage Industries' Share of Total Employment Growth

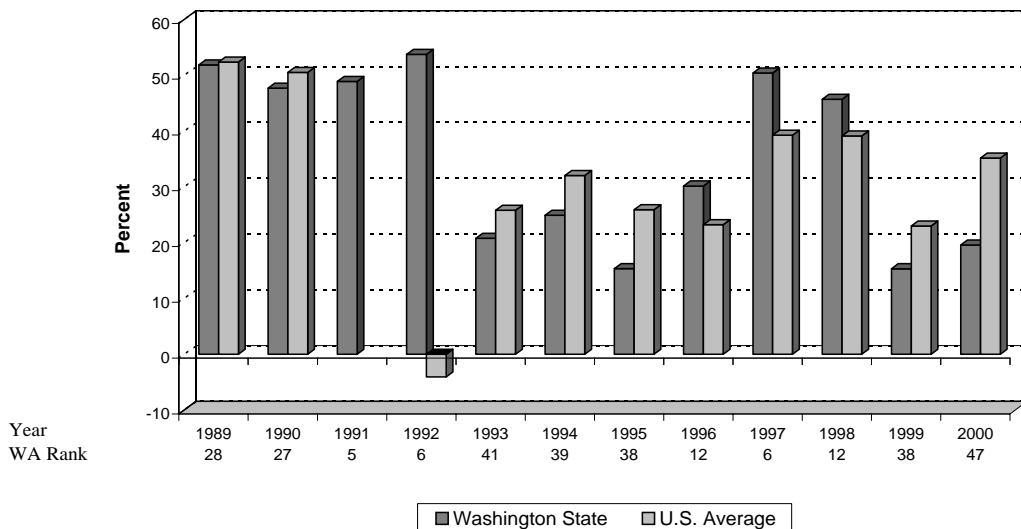


Table 5  
Economic Performance  
**High Wage Industries' Share of Total Employment Growth**  
(Percent)

	1995-96	1996-97	1997-98	1998-99	1999-00	1995-00
Alabama	17.6	36.3	39.5	5.5	46.2	30.2
Alaska	-32.8	19.9	-336.5	1008.2	44.1	20.4
Arizona	33.9	32.4	36.8	14.7	37.2	32.0
Arkansas	20.6	43.4	46.5	21.8	53.0	38.0
California	20.7	42.8	34.5	23.8	36.6	32.8
Colorado	22.2	34.7	40.6	29.9	29.9	32.6
Connecticut	-2.6	32.5	30.6	9.3	18.7	21.0
Delaware	11.1	35.1	57.4	23.2	37.0	31.9
Florida	33.3	36.6	33.8	22.9	25.7	29.8
Georgia	29.0	43.5	48.0	34.1	36.4	37.3
Hawaii	1789.3*	-124.7	23.4	-19.5	29.6	2.7
Idaho	36.7	41.3	23.8	60.9	38.5	40.5
Illinois	12.2	36.3	34.2	14.5	29.2	27.1
Indiana	15.9	37.9	36.2	26.5	30.3	31.9
Iowa	11.5	53.7	50.0	23.9	48.8	37.6
Kansas	16.5	47.5	41.6	22.3	44.8	38.6
Kentucky	33.0	44.0	59.4	31.8	44.1	43.7
Louisiana	33.1	38.5	39.8	-79.2	2.0	23.5
Maine	26.2	22.6	37.8	46.0	39.0	38.4
Maryland	13.2	36.9	37.9	25.3	32.5	31.3
Massachusetts	21.9	36.5	39.4	10.3	25.3	29.7
Michigan	27.8	32.8	32.7	23.4	42.6	33.7
Minnesota	38.9	44.5	31.3	40.1	39.0	39.8
Mississippi	22.5	28.8	56.9	9.1	36.1	31.3
Missouri	39.9	45.4	33.1	26.2	28.7	37.8
Montana	12.9	29.5	34.8	38.5	36.1	31.6
Nebraska	12.6	49.7	46.7	28.6	46.0	37.3
Nevada	26.8	27.1	38.2	21.0	31.3	28.5
New Hampshire	35.6	36.7	37.3	26.4	31.9	34.1
New Jersey	1.2	40.2	39.7	28.0	38.9	35.0
New Mexico	15.2	36.8	21.5	-1.0	40.8	27.7
New York	-18.6	37.1	33.1	26.1	32.6	29.0
North Carolina	39.3	42.2	49.1	36.7	55.3	43.4
North Dakota	25.5	67.8	33.1	55.2	57.6	43.2
Ohio	22.2	38.9	40.1	20.8	28.2	32.1
Oklahoma	14.0	48.6	41.9	-4.4	34.8	33.6
Oregon	30.9	40.4	51.3	21.7	37.6	37.1
Pennsylvania	-4.1	40.8	34.1	21.6	26.9	28.1
Rhode Island	19.2	54.2	40.4	24.4	35.2	37.5
South Carolina	26.0	39.0	53.9	46.0	72.1	48.6
South Dakota	13.4	64.2	36.7	41.3	37.6	38.6
Tennessee	30.1	31.6	43.2	28.9	26.7	33.0
Texas	29.4	44.4	44.5	15.0	39.9	37.5
Utah	33.3	35.7	41.2	21.1	24.3	33.5
Vermont	7.1	22.8	30.7	49.3	46.7	34.3
Virginia	22.5	24.4	33.6	27.9	44.6	31.7
<b>Washington</b>	<b>30.2</b>	<b>50.4</b>	<b>45.7</b>	<b>15.3</b>	<b>19.6</b>	<b>36.3</b>
West Virginia	14.6	28.7	29.9	-34.6	18.6	20.5
Wisconsin	29.4	43.1	47.9	23.5	36.9	38.2
Wyoming	0.4	81.9	40.8	21.5	57.0	41.1
U.S. Average	23.3	39.3	39.1	23.0	35.2	33.4
<b>Washington's Rank</b>	<b>12</b>	<b>6</b>	<b>12</b>	<b>38</b>	<b>47</b>	<b>20</b>

\* Total employment growth rate was negative.

Source: Washington State Office of the Forecast Council based on personal income data provided by the U.S. Department of Commerce, Bureau of Economic Analysis, May 2002.

# Annual Earnings Per Job

The Bureau of Economic Analysis defines earnings as salary income, other labor income, and proprietors' income. Historically, Washington has ranked high in annual earnings per job due to an industry mix that favors high wage employment. The state has ranked in the top ten states for annual earnings per job in four out of the last five years of this benchmark.

Washington's average annual earnings per job increased to \$38,619 in 2001, up \$370 from 2000. Washington's national rank declined from 7<sup>th</sup> to 9<sup>th</sup>.

## 2001 Annual Earnings Per Job Top 10 States

	2001	Rank
New York	49073	1
Connecticut	48152	2
New Jersey	46490	3
Massachusetts	45595	4
California	41890	5
Illinois	40541	6
Delaware	39144	7
Maryland	39077	8
<b>Washington</b>	<b>38619</b>	<b>9</b>
Colorado	38374	10

Chart 6  
Annual Earnings Per Job

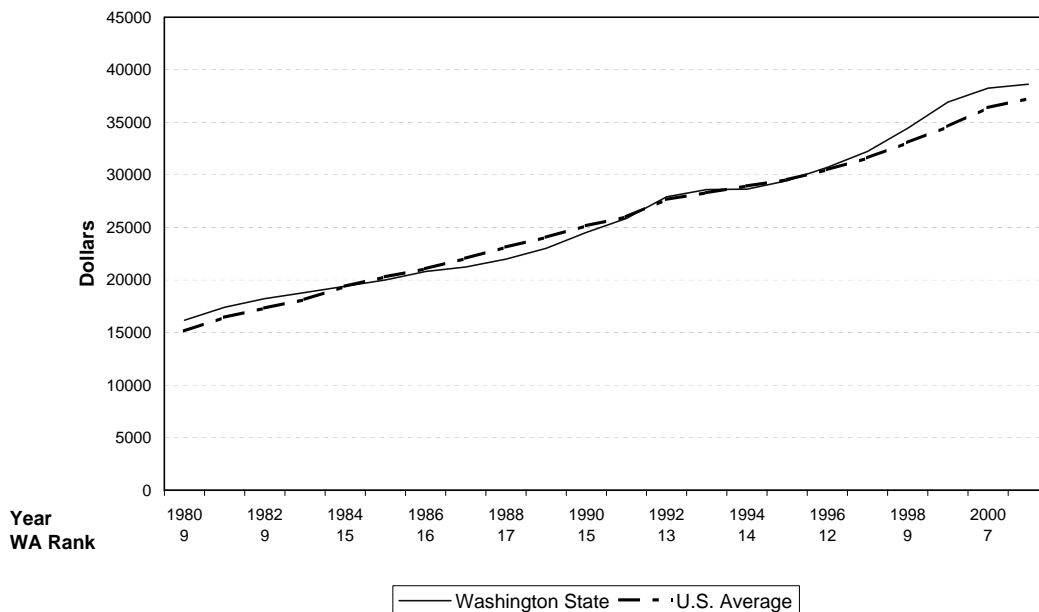


Table 6  
Economic Performance  
**Annual Earnings Per Job**  
(Dollars)

	1997	1998	1999	2000	2001	1997-01
Alabama	26,933	27,831	28,999	29,758	30,935	28,891
Alaska	33,572	34,211	34,944	35,808	36,908	35,089
Arizona	28,439	29,933	31,350	33,095	33,925	31,348
Arkansas	24,241	25,029	26,204	26,890	27,674	26,008
California	35,060	36,514	38,539	41,651	41,890	38,731
Colorado	30,707	32,465	34,951	37,585	38,374	34,816
Connecticut	40,083	42,187	44,268	46,754	48,152	44,289
Delaware	33,134	34,552	36,164	37,394	39,144	36,078
Florida	28,098	29,260	30,487	31,720	32,643	30,442
Georgia	30,999	32,520	34,412	36,167	37,203	34,260
Hawaii	30,581	31,001	31,912	32,503	33,285	31,856
Idaho	24,523	25,458	27,108	28,146	28,527	26,752
Illinois	34,962	36,333	37,892	39,553	40,541	37,856
Indiana	28,231	29,560	30,574	31,609	32,389	30,473
Iowa	25,346	25,806	26,697	27,831	28,483	26,833
Kansas	26,247	27,232	28,520	29,334	30,181	28,303
Kentucky	26,037	27,056	28,134	29,407	30,399	28,207
Louisiana	27,438	28,496	28,900	29,569	30,718	29,024
Maine	25,054	25,913	27,039	27,746	28,752	26,901
Maryland	32,640	34,072	35,675	37,424	39,077	35,778
Massachusetts	36,927	38,867	41,321	44,958	45,595	41,534
Michigan	33,414	35,254	36,684	37,832	38,188	36,274
Minnesota	29,796	31,697	33,227	34,999	35,949	33,134
Mississippi	24,007	25,002	25,677	26,241	27,183	25,622
Missouri	28,028	29,082	30,171	31,614	32,525	30,284
Montana	21,350	22,350	23,295	23,887	24,816	23,140
Nebraska	26,306	27,074	28,170	28,711	29,586	27,969
Nevada	30,958	32,712	33,743	34,802	35,647	33,572
New Hampshire	29,496	31,137	32,648	34,960	35,698	32,788
New Jersey	39,943	41,882	43,483	45,899	46,490	43,539
New Mexico	25,659	26,657	27,512	28,338	29,702	27,574
New York	41,140	43,312	44,970	47,809	49,073	45,261
North Carolina	27,886	29,049	30,433	32,031	32,967	30,473
North Dakota	20,963	23,357	23,646	25,031	25,273	23,654
Ohio	29,943	31,067	32,251	33,206	33,935	32,080
Oklahoma	25,189	26,188	27,308	28,474	29,362	27,304
Oregon	28,254	29,366	30,940	32,419	32,744	30,745
Pennsylvania	31,996	33,530	34,667	35,979	36,943	34,623
Rhode Island	30,380	31,651	32,647	34,045	35,021	32,749
South Carolina	26,020	27,012	28,318	29,429	30,516	28,259
South Dakota	22,704	23,989	25,026	25,869	26,269	24,771
Tennessee	28,050	29,098	30,490	31,537	32,428	30,321
Texas	31,656	33,595	35,351	37,283	38,267	35,230
Utah	26,010	27,106	28,178	29,270	30,111	28,135
Vermont	24,843	25,809	27,124	28,347	29,457	27,116
Virginia	31,212	32,845	34,603	36,591	38,072	34,665
<b>Washington</b>	<b>32,234</b>	<b>34,435</b>	<b>36,915</b>	<b>38,249</b>	<b>38,619</b>	<b>36,090</b>
West Virginia	25,271	25,833	26,798	27,716	28,785	26,881
Wisconsin	27,524	28,917	30,091	31,004	31,872	29,882
Wyoming	24,471	25,009	26,514	27,413	28,665	26,414
U.S. Average	31,610	33,077	34,611	36,399	37,258	34,591
<b>Washington's Rank</b>	<b>11</b>	<b>9</b>	<b>7</b>	<b>7</b>	<b>9</b>	<b>8</b>

Source: US Department of Commerce, Bureau of Economic Analysis ([www.bea.gov](http://www.bea.gov))

# Annual Earnings Per Job Growth Rate

In 2001, the growth rate of annual earnings per job in Washington fell below the national average for the second straight year in a row. From 2000 to 2001, Washington earnings per job grew at a rate of 1.0 percent, ranking 47<sup>th</sup> among the states, while U.S. average earnings per job grew at 2.4 percent. During the four years prior to 2000, however, Washington's earnings growth handily outpaced that of the nation, ranking in the top ten for all four years and first in 1999. As a result, Washington's average annual growth rate in earnings per job for the years 1997-2001 remained above the national average, ranking 7<sup>th</sup> among the states.

Chart 7  
Annual Earnings Per Job Growth Rate

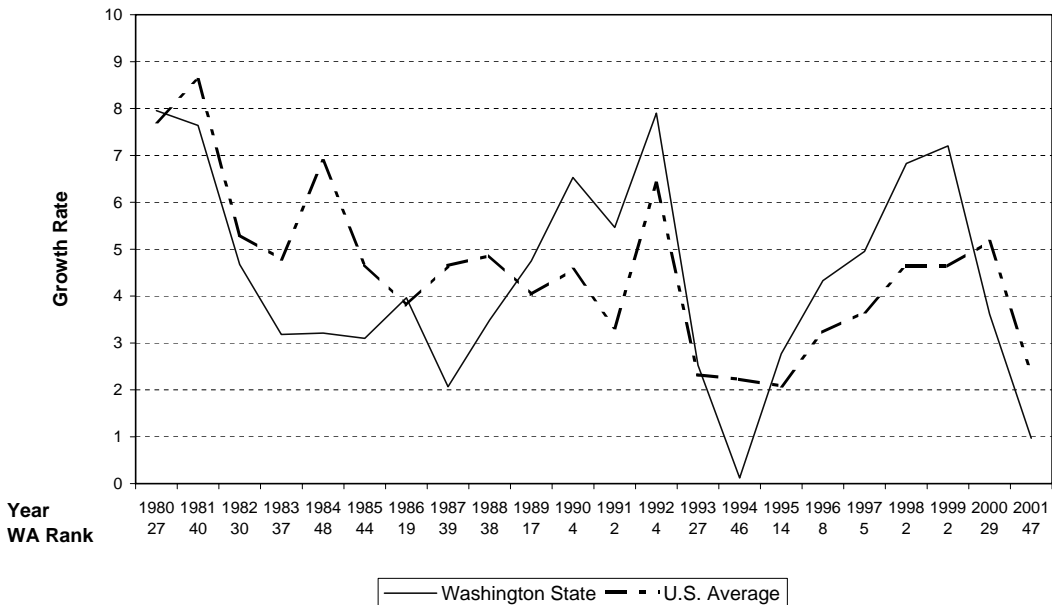




Table 7  
 Economic Performance  
**Annual Earnings Per Job Growth Rate**  
 (Dollars)

	1997	1998	1999	2000	2001	1997-01
Alabama	2.2	3.3	4.2	2.6	4.0	3.3
Alaska	0.9	1.9	2.1	2.5	3.1	2.1
Arizona	3.5	5.3	4.7	5.6	2.5	4.3
Arkansas	2.4	3.3	4.7	2.6	2.9	3.2
California	5.1	4.1	5.5	8.1	0.6	4.7
Colorado	4.6	5.7	7.7	7.5	2.1	5.5
Connecticut	6.0	5.2	4.9	5.6	3.0	5.0
Delaware	3.1	4.3	4.7	3.4	4.7	4.0
Florida	2.3	4.1	4.2	4.0	2.9	3.5
Georgia	4.1	4.9	5.8	5.1	2.9	4.6
Hawaii	1.7	1.4	2.9	1.9	2.4	2.0
Idaho	0.5	3.8	6.5	3.8	1.4	3.2
Illinois	4.2	3.9	4.3	4.4	2.5	3.9
Indiana	3.0	4.7	3.4	3.4	2.5	3.4
Iowa	2.8	1.8	3.5	4.2	2.3	2.9
Kansas	3.6	3.8	4.7	2.9	2.9	3.6
Kentucky	3.4	3.9	4.0	4.5	3.4	3.8
Louisiana	2.8	3.9	1.4	2.3	3.9	2.9
Maine	2.8	3.4	4.3	2.6	3.6	3.4
Maryland	3.6	4.4	4.7	4.9	4.4	4.4
Massachusetts	3.7	5.3	6.3	8.8	1.4	5.1
Michigan	2.5	5.5	4.1	3.1	0.9	3.2
Minnesota	3.1	6.4	4.8	5.3	2.7	4.5
Mississippi	2.9	4.1	2.7	2.2	3.6	3.1
Missouri	3.4	3.8	3.7	4.8	2.9	3.7
Montana	1.9	4.7	4.2	2.5	3.9	3.5
Nebraska	0.8	2.9	4.0	1.9	3.0	2.5
Nevada	1.8	5.7	3.2	3.1	2.4	3.2
New Hampshire	4.5	5.6	4.9	7.1	2.1	4.8
New Jersey	3.6	4.9	3.8	5.6	1.3	3.8
New Mexico	3.2	3.9	3.2	3.0	4.8	3.6
New York	3.4	5.3	3.8	6.3	2.6	4.3
North Carolina	3.4	4.2	4.8	5.3	2.9	4.1
North Dakota	-6.6	11.4	1.2	5.9	1.0	2.6
Ohio	3.9	3.8	3.8	3.0	2.2	3.3
Oklahoma	3.7	4.0	4.3	4.3	3.1	3.9
Oregon	3.5	3.9	5.4	4.8	1.0	3.7
Pennsylvania	2.9	4.8	3.4	3.8	2.7	3.5
Rhode Island	3.9	4.2	3.1	4.3	2.9	3.7
South Carolina	2.5	3.8	4.8	3.9	3.7	3.8
South Dakota	-0.3	5.7	4.3	3.4	1.5	2.9
Tennessee	2.9	3.7	4.8	3.4	2.8	3.5
Texas	5.7	6.1	5.2	5.5	2.6	5.0
Utah	3.8	4.2	4.0	3.9	2.9	3.7
Vermont	2.8	3.9	5.1	4.5	3.9	4.0
Virginia	4.0	5.2	5.4	5.7	4.0	4.9
Washington	<b>5.0</b>	<b>6.8</b>	<b>7.2</b>	<b>3.6</b>	<b>1.0</b>	<b>4.7</b>
West Virginia	2.0	2.2	3.7	3.4	3.9	3.0
Wisconsin	3.4	5.1	4.1	3.0	2.8	3.7
Wyoming	5.4	2.2	6.0	3.4	4.6	4.3
U.S. Average	3.7	4.6	4.6	5.2	2.4	4.1
<b>Washington's Rank</b>	<b>5</b>	<b>2</b>	<b>2</b>	<b>29</b>	<b>47</b>	<b>7</b>

Source: US Department of Commerce, Bureau of Economic Analysis ([www.bea.gov](http://www.bea.gov))

# Migration Rate

The U.S. Department of Commerce, Bureau of the Census publishes estimates of the annual increases in state populations that are attributable to natural increase (births minus deaths), domestic migration, and international migration. The effective dates of these estimates are normally July first of each year, with the migration and natural increase numbers showing the change from one July to the next.

Intercensal estimates of population changes from 1990 to 1999 rely on baseline data from the 1990 decennial census, while estimates for the current decade will rely on the 2000 census. The Census Bureau is currently working on revisions to the estimates from 1990-99 to make them consistent with both the 1990 and 2000 censuses. Until these revisions are made, the bureau will not release migration and natural increase estimates for the period from July 1999 to July 2000. It has, however, produced migration and natural increase estimates for the period from July 1, 2000 to July 1, 2001 and July 1, 2001 to July 1, 2002 based upon the 2000 census, which are presented in Table 8. Due to the gap in coverage, a 5-year average of migration rates and accompanying rank were not computed.

Washington continues to be a popular destination for migrants, ranking at or above 16<sup>th</sup> among the states since 1985. Its migration rate of 0.7 percent for the July 2001-July 2002 period, down slightly from 0.8 previously, ranked 16<sup>th</sup> among the states. During this period, Washington's total population growth was 1.2 percent, with about 0.5 percent coming from natural increase and 0.7 percent from migration. Of the state's immigrants, roughly 72 percent were international immigrants and 28 percent domestic. Total U.S. population growth for the same period was 1.1 percent, with 0.6 percent of its growth from natural increase and 0.5 percent from migration.

Chart 8  
Migration Rate

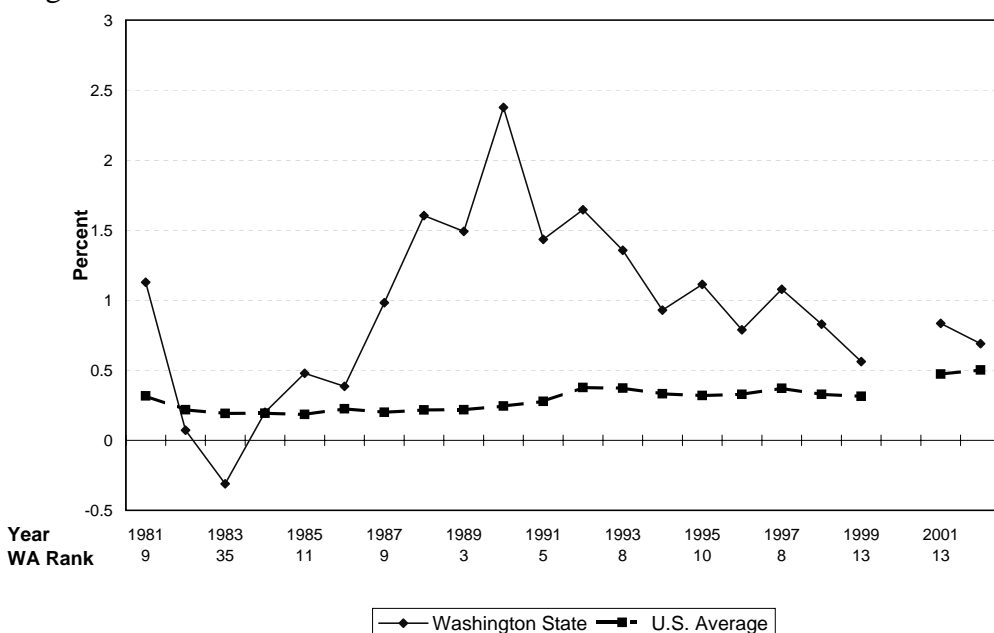


Table 8  
Economic Performance  
**Migration Rate**  
(Percent)\*

	1996	1997	1998	1999	2001	2002
Alabama	0.3	0.3	0.3	0.0	-0.0	0.0
Alaska	-0.6	-0.6	-0.1	-0.5	-0.2	0.4
Arizona	2.0	1.8	1.6	1.5	1.8	2.0
Arkansas	0.6	0.4	0.2	0.1	0.2	0.2
California	-0.1	0.4	0.5	0.5	0.8	0.6
Colorado	1.2	1.3	1.2	1.4	1.6	0.9
Connecticut	-0.4	-0.4	-0.3	-0.1	0.3	0.4
Delaware	0.7	0.6	0.7	0.7	0.8	0.9
Florida	1.5	1.5	1.3	1.1	1.7	1.8
Georgia	1.3	1.3	1.2	1.2	1.2	1.0
Hawaii	-0.6	-0.4	-0.7	-1.3	0.3	0.5
Idaho	1.1	1.1	0.9	0.9	0.8	0.8
Illinois	-0.1	-0.2	-0.2	-0.2	0.0	0.0
Indiana	0.2	0.1	0.1	0.1	0.1	0.1
Iowa	-0.0	-0.1	-0.1	-0.0	-0.2	-0.1
Kansas	-0.0	0.2	0.3	0.0	-0.2	0.0
Kentucky	0.3	0.3	0.3	0.3	0.1	0.3
Louisiana	-0.3	-0.3	-0.4	-0.4	-0.6	-0.3
Maine	0.2	0.2	0.1	0.3	0.5	0.7
Maryland	0.1	0.1	0.2	0.2	0.8	0.7
Massachusetts	-0.0	0.1	0.1	0.1	0.3	0.1
Michigan	0.3	-0.0	-0.1	-0.0	0.0	-0.0
Minnesota	0.4	0.3	0.3	0.5	0.5	0.2
Mississippi	0.2	0.3	0.2	0.1	-0.2	-0.1
Missouri	0.5	0.4	0.2	0.2	0.2	0.3
Montana	0.5	-0.1	-0.2	0.1	-0.0	0.2
Nebraska	0.3	0.0	-0.2	-0.2	-0.1	0.0
Nevada	3.8	4.1	3.2	2.9	3.1	2.8
New Hampshire	0.9	0.7	0.6	0.9	1.2	0.9
New Jersey	0.0	0.1	0.0	0.1	0.4	0.5
New Mexico	0.5	0.1	-0.2	-0.5	-0.2	0.6
New York	-0.6	-0.5	-0.5	-0.4	-0.1	-0.1
North Carolina	1.2	1.1	1.0	0.8	0.9	0.8
North Dakota	-0.2	-0.6	-0.8	-1.0	-0.9	-0.6
Ohio	-0.1	-0.2	-0.2	-0.2	-0.2	-0.1
Oklahoma	0.4	0.3	0.3	0.1	0.0	0.3
Oregon	1.2	1.1	0.7	0.6	0.8	1.0
Pennsylvania	-0.2	-0.3	-0.3	-0.2	0.0	0.1
Rhode Island	-0.5	-0.4	-0.2	0.0	0.6	0.7
South Carolina	0.6	0.9	0.8	0.7	0.4	0.6
South Dakota	-0.2	-0.5	-0.4	-0.1	-0.1	-0.1
Tennessee	1.0	0.8	0.6	0.5	0.4	0.4
Texas	0.8	0.8	0.8	0.7	1.0	0.9
Utah	0.8	0.6	0.1	-0.2	0.1	0.1
Vermont	0.3	0.1	0.1	0.2	0.3	0.4
Virginia	0.4	0.4	0.3	0.6	0.7	0.7
<b>Washington</b>	<b>0.8</b>	<b>1.1</b>	<b>0.8</b>	<b>0.6</b>	<b>0.8</b>	<b>0.7</b>
West Virginia	-0.1	-0.2	-0.2	-0.3	-0.3	0.1
Wisconsin	0.3	0.1	0.0	0.1	0.2	0.3
Wyoming	-0.2	-0.6	-0.5	-0.6	-0.5	0.6
U.S. Average*	0.3	0.4	0.3	0.3	0.5	0.5
<b>Washington's Rank</b>	<b>12</b>	<b>8</b>	<b>8</b>	<b>13</b>	<b>12</b>	<b>16</b>

\* The District of Columbia is included in the U.S. average.

Source: Population Division, U.S. Census Bureau, December 2002.

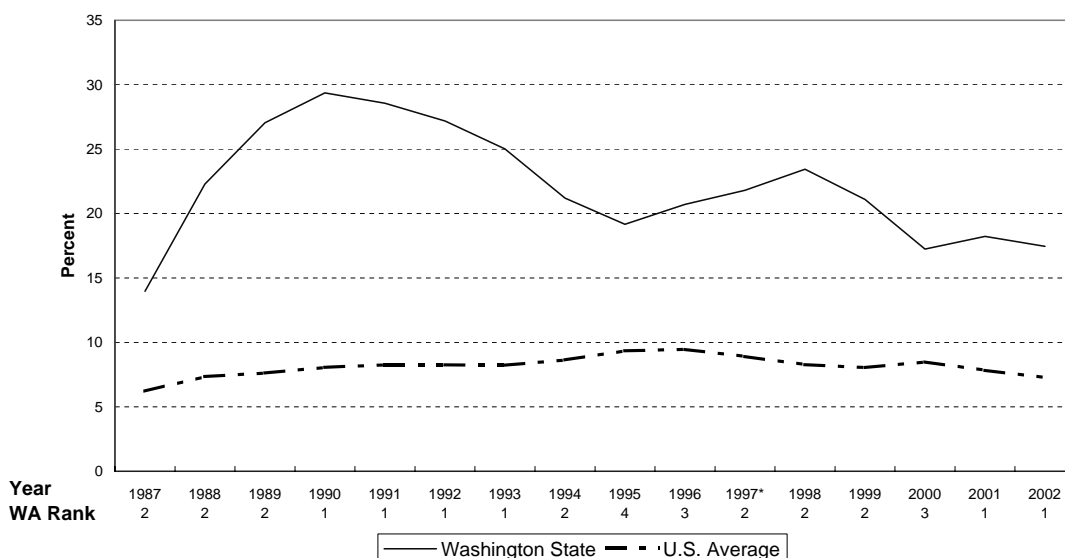
# Foreign Exports Inclusive and Exclusive of Transportation Equipment

In 2002, Washington ranked 1<sup>st</sup> among the states in foreign exports as a percent of personal income, with exports equivalent to 17.5 percent of total personal income. The state's average exports as a percent of personal income for the years 1998-2002 was 19.5 percent, ranking 2<sup>nd</sup> among the states and well above the national average of 8.0 percent.

Washington's perennially strong performance in this category is due mainly to the presence of Boeing and PACCAR, respectively the world's leading commercial aircraft and truck manufacturers. Exports of transportation equipment from these and other Washington manufacturers regularly account for over half of Washington's exports. Excluding exports of these products, Washington's exports were equivalent to 5.7 percent of personal income, roughly equal to the national average, ranking 17<sup>th</sup> among the states.

It must be noted that the trade data used for this indicator, obtained from the U.S. Bureau of the Census, only includes trade in goods, not services. Software, one of Washington's main exports, is classified as a service and is therefore not included in this data. As service exports are difficult to track and attribute to specific states, state service export data is not available from the Census. As software giant Microsoft contributes greatly to state personal income while its exports are not included in the trade data, the measure of Washington exports as a percent of personal income understates the contribution of trade to Washington's economy. This growing understatement is part of the reason that exports excluding transportation products as a percentage of personal income, as shown in Chart 10, begins to decline in 1997, as this year coincides with the period where Microsoft's contribution to personal income began its greatest growth.

Chart 9  
Foreign Exports



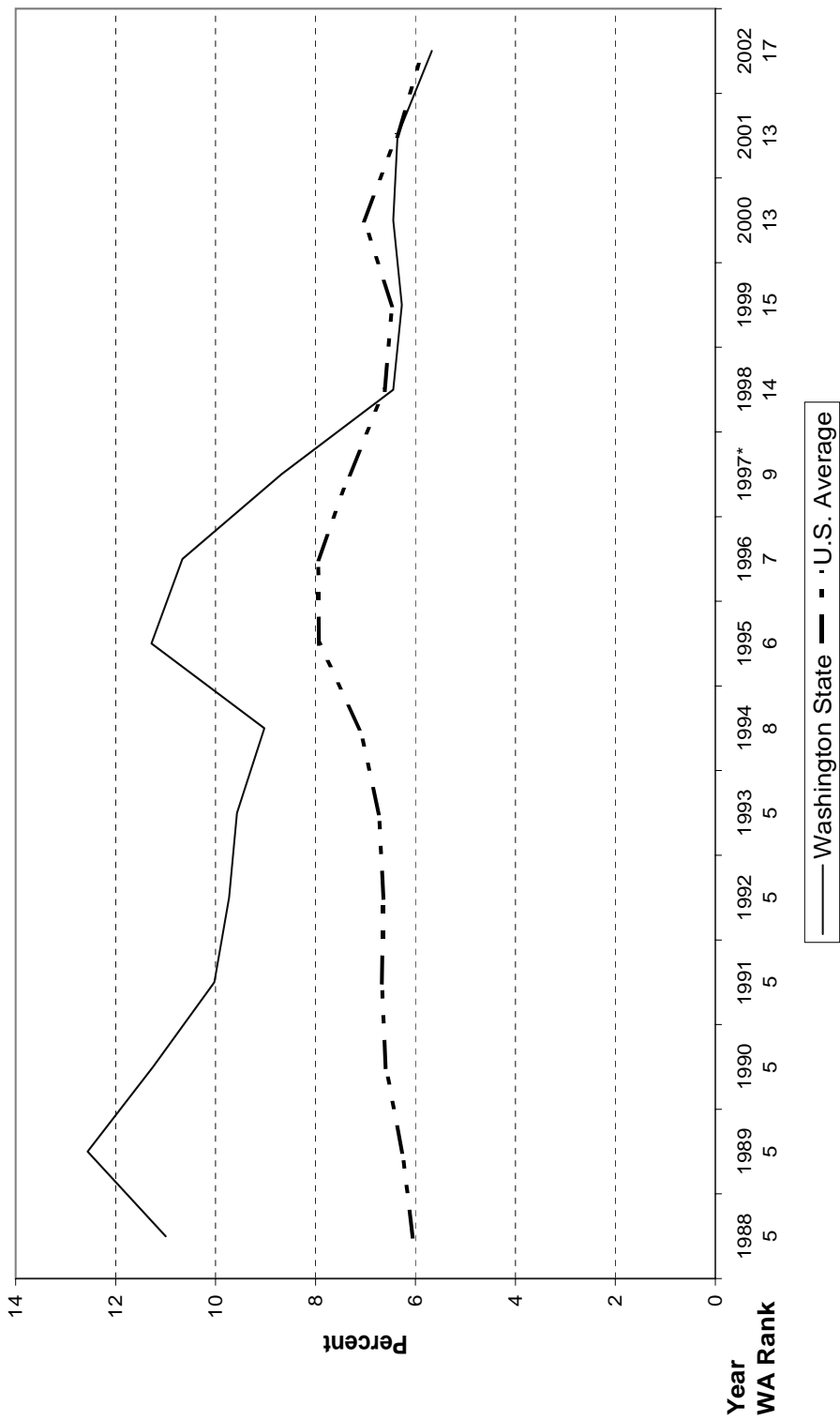
\*Trade data from 1997 to 2002 is coded under the North American Industry Classification System (NAICS).  
Prior data is coded under Standard Industrial Classification (SIC)

Table 9  
Economic Performance  
**Foreign Exports**  
(Percent of State Personal Income)

	1998	1999	2000	2001	2002	1998-2002
Alabama	6.60	6.17	6.94	6.92	7.33	6.79
Alaska	11.40	14.57	13.10	12.30	12.16	12.71
Arizona	10.11	9.83	10.94	9.11	8.31	9.66
Arkansas	4.25	3.89	4.41	4.75	4.40	4.34
California	10.28	9.84	10.87	9.45	7.96	9.68
Colorado	4.45	4.62	4.61	4.13	3.68	4.30
Connecticut	5.84	5.54	5.69	5.92	5.63	5.72
Delaware	10.20	10.07	8.99	7.75	7.57	8.91
Florida	6.04	5.68	5.83	5.72	4.96	5.64
Georgia	6.73	6.44	6.45	6.11	5.84	6.31
Hawaii	0.87	0.84	1.12	1.04	1.38	1.05
Idaho	5.58	7.58	11.41	6.56	5.85	7.40
Illinois	7.99	7.87	7.82	7.37	6.10	7.43
Indiana	8.25	8.36	9.35	8.52	8.58	8.61
Iowa	6.88	5.61	5.74	5.84	5.72	5.96
Kansas	5.95	6.67	6.96	6.51	6.30	6.48
Kentucky	9.19	9.73	9.79	8.94	10.13	9.56
Louisiana	17.28	15.99	16.23	15.18	15.40	16.01
Maine	6.19	6.56	5.41	5.25	5.49	5.78
Maryland	2.98	2.40	2.54	2.62	2.26	2.56
Massachusetts	7.74	7.74	8.48	7.03	6.62	7.52
Michigan	10.95	11.26	11.56	10.92	11.09	11.16
Minnesota	6.53	6.37	6.48	6.39	6.08	6.37
Mississippi	4.15	3.90	4.57	5.74	4.76	4.63
Missouri	4.15	4.21	4.22	3.88	4.14	4.12
Montana	2.22	2.20	2.61	2.24	1.70	2.19
Nebraska	4.61	4.63	5.28	5.44	4.91	4.97
Nevada	1.32	1.92	2.46	2.25	1.79	1.95
New Hampshire	4.91	5.20	5.75	5.61	4.26	5.15
New Jersey	5.51	5.32	5.86	5.76	5.02	5.49
New Mexico	5.03	8.31	6.02	3.32	2.69	5.08
New York	6.33	6.01	6.44	6.16	5.36	6.06
North Carolina	8.16	7.41	8.24	7.50	6.38	7.54
North Dakota	5.10	4.71	3.91	4.91	5.02	4.73
Ohio	8.48	8.18	8.23	8.29	8.25	8.29
Oklahoma	3.73	3.85	3.70	3.07	2.73	3.42
Oregon	10.59	11.75	11.98	9.08	9.97	10.67
Pennsylvania	4.83	4.72	5.14	4.61	4.03	4.67
Rhode Island	3.98	3.88	3.86	3.96	3.35	3.80
South Carolina	8.94	7.85	8.79	9.87	9.26	8.94
South Dakota	2.55	2.68	3.48	2.95	2.92	2.92
Tennessee	7.12	7.00	7.73	7.34	7.24	7.29
Texas	15.41	15.42	17.71	15.61	15.34	15.90
Utah	6.37	6.41	6.13	6.40	8.07	6.68
Vermont	24.89	25.83	24.46	16.06	13.83	21.01
Virginia	6.48	5.61	5.27	5.00	4.50	5.37
<b>Washington</b>	<b>23.44</b>	<b>21.09</b>	<b>17.24</b>	<b>18.23</b>	<b>17.46</b>	<b>19.49</b>
West Virginia	5.73	5.05	5.63	5.44	5.24	5.42
Wisconsin	7.08	6.74	6.89	6.65	6.56	6.78
Wyoming	4.12	3.54	3.64	3.44	3.63	3.68
U.S. Average	8.27	8.05	8.49	7.83	7.28	7.98
<b>Washington's Rank</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>2</b>

Source: U.S. Department of Commerce, Bureau of the Census, Foreign Trade Division, Bureau of Economic Analysis  
Trade data prepared by Massachusetts Institute for Social and Economic Research, May 2003

**Chart 10**  
**Foreign Exports (Excluding Transportation Equipment)**



\*Trade data from 1997 to 2002 is coded under the North American Industry Classification System (NAICS).  
 Prior data is coded under Standard Industrial Classification (SIC)

Table 10  
Economic Performance  
**Foreign Exports (Excluding Transportation Equipment)**  
(Percent of State Personal Income)

	1998	1999	2000	2001	2002	1998-2002
Alabama	5.26	4.67	5.44	5.18	5.15	5.14
Alaska	11.17	14.42	12.86	12.02	12.02	12.50
Arizona	8.62	8.28	9.21	7.28	6.73	8.02
Arkansas	3.73	3.52	4.03	4.14	3.44	3.77
California	9.18	8.95	10.13	8.70	7.35	8.86
Colorado	4.24	4.42	4.43	3.94	3.51	4.11
Connecticut	3.71	3.55	3.45	3.18	2.85	3.35
Delaware	7.57	8.54	7.62	6.80	6.71	7.45
Florida	5.23	5.00	5.07	4.95	4.23	4.89
Georgia	5.50	5.07	5.37	5.20	4.81	5.19
Hawaii	0.74	0.75	1.00	0.81	0.72	0.80
Idaho	5.50	7.47	11.30	6.50	5.79	7.31
Illinois	6.58	6.38	6.22	5.91	5.33	6.08
Indiana	5.43	5.51	6.25	5.84	5.83	5.77
Iowa	6.49	5.13	5.27	5.43	5.43	5.55
Kansas	3.67	3.75	4.52	4.36	4.18	4.09
Kentucky	6.05	5.87	6.19	5.94	5.87	5.98
Louisiana	16.79	15.49	15.97	14.92	14.76	15.59
Maine	5.87	6.17	5.23	5.02	5.21	5.50
Maryland	2.10	2.00	2.19	2.20	1.80	2.06
Massachusetts	7.43	7.42	8.21	6.85	6.49	7.28
Michigan	4.72	4.54	4.85	4.66	4.66	4.69
Minnesota	6.04	5.95	6.04	5.87	5.46	5.87
Mississippi	3.72	3.69	4.26	4.10	4.57	4.07
Missouri	2.97	3.07	3.16	2.75	2.74	2.94
Montana	2.18	2.14	2.56	2.20	1.66	2.15
Nebraska	4.19	4.23	4.84	4.92	4.50	4.54
Nevada	1.19	1.62	2.25	1.84	1.74	1.73
New Hampshire	4.76	5.06	5.61	5.47	4.08	5.00
New Jersey	4.94	4.78	5.31	5.29	4.56	4.98
New Mexico	4.89	8.17	5.92	3.25	2.56	4.96
New York	5.55	5.39	5.84	5.51	4.70	5.40
North Carolina	7.63	6.93	7.74	7.09	6.01	7.08
North Dakota	4.34	4.08	3.38	4.45	4.69	4.19
Ohio	5.39	5.26	5.40	5.12	4.91	5.22
Oklahoma	2.99	2.87	2.77	2.50	2.18	2.66
Oregon	9.76	10.48	11.08	8.45	9.01	9.76
Pennsylvania	4.26	4.29	4.71	4.20	3.63	4.22
Rhode Island	3.87	3.78	3.75	3.88	3.28	3.71
South Carolina	7.60	6.76	7.28	6.80	6.61	7.01
South Dakota	2.42	2.55	3.38	2.84	2.80	2.80
Tennessee	5.53	5.38	5.99	5.77	5.52	5.64
Texas	13.35	13.36	15.71	13.76	13.65	13.97
Utah	5.55	5.39	4.95	5.33	7.20	5.68
Vermont	24.53	25.38	23.84	15.37	13.33	20.49
Virginia	5.89	4.94	4.78	4.54	4.03	4.84
<b>Washington</b>	<b>6.45</b>	<b>6.27</b>	<b>6.44</b>	<b>6.36</b>	<b>5.67</b>	<b>6.24</b>
West Virginia	5.64	4.92	5.43	5.01	4.70	5.14
Wisconsin	6.22	5.85	6.04	5.94	5.88	5.99
Wyoming	4.11	3.48	3.62	3.43	3.61	3.65
U.S. Average	6.62	6.46	7.03	6.37	5.85	6.47
<b>Washington's Rank</b>	<b>14</b>	<b>15</b>	<b>13</b>	<b>13</b>	<b>17</b>	<b>13</b>

Source: U.S. Department of Commerce, Bureau of the Census, Foreign Trade Division, Bureau of Economic Analysis  
Trade data prepared by Massachusetts Institute for Social and Economic Research, May 2003

# Per Capita Spending in Research and Development

- Industrial R&D
- University R&D
- Total Per Capita R&D

The amount of research and development activity occurring within a state relative to the size of its population provides a good indication of that state's capacity for innovation. Industrial research and development brings new products and processes for continued growth. University and government research and development can provide basic research to support local technology hubs and can also attract funding from outside of the state.

The Division of Science Resources Studies (SRS) of the National Science Foundation annually compiles surveys of industries, universities, and other agencies into a report titled *National Patterns of Research and Development Resources*. This report indicates the state in which the research and development activity took place regardless of the state of the sponsoring party. The state spending figures for industrial, university, and total research and development spending can be divided by the state populations to derive per capita spending. The most recent year of state spending data available is 2000.

In 2000, Washington ranked 21<sup>st</sup> in per capita university research and development with a spending level of \$109 per capita, slightly above the U.S. average of \$107. For the period 1995-00 its average rank was 20<sup>th</sup>. In both industry and total 2000 per capita research and development spending, however, the state ranked much higher. Washington's 2000 per capita industrial research and development spending, at \$1567, was over twice as high as the national average of \$699, ranking 3<sup>rd</sup> among the states. The state's total 2000 per capita research and development spending, at \$1779 was also much higher than the national average of \$938, ranking 4<sup>th</sup>.

Chart 11  
University Research and Development

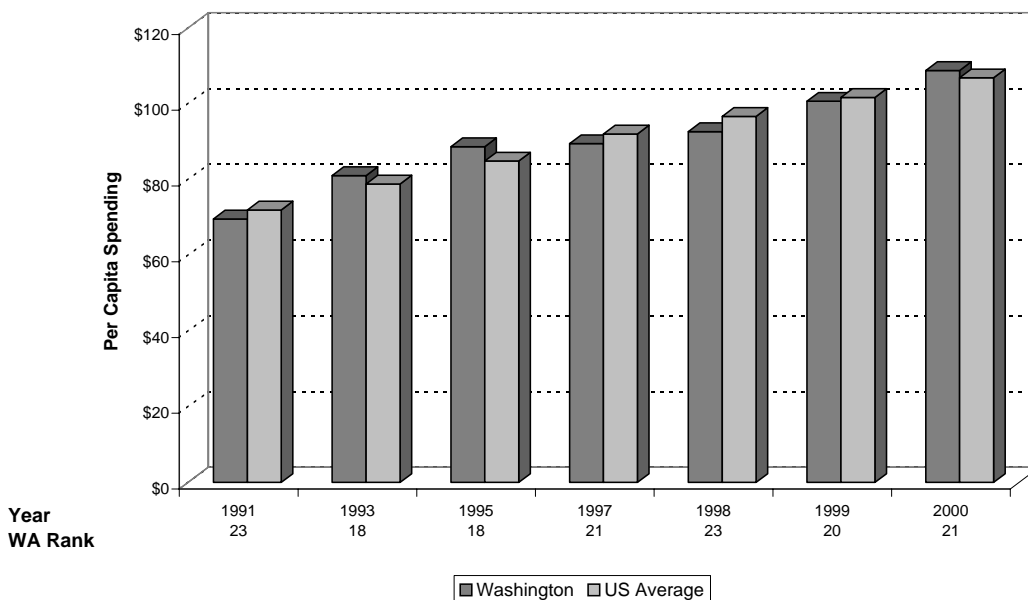




Table 11  
**University Research and Development**  
(Dollars Per Capita)

	1995	1997	1998	1999	2000	1995-00
Alabama	78	84	100	94	96	91
Alaska	119	116	122	150	171	136
Arizona	86	80	83	87	90	85
Arkansas	35	39	44	42	49	42
California	82	92	101	109	119	101
Colorado	103	106	119	120	126	115
Connecticut	113	117	120	123	137	122
Delaware	73	87	95	98	99	91
Florida	38	45	46	50	53	46
Georgia	90	100	102	104	113	102
Hawaii	66	99	122	130	133	110
Idaho	50	52	58	56	57	55
Illinois	68	76	85	89	94	83
Indiana	64	67	71	76	84	72
Iowa	113	118	123	129	143	125
Kansas	70	75	80	88	96	82
Kentucky	35	40	53	68	68	53
Louisiana	72	75	79	84	89	80
Maine	26	26	28	35	45	32
Maryland	229	241	256	264	284	255
Massachusetts	187	204	214	222	234	212
Michigan	78	86	89	93	100	89
Minnesota	72	76	76	77	84	77
Mississippi	41	45	54	57	76	55
Missouri	74	85	88	99	110	91
Montana	76	79	81	94	110	88
Nebraska	95	104	110	120	122	110
Nevada	55	50	45	47	53	50
New Hampshire	80	90	97	104	122	99
New Jersey	55	56	58	62	67	60
New Mexico	134	123	127	124	135	129
New York	92	96	103	109	121	104
North Carolina	93	103	115	127	129	113
North Dakota	92	86	88	96	105	93
Ohio	57	68	71	73	81	70
Oklahoma	56	48	61	69	73	62
Oregon	81	88	92	94	101	91
Pennsylvania	93	102	110	114	126	109
Rhode Island	104	109	109	116	123	112
South Carolina	59	57	63	67	73	64
South Dakota	29	33	34	34	36	33
Tennessee	58	60	62	66	71	63
Texas	78	80	84	89	97	86
Utah	100	110	115	124	137	117
Vermont	92	100	96	107	106	100
Virginia	67	67	71	76	83	73
<b>Washington</b>	<b>89</b>	<b>89</b>	<b>93</b>	<b>101</b>	<b>109</b>	<b>96</b>
West Virginia	29	35	35	36	41	35
Wisconsin	91	94	101	105	123	103
Wyoming	83	98	99	96	87	93
U.S. Average	85	92	97	102	107	96
<b>Washington's Rank</b>	<b>18</b>	<b>21</b>	<b>23</b>	<b>20</b>	<b>21</b>	<b>20</b>

Source: The National Science Foundation(www.nsf.gov), 2002.

**Chart 12**  
**Industry Research and Development**

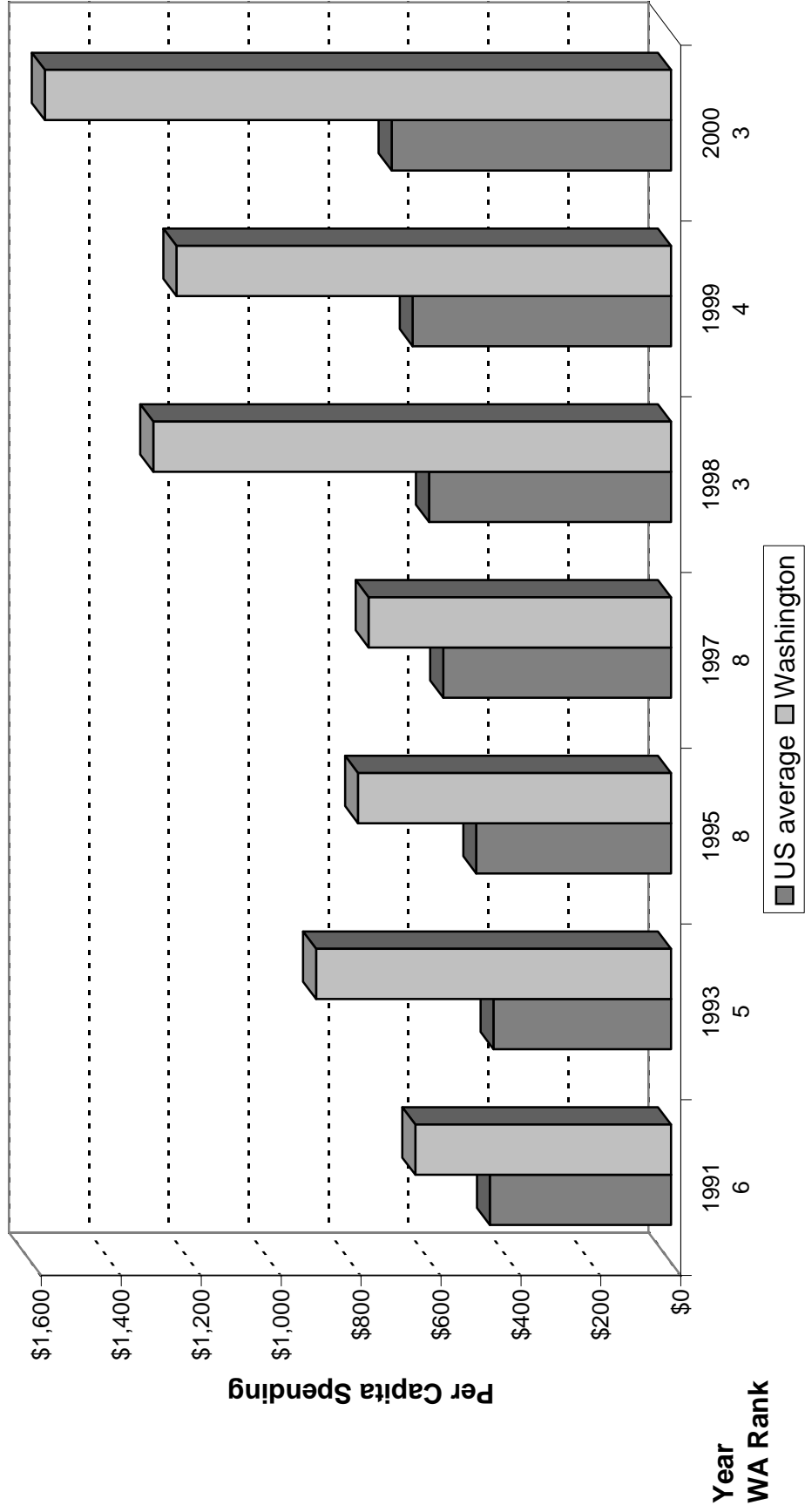
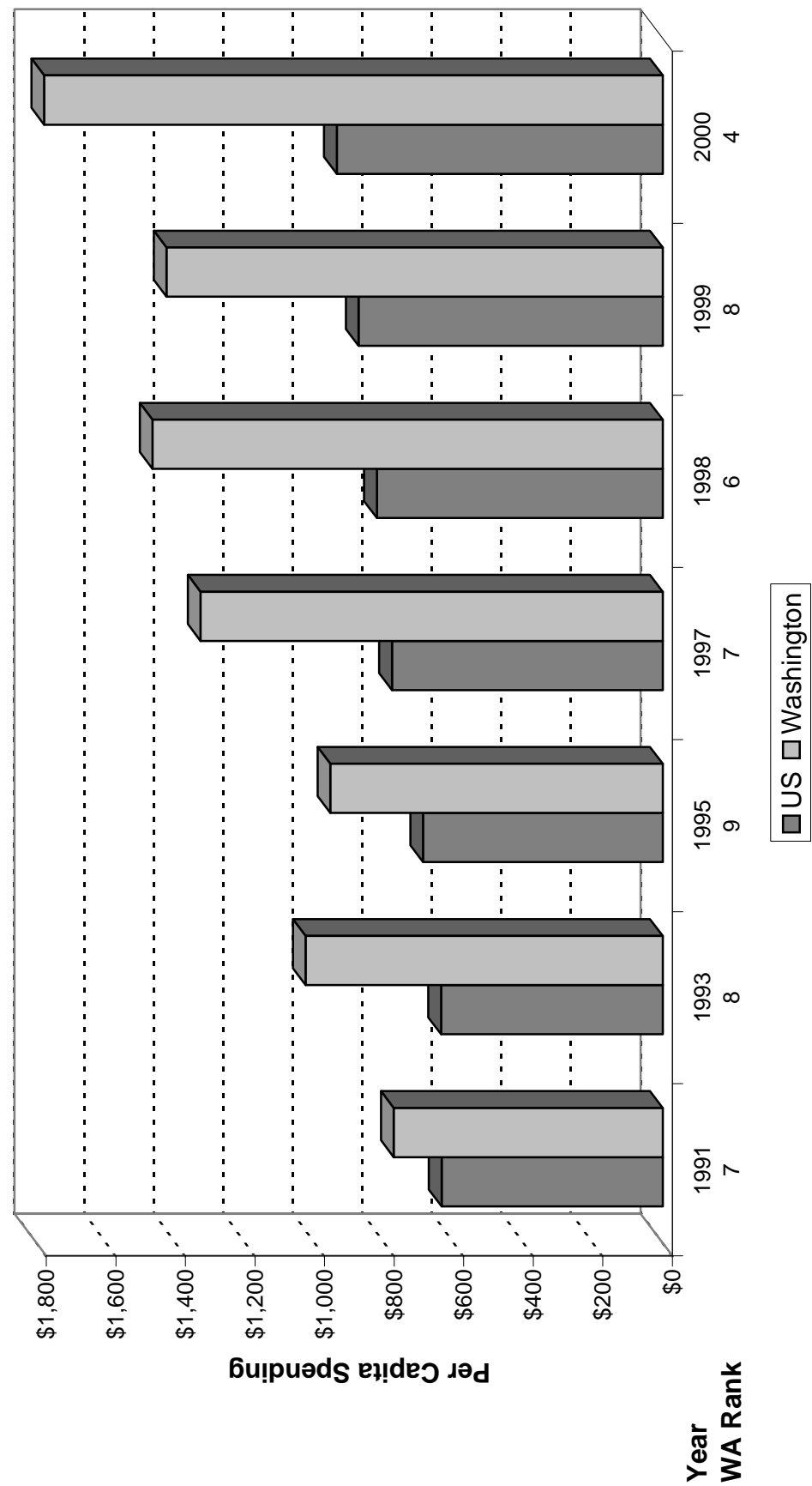


Table 12  
**Industry Research and Development**  
(Dollars Per Capita)

	1995	1997	1998	1999	2000	1995-00
Alabama	160	157	161	126	136	148
Alaska	50	49	D	D	14	38
Arizona	306	286	354	883	473	460
Arkansas	71	70	45	81	102	74
California	906	884	1,078	1,166	1,346	1,076
Colorado	487	464	866	742	726	657
Connecticut	1,175	1,166	925	1,176	1,281	1,145
Delaware	1,476	1,433	3,244	1,627	1,836	1,923
Florida	282	270	213	171	200	227
Georgia	160	153	184	227	192	183
Hawaii	12	12	14	22	36	19
Idaho	702	673	821	949	1,029	835
Illinois	481	474	562	624	857	600
Indiana	465	457	437	372	438	434
Iowa	348	345	218	192	184	257
Kansas	219	216	481	479	423	364
Kentucky	116	114	107	170	144	130
Louisiana	14	14	23	42	28	24
Maine	230	228	65	111	157	158
Maryland	212	208	335	324	382	292
Massachusetts	1,208	1,191	1,691	1,474	1,550	1,423
Michigan	1,280	1,263	1,284	1,790	1,772	1,478
Minnesota	566	553	690	693	754	651
Mississippi	24	24	26	40	35	30
Missouri	377	370	238	249	338	314
Montana	19	19	92	37	31	40
Nebraska	91	89	55	104	116	91
Nevada	204	183	234	174	123	183
New Hampshire	408	397	984	899	472	632
New Jersey	1,014	998	1,257	1,131	1,430	1,166
New Mexico	849	823	672	742	636	744
New York	467	464	596	603	555	537
North Carolina	303	291	431	497	454	395
North Dakota	19	18	53	116	80	57
Ohio	357	355	472	575	525	457
Oklahoma	87	85	72	106	96	89
Oregon	233	224	445	454	481	367
Pennsylvania	437	436	578	728	641	564
Rhode Island	511	507	1,280	1,215	1,037	910
South Carolina	197	191	177	167	194	185
South Dakota	26	26	7	17	58	27
Tennessee	188	182	366	314	213	253
Texas	328	315	417	483	428	394
Utah	399	379	512	510	436	447
Vermont	421	415	187	526	649	440
Virginia	236	231	392	355	382	320
<b>Washington</b>	<b>783</b>	<b>757</b>	<b>1,296</b>	<b>1,238</b>	<b>1,567</b>	<b>1,128</b>
West Virginia	133	134	124	119	130	128
Wisconsin	329	324	362	365	369	350
Wyoming	52	51	4	D	14	30
U.S. Average	488	570	606	647	699	602
<b>Washington's Rank</b>	<b>8</b>	<b>8</b>	<b>3</b>	<b>4</b>	<b>3</b>	<b>6</b>

Source: The National Science Foundation(www.nsf.gov), 2002.

**Chart 13**  
**Per Capita Research and Development**



**Table 13**  
**Total Research and Development**  
(Dollars Per Capita)

	<b>1995</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>1995-00</b>
Alabama	391	375	437	398	389	398
Alaska	270	221	D	243	313	262
Arizona	442	509	475	1,013	601	608
Arkansas	130	104	108	143	170	131
California	1,137	1,283	1,331	1,432	1,620	1,361
Colorado	706	798	1,109	996	978	917
Connecticut	1,297	1,031	1,057	1,310	1,433	1,226
Delaware	1,574	1,449	3,348	1,733	1,948	2,010
Florida	359	315	308	271	290	309
Georgia	288	296	317	368	340	322
Hawaii	141	227	199	223	240	206
Idaho	776	1,034	900	1,026	1,103	968
Illinois	623	659	720	786	1,026	763
Indiana	540	529	515	457	534	515
Iowa	485	339	363	344	347	376
Kansas	294	512	571	581	527	497
Kentucky	153	133	162	241	214	180
Louisiana	97	125	122	140	140	125
Maine	278	118	126	177	250	190
Maryland	1,354	1,434	1,541	1,539	1,625	1,499
Massachusetts	1,623	1,782	2,134	1,930	2,044	1,903
Michigan	1,372	1,426	1,387	1,899	1,898	1,596
Minnesota	663	757	793	801	871	777
Mississippi	116	133	131	168	180	146
Missouri	465	333	338	361	461	392
Montana	136	224	214	188	188	190
Nebraska	203	163	186	245	256	211
Nevada	281	293	308	237	187	261
New Hampshire	516	671	1,111	1,028	625	790
New Jersey	1,129	1,468	1,372	1,260	1,557	1,357
New Mexico	1,916	1,706	1,690	1,813	1,694	1,764
New York	591	660	732	747	713	689
North Carolina	435	610	584	663	624	583
North Dakota	151	178	184	261	227	200
Ohio	474	634	616	713	674	622
Oklahoma	160	191	151	193	191	177
Oregon	342	460	570	582	617	514
Pennsylvania	567	671	715	872	801	725
Rhode Island	882	1,015	1,626	1,587	1,428	1,308
South Carolina	266	269	252	246	280	263
South Dakota	74	96	80	79	112	88
Tennessee	262	285	449	406	361	353
Texas	442	481	534	605	551	523
Utah	568	652	690	669	607	637
Vermont	523	526	292	643	763	549
Virginia	584	606	715	729	713	669
<b>Washington</b>	<b>956</b>	<b>1,329</b>	<b>1,467</b>	<b>1,427</b>	<b>1,779</b>	<b>1,392</b>
West Virginia	260	235	232	242	253	244
Wisconsin	429	428	472	481	501	462
Wyoming	179	178	133	134	123	149
U.S. Average	690	779	822	875	938	821
<b>Washington's rank</b>	<b>9</b>	<b>7</b>	<b>6</b>	<b>8</b>	<b>4</b>	<b>6</b>

Source: The National Science Foundation(www.nsf.gov), 2002.

# Unemployment Rate

In 2002, the national unemployment rate continued to increase after reaching its lowest point in 31 years in 2000, increasing from an annual average of 4.0 percent to 4.5 percent in 2001 and increasing further to 5.4 percent in 2002. Washington's unemployment rate, having reached its lowest point in 33 years in 1999, increased annually from 2000-2002, with its 2002 rate of 7.3 percent raking 48<sup>th</sup> among the states.

Historically, Washington has nearly always had an unemployment rate higher than the national average. Starting in the late 1980's, however, the gap between the two rates began to narrow, with Washington's rate sometimes below the national rate. This narrowing has been attributed to the decrease in the percent of Washington's workforce employed in seasonal industries such as agriculture, fishing, forest products, and food processing. While it is not the sole cause, much of the current divergence, which began in 1998, can be attributed to the loss of over 40,000 aerospace jobs from the sector's employment peak in June of 1998 through the end of 2002.

Chart 14  
Unemployment Rate

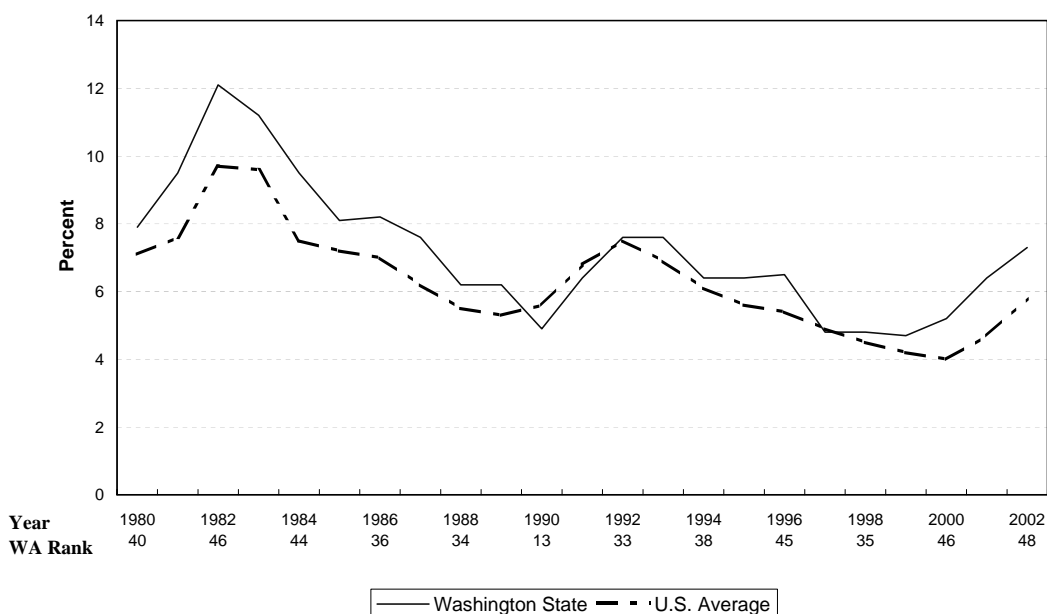


Table 14  
Economic Performance  
**Unemployment Rate**

	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>1998-02</b>
Alabama	4.2	4.8	4.5	5.3	5.9	4.9
Alaska	5.8	6.4	6.7	6.4	7.7	6.6
Arizona	4.1	4.4	4.0	4.7	6.2	4.7
Arkansas	5.5	4.5	4.4	5.0	5.4	5.0
California	5.9	5.2	4.9	5.4	6.7	5.6
Colorado	3.8	2.9	2.8	3.7	5.7	3.8
Connecticut	3.4	3.2	2.2	3.3	4.3	3.3
Delaware	3.8	3.5	3.9	3.4	4.2	3.8
Florida	4.3	3.9	3.6	4.8	5.5	4.4
Georgia	4.2	4.0	3.7	4.0	5.1	4.2
Hawaii	6.2	5.6	4.3	4.6	4.2	5.0
Idaho	5.0	5.2	4.9	5.0	5.8	5.2
Illinois	4.5	4.3	4.3	5.4	6.5	5.0
Indiana	3.1	3.0	3.2	4.4	5.1	3.8
Iowa	2.8	2.5	2.6	3.3	4.0	3.0
Kansas	3.8	3.0	3.7	4.3	5.1	4.0
Kentucky	4.6	4.5	4.1	5.4	5.6	4.8
Louisiana	5.7	5.1	5.4	5.9	6.1	5.6
Maine	4.4	4.1	3.5	3.9	4.4	4.1
Maryland	4.6	3.5	3.8	4.0	4.4	4.1
Massachusetts	3.3	3.2	2.6	3.7	5.3	3.6
Michigan	3.9	3.8	3.5	5.3	6.2	4.5
Minnesota	2.5	2.8	3.3	3.7	4.4	3.3
Mississippi	5.4	5.1	5.6	5.5	6.8	5.7
Missouri	4.2	3.4	3.4	4.7	5.5	4.2
Montana	5.6	5.2	5.0	4.6	4.6	5.0
Nebraska	2.7	2.9	3.0	3.1	3.6	3.1
Nevada	4.3	4.4	4.0	5.3	5.5	4.7
New Hampshire	2.9	2.7	2.8	3.5	4.7	3.3
New Jersey	4.6	4.6	3.7	4.2	5.8	4.6
New Mexico	6.2	5.6	5.0	4.8	5.4	5.4
New York	5.6	5.2	4.6	4.9	6.1	5.3
North Carolina	3.5	3.2	3.6	5.5	6.7	4.5
North Dakota	3.2	3.4	3.0	2.9	4.0	3.3
Ohio	4.3	4.3	4.0	4.2	5.7	4.5
Oklahoma	4.5	3.4	3.1	3.8	4.5	3.9
Oregon	5.6	5.7	4.9	6.3	7.5	6.0
Pennsylvania	4.6	4.4	4.1	4.7	5.7	4.7
Rhode Island	4.9	4.1	4.1	4.7	5.1	4.6
South Carolina	3.8	4.5	3.8	5.3	6.0	4.7
South Dakota	2.9	2.9	2.3	3.4	3.1	2.9
Tennessee	4.2	4.0	3.9	4.4	5.1	4.3
Texas	4.8	4.6	4.2	4.8	6.3	4.9
Utah	3.8	3.7	3.3	4.4	6.1	4.3
Vermont	3.4	3.0	2.9	3.6	3.7	3.3
Virginia	2.9	2.8	2.2	3.4	4.1	3.1
<b>Washington</b>	<b>4.8</b>	<b>4.7</b>	<b>5.2</b>	<b>6.4</b>	<b>7.3</b>	<b>5.7</b>
West Virginia	6.6	6.6	5.5	4.8	6.1	5.9
Wisconsin	3.4	3.0	3.6	4.5	5.5	4.0
Wyoming	4.8	4.9	3.9	3.9	4.2	4.3
U.S. Average	4.5	4.2	4.0	4.7	5.8	4.6
<b>Washington's Rank</b>	<b>35</b>	<b>37</b>	<b>46</b>	<b>49</b>	<b>48</b>	<b>46</b>

Source: U.S. Department of Labor, Bureau of Labor Statistics. June 2003 (www.bls.gov)

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# Quality of Life

# Homicide Rate, Violent Crime Rate, Arrest Rate for Violent Crimes

Crime statistics can prove difficult to interpret because reporting procedures vary dramatically among states. Furthermore, nearly two-thirds of all crimes and three-fifths of violent crimes are never reported, creating a considerable discrepancy between actual and reported crime rates. In view of the fact that reporting methods differ across states, it is clear that state comparisons would be difficult and uncertain. However, recognizing the need for consistent national crime statistics, the International Association of Chiefs of Police established the Uniform Crime Records (UCR.) The program's primary objective is to generate a reliable set of criminal statistics by mandating specific reporting requirements and criterion for gathering data that ensures consistency and comparability among states. The UCR program is a nationwide, statistical effort of over 17,000 city, county, and state law enforcement agencies. During 2001, law enforcement agencies active in the UCR Program represented 92 percent of the total population as established by the Bureau of the Census. The coverage amounted to 93 percent of the United States population in Metropolitan Statistical Areas (MSAs), 87 percent of the population in cities outside metropolitan areas, and 88 percent in rural counties. Over the years its data have become one of the country's leading social indicators and is therefore used within this study. Specifically, the homicide rate, the violent crime rate (i.e., offenses of murder, forcible rape, robbery, and aggravated assault) and the arrest rate for violent crimes are included because of their seriousness and prevalence in media reporting.

In 2001, Washington's homicide rate, as measured per 100,000 people, decreased from 3.3 (2000) to 3.0 (2001) and Washington's national rank thus increased from 20<sup>th</sup> to 16<sup>th</sup>. The violent crime rate, also measured per 100,000 people, declined from 370 (2000) to 355 (2001). Due to Washington's violent crime rate of 355, which is below the national average of 504, its national rank increased from 25<sup>h</sup> (2000) to 24<sup>th</sup> (2001.) The Arrest Rate for Violent Crimes decreased from 176 (2000) to 158 (2001), as measured per 100,000 people, and Washington's national rank increased from 27<sup>th</sup> (2000) to 20<sup>th</sup> (2001). As in all years since UCR statistics began being reported, Washington continues to rank well below the national average in incidences of these categories of crime.

Chart 15  
Homicide Rate

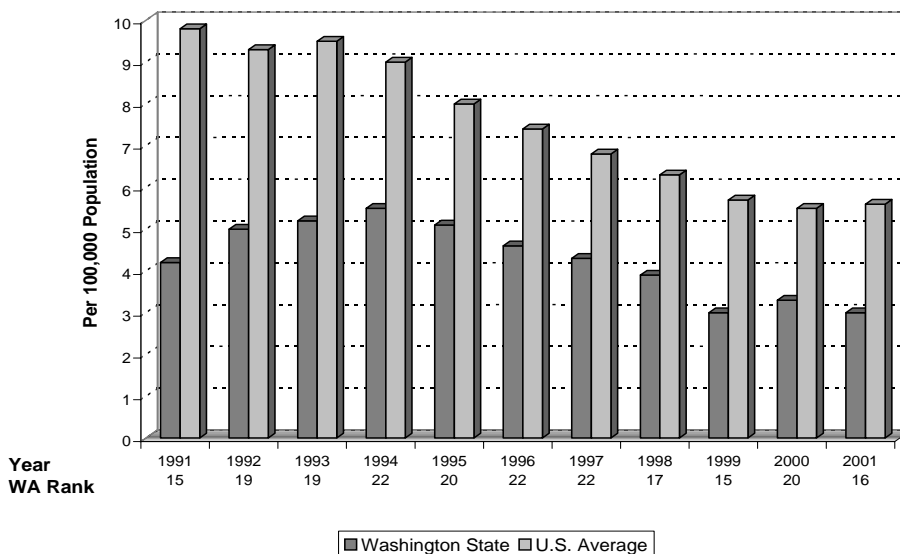


Table 15  
 Quality of Life  
**Homicide Rate**  
 (Per 100,000 Population)

	1997	1998	1999	2000	2001	1997-01
Alabama	9.9	8.1	7.9	7.4	8.5	8.4
Alaska	8.9	6.7	8.6	4.3	6.1	6.9
Arizona	8.2	8.1	8.0	7.0	7.5	7.8
Arkansas	9.9	7.9	5.6	6.3	5.5	7.0
California	8.0	6.6	6.0	6.1	6.4	6.6
Colorado	4.0	4.6	4.6	3.1	3.6	4.0
Connecticut	3.8	4.1	3.3	2.9	3.1	3.4
Delaware	2.5	2.8	3.2	3.2	2.9	2.9
Florida	6.9	6.5	5.7	5.6	5.3	6.0
Georgia	7.5	8.1	7.5	8.0	7.1	7.6
Hawaii	4.0	2.0	3.7	2.9	2.6	3.0
Idaho	3.2	2.9	2.0	1.2	2.3	2.3
Illinois	9.2	8.4	7.7	7.2	7.9	8.1
Indiana	7.3	7.7	6.6	5.8	6.8	6.8
Iowa	1.8	1.9	1.5	1.6	1.7	1.7
Kansas	6.0	5.9	6.0	6.3	3.4	5.5
Kentucky	5.8	4.6	0.0	4.8	4.7	4.0
Louisiana	15.7	12.8	10.7	12.5	11.2	12.6
Maine	2.0	2.0	2.2	1.2	1.4	1.8
Maryland	9.9	10.0	9.0	8.1	8.3	9.1
Massachusetts	1.9	2.0	2.0	2.0	2.3	2.0
Michigan	7.8	7.3	7.0	6.7	6.7	7.1
Minnesota	2.8	2.6	2.8	3.1	2.4	2.7
Mississippi	13.1	11.4	7.7	9.0	9.9	10.2
Missouri	7.9	7.3	6.6	6.2	6.6	6.9
Montana	4.8	4.1	2.6	1.8	3.8	3.4
Nebraska	3.0	3.1	3.6	3.7	2.5	3.2
Nevada	11.2	9.7	9.1	6.5	8.5	9.0
New Hampshire	1.4	1.5	1.5	1.8	1.4	1.5
New Jersey	4.2	4.0	3.5	3.4	4.0	3.8
New Mexico	7.7	10.9	9.8	7.4	5.4	8.2
New York	6.0	5.1	5.0	5.0	5.0	5.2
North Carolina	8.3	8.1	7.2	7.0	6.2	7.4
North Dakota	0.9	1.1	1.6	0.6	1.1	1.1
Ohio	4.7	4.0	3.5	3.7	4.0	4.0
Oklahoma	6.9	6.1	6.9	5.3	5.3	6.1
Oregon	2.9	3.8	2.7	2.0	2.4	2.8
Pennsylvania	5.9	5.3	4.9	4.9	5.3	5.3
Rhode	2.5	2.4	3.6	4.3	3.7	3.3
South Carolina	8.4	8.0	6.6	5.8	6.3	7.0
South Dakota	1.4	1.4	2.5	0.9	0.9	1.4
Tennessee	9.5	8.5	7.1	7.2	7.4	7.9
Texas	6.8	6.8	6.1	5.9	6.2	6.4
Utah	2.4	3.1	2.1	1.9	3.0	2.5
Vermont	1.5	2.2	2.9	1.5	1.1	1.8
Virginia	7.2	6.2	5.7	5.7	5.1	6.0
<b>Washington</b>	<b>4.3</b>	<b>3.9</b>	<b>3.0</b>	<b>3.3</b>	<b>3.0</b>	<b>3.5</b>
West Virginia	4.1	4.3	4.4	2.5	2.2	3.5
Wisconsin	4.0	3.6	3.4	3.2	3.6	3.6
Wyoming	3.5	4.8	2.3	2.4	1.8	3.0
U.S. Average	6.8	6.3	5.7	5.5	5.6	6.0
<b>Washington's Rank</b>	<b>22</b>	<b>17</b>	<b>15</b>	<b>20</b>	<b>16</b>	<b>19</b>

Source: U.S. Department of Justice. Federal Bureau of Investigation. Crime in the United States-Uniform Crime Reports: 1991-2001. ([www.fbi.gov](http://www.fbi.gov))

NA: Complete arrest data were not available.

**Chart 16**  
Violent Crime Rate

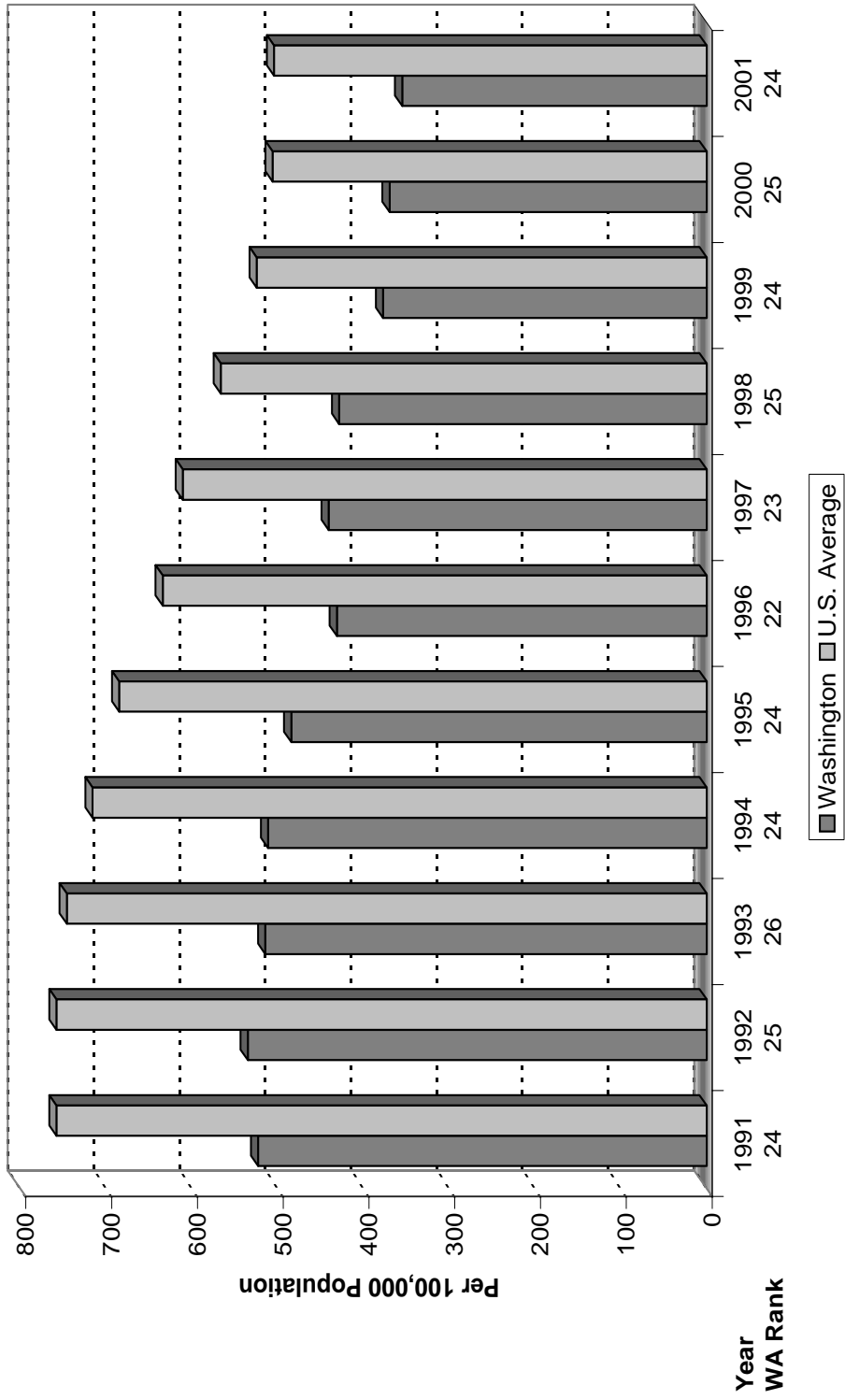


Table 16  
Quality of Life  
**Violent Crime Rate**  
(Per 100,000 Population)

	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>1997-01</b>
Alabama	565	512	490	486	439	498
Alaska	701	654	632	567	588	628
Arizona	624	578	551	532	540	565
Arkansas	527	490	425	445	453	468
California	798	704	627	622	617	674
Colorado	363	378	341	334	351	353
Connecticut	391	366	346	325	336	353
Delaware	678	762	734	684	611	694
Florida	1,024	939	854	812	797	885
Georgia	607	573	534	505	497	543
Hawaii	278	247	235	244	255	252
Idaho	257	282	245	253	243	256
Illinois	861	808	733	657	637	739
Indiana	515	431	375	349	372	408
Iowa	310	312	280	266	269	287
Kansas	409	397	383	389	405	397
Kentucky	317	284	301	295	257	291
Louisiana	856	780	733	681	687	747
Maine	121	126	112	110	112	116
Maryland	847	797	743	787	783	791
Massachusetts	644	621	551	476	480	554
Michigan	590	621	575	555	555	579
Minnesota	338	310	274	281	264	293
Mississippi	469	411	349	361	350	388
Missouri	577	556	500	490	541	533
Montana	132	139	207	241	352	214
Nebraska	438	451	430	328	304	390
Nevada	799	644	570	524	587	625
New Hampshire	113	107	97	175	170	133
New Jersey	493	440	412	384	390	424
New Mexico	853	961	835	758	781	838
New York	689	638	589	554	516	597
North Carolina	607	579	542	498	494	544
North Dakota	87	89	67	81	80	81
Ohio	435	363	316	334	352	360
Oklahoma	560	539	508	498	512	523
Oregon	444	420	375	351	307	379
Pennsylvania	442	421	421	420	410	423
Rhode Island	334	312	287	298	310	308
South Carolina	990	903	847	805	720	853
South Dakota	197	154	167	167	155	168
Tennessee	790	715	695	707	745	730
Texas	603	565	560	545	573	569
Utah	334	314	276	256	234	283
Vermont	120	106	114	114	105	112
Virginia	345	326	315	282	291	312
<b>Washington</b>	<b>441</b>	<b>429</b>	<b>377</b>	<b>370</b>	<b>355</b>	<b>394</b>
West Virginia	219	249	351	317	279	283
Wisconsin	271	249	246	237	231	247
Wyoming	255	248	232	267	257	252
United States	611	566	525	506	504	542
<b>Washington's Rank</b>	<b>23</b>	<b>25</b>	<b>24</b>	<b>25</b>	<b>24</b>	<b>24</b>

Source: U.S. Department of Justice. Federal Bureau of Investigation. Crime in the United States-Uniform Crime Reports: 1991-2001. ([www.fbi.gov](http://www.fbi.gov))

Chart 17  
Arrests Rates for Violent Crime

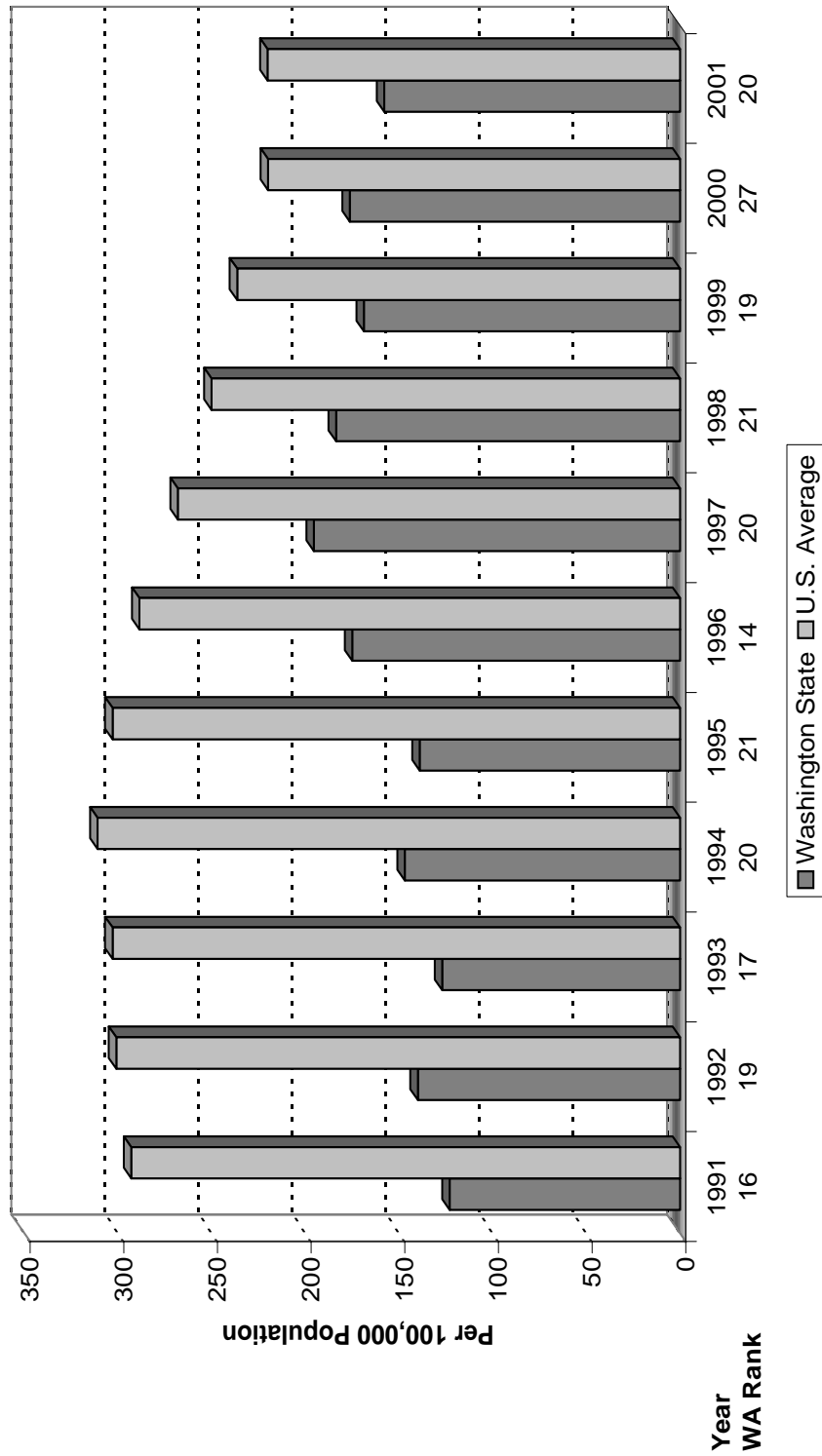


Table 17  
 Quality of Life  
**Arrest Rates for Violent Crime**  
 (Per 100,000 Population)

	1997	1998	1999	2000	2001	1997-01
Alabama	249	196	165	184	169	193
Alaska	382	262	259	211	221	267
Arizona	224	201	177	176	175	191
Arkansas	264	229	225	215	158	218
California	473	434	403	383	387	416
Colorado	181	174	205	159	162	176
Connecticut	269	247	166	176	207	213
Delaware	515	345	384	583	197	405
Florida	NA	390	368	344	352	364
Georgia	452	343	173	291	262	304
Hawaii	134	112	107	120	110	117
Idaho	110	129	107	107	102	111
Illinois	407	383	402	360	364	383
Indiana	257	264	268	260	259	262
Iowa	161	153	181	160	139	159
Kansas	NA	NA	NA	NA	NA	NA
Kentucky	481	451	558	161	317	394
Louisiana	429	376	353	334	336	366
Maine	65	71	NA	71	67	69
Maryland	268	250	156	228	242	229
Massachusetts	304	327	284	281	251	289
Michigan	245	220	213	110	117	181
Minnesota	88	122	139	140	76	113
Mississippi	229	209	189	179	161	193
Missouri	315	332	263	266	282	291
Montana	59	70	140	201	137	121
Nebraska	95	106	91	93	94	96
Nevada	220	222	180	163	197	196
New Hampshire	NA	74	60	57	59	62
New Jersey	247	227	203	190	189	211
New Mexico	243	266	254	243	267	255
New York	172	188	178	175	166	176
North Carolina	385	380	357	322	332	355
North Dakota	34	36	35	26	32	33
Ohio	246	208	178	175	173	196
Oklahoma	183	182	NA	173	178	179
Oregon	136	130	109	119	116	122
Pennsylvania	143	226	244	257	240	222
Rhode Island	230	151	121	105	116	145
South Carolina	344	310	334	271	294	311
South Dakota	148	108	99	96	98	110
Tennessee	382	311	258	208	210	274
Texas	182	166	161	153	150	162
Utah	119	117	117	98	79	106
Vermont	NA	30	60	58	55	50
Virginia	171	168	159	121	102	144
Washington	<b>196</b>	<b>184</b>	<b>169</b>	<b>176</b>	<b>158</b>	<b>176</b>
West Virginia	78	94	174	148	112	121
Wisconsin	204	NA	NA	NA	359	282
Wyoming	141	123	107	131	127	126
U. S. Average	268	250	236	220	220	239
<b>Washington's Rank</b>	<b>20</b>	<b>21</b>	<b>19</b>	<b>27</b>	<b>20</b>	<b>21</b>

\*Violent crimes are offenses of murder, forcible rape, robbery, and aggravated assault.

NA: Complete arrest data were not available.

Source: U.S. Department of Justice. Federal Bureau of Investigation. Crime in the United States-Uniform Crime Reports: 1991-2001 ([www.fbi.gov](http://www.fbi.gov))

# Air Quality

The air quality index measures the percentage of a state's population living in nonattainment areas. The Environmental Protection Agency (EPA) defines a nonattainment area as a locality where air pollution levels have exceeded the allowable amount according to National Ambient Air Quality Standards (NAAQS). Once an area gains "nonattainment" status, its air must meet the NAAQS standards for three years before it can be reclassified as an "attainment" area. Carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter, and sulfur dioxide are the six "criteria pollutants" tested under the NAAQS. Adverse effects on the environment and human health may result from pollutant concentrations exceeding these NAAQS thresholds. The nonattainment area population was calculated with the 1990 census population estimate for the years 1992-1999 and with the 2000 census population estimate for the years 2000-2002.

In 2000, 20.8 percent of Washington's population in nonattainment areas, but in 2001 this ratio decreased to only 6.4 percent. This progress can be attributed to improvements made in Kent, Tacoma and Seattle that resulted in a redesignation from nonattainment to attainment for 847,000 people. The recorded nonattainment area population remained constant in 2002 while its share of the total state population decreased to 6.3 percent. This level, a record low for Washington, ranked 25<sup>th</sup> among the states.

Chart 18  
Air Quality Index

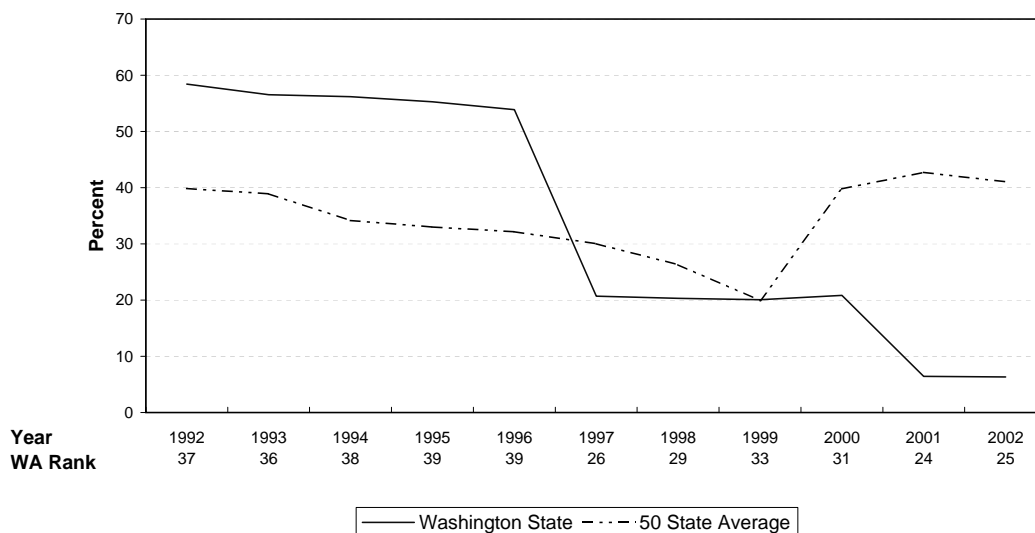




Table 18  
Quality of Life  
**Air Quality**  
(Percent of State Population)

	1998	1999	2000	2001	2002	1998-02
Alabama	17.0	17.0	18.1	18.0	17.9	17.6
Alaska	42.6	42.3	48.9	48.5	47.7	46.0
Arizona	46.0	44.7	63.3	61.7	59.7	55.1
Arkansas	0.0	0.0	0.0	0.0	0.0	0.0
California	82.6	81.4	92.6	91.1	89.7	87.5
Colorado	57.8	46.7	59.1	57.6	3.7	45.0
Connecticut*	73.4	72.9	74.2	73.7	73.2	73.5
Delaware*	0.0	0.0	19.8	19.6	19.3	11.7
Florida	0.0	0.0	0.0	0.0	0.0	0.0
Georgia	36.0	33.0	44.9	44.0	43.2	40.2
Hawaii	0.0	0.0	0.0	0.0	0.0	0.0
Idaho	19.1	8.9	23.9	23.6	8.5	16.8
Illinois*	64.3	63.8	70.4	69.9	69.5	67.6
Indiana*	0.3	0.3	0.0	0.0	0.0	0.1
Iowa	0.0	0.0	0.0	0.0	0.0	0.0
Kansas	0.0	0.0	0.0	0.0	0.0	0.0
Kentucky*	22.2	22.0	21.8	0.0	0.0	13.2
Louisiana	12.6	12.5	14.2	14.2	14.2	13.6
Maine	35.0	0.0	0.0	60.7	60.3	31.2
Maryland*	46.1	45.7	48.4	47.7	47.1	47.0
Massachusetts*	100.8	12.9	19.4	104.6	104.2	68.4
Michigan	1.6	0.0	0.0	0.0	0.0	0.3
Minnesota	49.5	7.0	7.5	5.7	0.0	14.0
Mississippi	0.0	0.0	0.0	0.0	0.0	0.0
Missouri*	43.4	43.1	44.4	44.1	43.9	43.8
Montana	11.9	12.4	29.6	29.5	13.7	19.4
Nebraska	0.1	0.1	0.1	0.0	0.0	0.0
Nevada	53.8	51.5	86.4	83.1	80.2	71.0
New Hampshire*	15.2	0.0	8.6	44.1	43.6	22.3
New Jersey*	0.0	0.0	0.0	0.0	0.0	0.0
New Mexico	2.0	2.1	2.4	2.3	2.3	2.2
New York*	95.7	95.0	100.9	115.0	114.5	104.2
North Carolina	0.0	0.0	0.0	0.0	0.0	0.0
North Dakota	0.0	0.0	0.0	0.0	0.0	0.0
Ohio*	37.2	34.6	34.0	30.8	27.9	32.9
Oklahoma	0.0	0.0	0.0	0.0	0.0	0.0
Oregon*	8.1	8.0	7.9	12.9	12.8	9.9
Pennsylvania*	73.6	73.5	76.0	85.0	84.8	78.6
Rhode Island	97.3	0.0	0.0	98.9	98.0	58.8
South Carolina	0.0	0.0	0.0	0.0	0.0	0.0
South Dakota	0.0	0.0	0.0	0.0	0.0	0.0
Tennessee	16.3	14.6	0.0	0.0	0.0	6.2
Texas	40.9	40.1	49.3	48.3	47.4	45.2
Utah	49.7	48.9	61.6	60.7	59.7	56.1
Vermont	0.0	0.0	0.0	0.0	0.0	0.0
Virginia*	0.0	0.0	0.0	0.0	0.0	0.0
<b>Washington*</b>	<b>20.3</b>	<b>20.1</b>	<b>20.8</b>	<b>6.4</b>	<b>6.3</b>	<b>14.8</b>
West Virginia	2.1	2.1	4.2	4.2	4.2	3.4
Wisconsin	37.5	36.8	38.7	38.3	35.8	37.4
Wyoming	2.6	2.6	3.0	3.0	3.0	2.9
50 State Average	26.3	19.9	39.8	42.7	41.1	34.0
<b>Washington's Rank</b>	<b>29</b>	<b>33</b>	<b>31</b>	<b>24</b>	<b>25</b>	<b>27</b>

\*Due to areas that span more than one state, these states may have more or less non-attainment areas than specified but are not documented to avoid double counting.

Source: U.S. Environmental Protection Agency. National Air Quality and Emissions Trends Report, 1996-2002 data: effective July 25, 1996, June 18, 1997, December 7, 1998, December 13, 1999 from the Office of Air Quality Planning and Standards.

# Drinking Water

The objective of the Washington State Department of Health Drinking Water Program is to protect the health of the citizens of Washington State by ensuring safe and reliable drinking water. In Washington, nearly 5 million residents are served by 4,260 public water systems that must abide by the standards established by the Environmental Protection Agency (EPA) under the federal Safe Drinking Water Act (SDWA). These standards are designed to prevent microbial, chemical and radiological contaminants in drinking water and to assure the protection of public health if contamination does occur. EPA tracks a variety of information related to water systems subject to the SDWA. The number of contaminants regulated by the EPA has risen from 23 in 1986 to 84 in 1996 and is expected to reach 103 by 2002 and 130 by 2010.

The EPA annually reports number of systems whose water has exceeded the Maximum Contaminant Level (MCL) for any contaminant and the number of people served by those systems. A MCL, according to the EPA, is the highest permissible level for a contaminant. In addition, the EPA also calculates the number of systems that have violated a treatment technique, the requirement to have properly operating treatment facilities in order to remove contaminants. The attached table contains EPA data for the years 1998-2002, showing the percentage of a state's population served by a water system subject to the SDWA that violated either a coliform MCL or a surface water treatment technique.

In 2002, 6.6 percent of Washington residents were served by water systems which experienced a violation of either a coliform MCL or a water treatment technique, compared to the 50 State average of 6.0 percent. This improved Washington's rank to 35<sup>th</sup> in the country, up from 39<sup>th</sup> in 2001. Washington's percentage of 7.4 for the period from 1998 to 2002 was roughly equal to the 50 state average of 7.5 percent and ranked 32<sup>nd</sup> in the country.

Chart 19  
Drinking Water

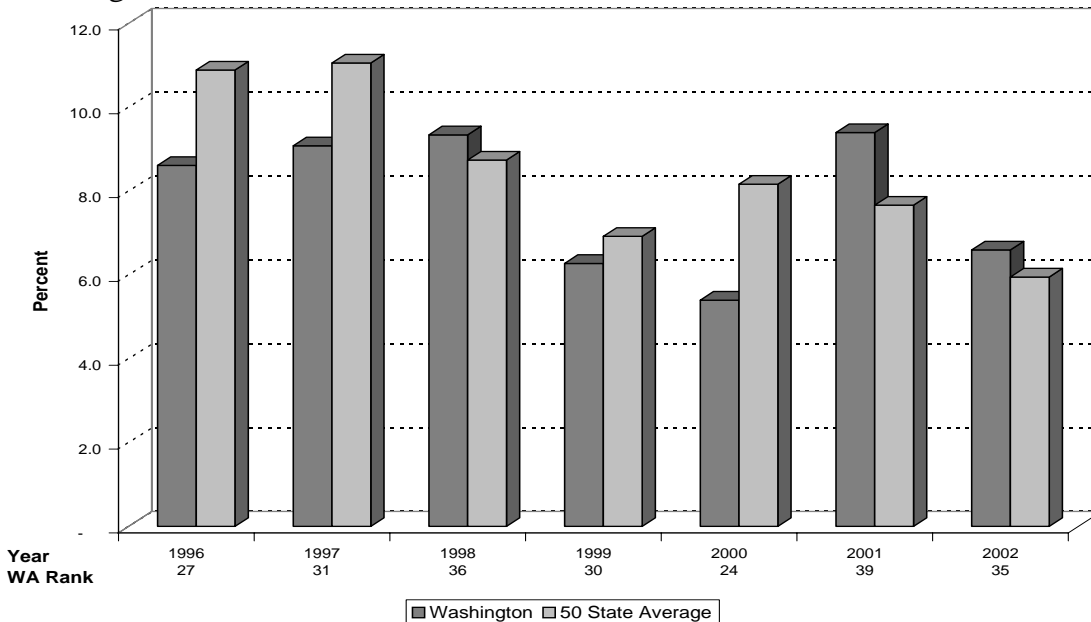


Table 19  
 Quality of Life  
**Drinking Water Index**  
 (Percent)\*

	1998	1999	2000	2001	2002	1998-02
Alabama	5.3	2.3	2.0	3.0	2.0	2.9
Alaska	30.6	9.7	14.0	9.0	6.0	13.9
Arizona	25.5	13.8	9.0	5.0	6.0	11.9
Arkansas	5.8	7.2	8.0	10.0	7.0	7.6
California	2.8	1.5	6.0	2.0	0.0	2.5
Colorado	10.2	10.0	10.0	10.0	1.0	8.2
Connecticut	15.7	13.9	2.0	2.0	4.0	7.5
Delaware	17.3	0.4	17.0	8.0	3.0	9.1
Florida	6.4	4.9	4.0	5.0	4.0	4.9
Georgia	3.3	5.8	1.0	2.0	2.0	2.8
Hawaii	6.2	6.3	5.0	9.0	4.0	6.1
Idaho	21.0	9.5	17.0	3.0	8.0	11.7
Illinois	8.1	12.2	9.0	8.0	7.0	8.9
Indiana	2.3	0.9	7.0	5.0	3.0	3.6
Iowa	3.4	5.2	5.0	2.0	2.0	3.5
Kansas	10.0	3.8	5.0	6.0	3.0	5.5
Kentucky	3.7	7.9	3.0	7.0	5.0	5.3
Louisiana	9.2	5.3	6.0	6.0	6.0	6.5
Maine	3.9	5.0	35.0	11.0	13.0	13.6
Maryland	2.3	2.0	1.0	0.0	0.0	1.1
Massachusetts	51.9	36.3	58.0	54.0	15.0	43.0
Michigan	0.9	0.9	2.0	2.0	3.0	1.8
Minnesota	0.5	1.6	1.0	1.0	13.0	3.4
Mississippi	3.8	5.7	9.0	9.0	10.0	7.5
Missouri	3.8	3.3	2.0	4.0	5.0	3.6
Montana	18.6	5.8	4.0	4.0	6.0	7.7
Nebraska	12.3	13.6	19.0	53.0	16.0	22.8
Nevada	0.2	1.9	1.0	0.0	2.0	1.0
New Hampshire	8.5	7.2	8.0	12.0	24.0	11.9
New Jersey	1.4	1.0	15.0	13.0	4.0	6.9
New Mexico	1.9	6.5	7.0	7.0	9.0	6.3
New York	43.3	41.8	12.0	12.0	9.0	23.6
North Carolina	1.3	2.4	3.0	4.0	5.0	3.1
North Dakota	0.8	1.4	4.0	4.0	3.0	2.7
Ohio	4.6	3.4	1.0	12.0	2.0	4.6
Oklahoma	14.5	12.6	6.0	7.0	18.0	11.6
Oregon	5.8	7.3	6.0	7.0	8.0	6.8
Pennsylvania	3.6	2.4	4.0	3.0	3.0	3.2
Rhode Island	1.2	4.9	6.0	0.0	0.0	2.4
South Carolina	12.0	11.8	23.0	13.0	4.0	12.8
South Dakota	7.2	2.0	2.0	2.0	2.0	3.0
Tennessee	3.2	2.9	3.0	3.0	3.0	3.0
Texas	2.5	2.8	2.0	3.0	5.0	3.1
Utah	2.4	3.7	6.0	1.0	5.0	3.6
Vermont	10.2	3.3	7.0	7.0	5.0	6.5
Virginia	2.3	2.6	2.0	2.0	3.0	2.4
<b>Washington**</b>	<b>9.3</b>	<b>6.3</b>	<b>5.4</b>	<b>9.4</b>	<b>6.6</b>	<b>7.4</b>
West Virginia	2.6	6.3	6.0	5.0	7.0	5.4
Wisconsin	9.2	6.6	15.0	15.0	16.0	12.4
Wyoming	4.3	10.0	3.0	2.0	0.0	3.8
50 State Average***	8.7	6.9	8.2	7.7	6.0	7.5
<b>Washington's Rank</b>	<b>36</b>	<b>30</b>	<b>24</b>	<b>39</b>	<b>35</b>	<b>32</b>

\*Percent of population served by water supply in violation of EPA standards.

\*\* Supplied by the Washington State Department of Health.

\*\*\*The 50 state average is an average of indicators listed. It may differ from the U.S. average.

Source: U.S. Environmental Protection Agency, Community Public Water Systems Compliance Statistics Safe Drinking Water Information System. FY 1996-2002.

(www.epa.gov) Washington State Department of Health. (www.doh.wa.gov)

# Toxins Released

The Toxics Release Inventory (TRI) provides the public with information concerning the amounts of toxic chemical releases from industrial facilities. Under the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA), the inventory was established with the objective of promoting emergency planning, minimizing the effects of chemical accidents, and providing the public with information on the release of toxic chemicals in their communities. Each year, facilities that meet certain thresholds must report their releases and other waste management activities for listed toxic chemicals to EPA and to the state or tribal entity in whose jurisdiction the facility is located. The TRI list for 2001 included more than 600 chemicals and 30 chemical categories. Each facility submits a TRI reporting form for each TRI chemical it has manufactured, processed, or otherwise used during 2001 in amounts exceeding the thresholds.\*

Before 1998, only facilities in the manufacturing sector were required to report to TRI. Starting in 1994, federal facilities began to report to TRI and in 1998 seven additional industries were added to the required report list. This is the basis for the dramatic increases in the national average for toxins released in 1998 and beyond. States that housed the newly added reporting industries saw a large jump in toxins released beginning in 1998.

In 2001, U.S. industries reported 6.1 billion pounds of toxic releases, down 940.1 million pounds from 2000. This figure includes toxic releases directly to air, water, and land, in addition to the disposal of toxic chemicals in on-site or off-site land fills, surface impoundments, land treatment, and underground injection wells. Washington industries reported 23.9 million pounds of toxic releases in 2001, ranking 5<sup>th</sup> among the states in terms of releases per square mile. This was a 78.2 million decrease from 2000 and it was well below the levels reported as recently as 1999, when 28.5 million pounds of releases were reported. Washington's toxic releases per square mile have been consistently lower than the U.S. average (total U.S. releases divided by total U.S. area) since the TRI reports began in 1989. Washington never saw a noticeable increase in toxins released with the added industries in 1998 because these industries, such as metal and coal mining, are not prevalent in Washington.

\* U.S. Environmental Protection Agency. 2001 Toxics Release Inventory.

Chart 20  
Toxins Released

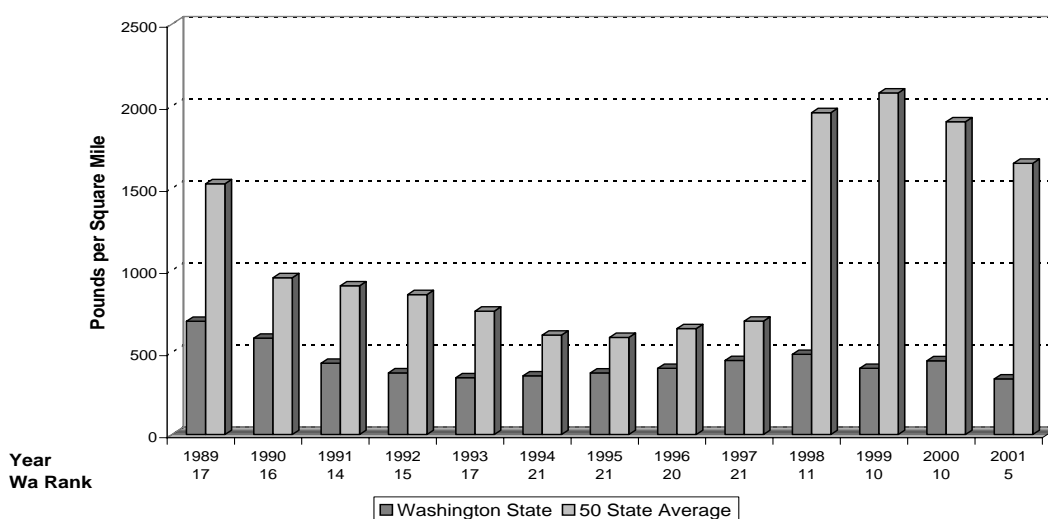


Table 20  
Quality of Life  
**Toxins Released**  
Pounds per square miles

	1997	1998	1999	2000	2001	1997-01
Alabama	1,812	2,833	2,644	2,884	2,574	2,549
Alaska	8	499	704	870	849	586
Arizona	276	9,381	8,450	6,532	5,323	5,992
Arkansas	1,123	734	781	967	828	887
California	284	445	435	476	369	402
Colorado	49	291	251	294	356	248
Connecticut	1,744	1,797	1,413	1,578	1,760	1,658
Delaware	1,463	5,493	4,748	5,674	5,037	4,483
Florida	1,591	2,450	2,491	2,395	2,054	2,196
Georgia	1,219	1,968	2,152	2,072	1,976	1,877
Hawaii	70	559	399	197	475	340
Idaho	212	1,192	1,029	917	900	850
Illinois	2,203	2,923	2,850	2,596	2,378	2,590
Indiana	3,365	5,203	5,460	5,604	5,644	5,055
Iowa	608	871	867	772	673	758
Kansas	325	487	517	466	385	436
Kentucky	1,171	2,511	2,628	2,510	2,319	2,228
Louisiana	3,747	3,799	3,024	3,112	2,937	3,324
Maine	290	289	233	314	317	289
Maryland	1,114	3,165	3,577	3,675	3,694	3,045
Massachusetts	763	1,618	1,285	1,406	1,200	1,254
Michigan	882	1,457	1,471	1,450	1,364	1,325
Minnesota	232	372	359	380	384	345
Mississippi	1,370	1,486	1,570	1,679	1,472	1,515
Missouri	901	1,963	1,861	1,879	1,720	1,665
Montana	295	840	868	831	445	656
Nebraska	232	275	352	389	345	319
Nevada	40	11,502	10,567	9,119	7,086	7,663
New Hampshire	300	761	633	664	513	574
New Jersey	2,528	3,745	3,808	3,531	7,163	4,155
New Mexico	281	2,139	2,157	1,030	870	1,295
New York	715	1,305	1,330	1,121	830	1,060
North Carolina	1,615	2,533	3,006	2,986	2,804	2,589
North Dakota	34	331	335	342	358	280
Ohio	3,540	7,501	6,764	6,313	5,679	5,959
Oklahoma	355	598	530	472	413	474
Oregon	319	568	697	846	387	563
Pennsylvania	3,130	4,724	5,148	4,937	4,534	4,495
Rhode Island	1,770	1,847	1,130	1,036	892	1,335
South Carolina	1,874	3,440	2,695	308	2,605	2,185
South Dakota	55	289	157	1,029	175	341
Tennessee	2,536	3,306	3,424	3,864	3,534	3,333
Texas	979	1,168	1,174	1,128	1,012	1,092
Utah	1,222	6,763	13,684	11,259	9,036	8,393
Vermont	59	43	67	42	38	50
Virginia	1,369	1,888	1,904	1,942	1,885	1,797
<b>Washington</b>	<b>451</b>	<b>488</b>	<b>403</b>	<b>449</b>	<b>338</b>	<b>426</b>
West Virginia	1,022	4,285	4,147	4,032	3,307	3,359
Wisconsin	772	927	891	758	715	813
Wyoming	96	233	199	216	180	185
U.S. Average	691	1,961	2,081	1,905	1,652	1,658
<b>Washington's Rank</b>	<b>21</b>	<b>11</b>	<b>10</b>	<b>10</b>	<b>5</b>	<b>11</b>

Source: U.S. Environmental Protection Agency, Office of Pollution Prevention and Toxics.  
Toxics Release Inventory Public Data Release Reports: 1989-2001. ([www.epa.gov](http://www.epa.gov))

Source: U.S. Department of Commerce, Economics and Statistics Administration, Statistical Abstract of the United States, 1995.

# State Health Index

The UnitedHealth Group State Health Rankings provide a composite indicator, by state, that measures the relative healthiness of each state and the general health of the population in the United States. Rankings are based on states' performance in five components: lifestyle, access to health care, occupational safety and disability, disease, and mortality. These components are in turn divided into a total of seventeen sub-components, each contributing to the overall score according to different component weights. To prevent an extreme value from excessively influencing the overall score, the maximum value any state can receive for a component is limited to the national average plus or minus two standard deviations. These components are then calculated into the state health index, which is simply the percentage a state is above or below the national average.

Washington's state health index ranked 11<sup>th</sup> in 2002 (tied with Wisconsin), up from 12<sup>th</sup> in 2001. Washington's strengths in 2002 include a low infant mortality rate (4.8 deaths per 1,000 births), low risk for heart disease (17 percent below the national average), and low motor vehicle deaths (1.2 deaths per 100,000,000 miles driven). Categories in which the state showed improvement in 2002 included the percentage of population without health insurance, which decreased to 13.1 from 15.8 in 2001, and cases per 100,000 of infectious diseases, which decreased to 20.5 from 24.5 in 2001. Washington has performed very well in the State Health Rankings over the last five years, with an average rank of 10<sup>th</sup> among the states and a score of 12 percent above the national average.

Chart 21  
State Health Index

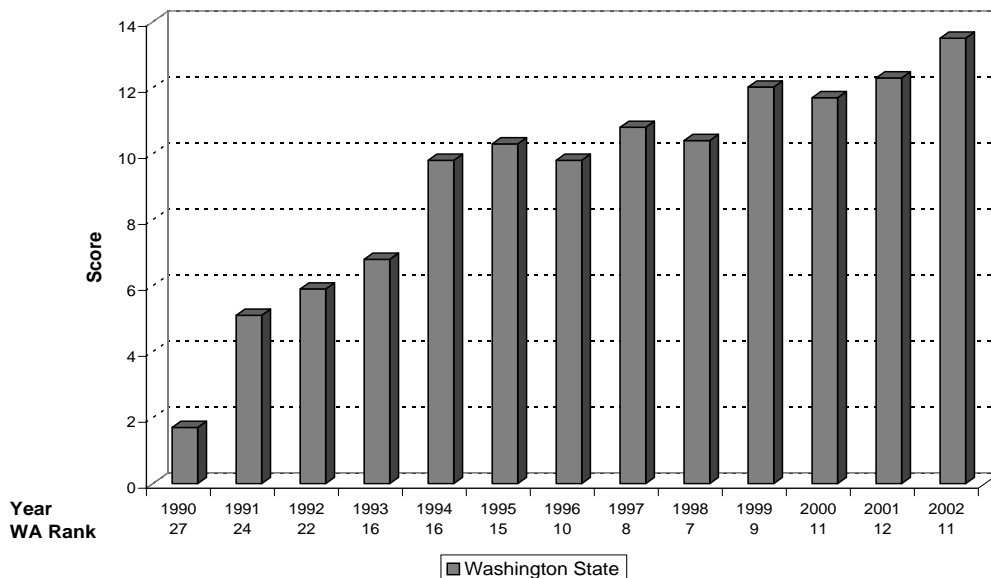


Table 21  
 Quality of Life  
 State Health Index  
 \*Score

	1998	1999	2000	2001	2002	1998-02
Alabama	-7	-10	-12	-11	-13	-11
Alaska	-8	-2	-2	2	0	-2
Arizona	-10	-7	-6	-4	-4	-6
Arkansas	-17	-19	-14	-9	-15	-15
California	5	4	4	5	4	4
Colorado	15	14	15	14	15	14
Connecticut	9	13	13	17	17	14
Delaware	-11	-8	-5	-6	-4	-7
Florida	-9	-11	-11	-13	-12	-11
Georgia	-2	-4	-5	-5	-9	-5
Hawaii	10	11	15	14	12	12
Idaho	1	4	4	7	8	5
Illinois	2	2	-1	-2	-1	-0
Indiana	3	4	1	5	4	3
Iowa	8	11	11	14	15	12
Kansas	6	5	7	7	7	6
Kentucky	-7	-7	-7	-6	-8	-7
Louisiana	-17	-18	-18	-21	-24	-20
Maine	3	11	12	14	14	11
Maryland	0	1	2	2	1	1
Massachusetts	12	16	16	15	19	16
Michigan	4	0	-1	0	1	1
Minnesota	22	23	22	23	22	22
Mississippi	-18	-18	-19	-19	-22	-19
Missouri	-4	-4	-3	-2	-3	-3
Montana	-3	-2	1	2	4	0
Nebraska	6	10	9	9	11	9
Nevada	-14	-13	-12	-9	-6	-11
New Hampshire	17	22	23	20	24	21
New Jersey	4	6	5	7	9	6
New Mexico	-13	-9	-9	-8	-10	-10
New York	-7	-5	-4	-3	-3	-4
North Carolina	-1	-4	-4	-4	-5	-4
North Dakota	6	10	10	11	14	10
Ohio	2	4	2	3	2	3
Oklahoma	-11	-10	-11	-8	-13	-11
Oregon	1	6	7	8	9	6
Pennsylvania	5	3	2	2	4	3
Rhode Island	4	8	7	10	12	8
South Carolina	-12	-14	-15	-15	-16	-14
South Dakota	4	4	6	6	10	6
Tennessee	-12	-11	-10	-10	-12	-11
Texas	-3	-4	-5	-5	-6	-4
Utah	13	15	17	19	18	16
Vermont	3	15	15	15	16	13
Virginia	9	10	9	10	9	9
<b>Washington</b>	<b>10</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>14</b>	<b>12</b>
West Virginia	-13	-13	-14	-13	-9	-12
Wisconsin	15	16	13	12	14	14
Wyoming	-7	0	-2	-2	3	-2
U.S. Average	0	0	0	0	0	0
<b>Washington's Rank</b>	<b>7</b>	<b>9</b>	<b>11</b>	<b>12</b>	<b>11</b>	<b>10</b>

\*Scores reflect the percentage above or below the national average.

Source: UnitedHealth Group, UnitedHealth Group State Health Rankings: 1990-2002, ([www.unitedhealthfoundation.org](http://www.unitedhealthfoundation.org))

# Parks and Recreation Areas

Washington lays claim to one of the largest and busiest state park systems in the United States. With 124 developed parks covering over 260,000 acres, Washington ranks 4<sup>th</sup> among all 50 states in the number of areas managed. Washington also ranks 4<sup>th</sup> in day-use attendance and 10<sup>th</sup> in the number of overnight visitors served. In 2002, Washington ranked 4<sup>th</sup> in total visitation with 48,864,376 visitors.

State parks provide areas that enrich the quality of life by providing recreational spaces where people exercise, enjoy the natural environment, and maintain their well being. In addition to the numerous social values generated by state parks, several economic benefits exist. Local economies prosper from the increased demand for gas, food and lodging. State parks also provide employment opportunities. The Washington State Parks and Recreation Commission reports that state parks employ approximately 530 full time employees.

Since state park visits per capita were recorded, Washington has consistently placed in the top 5 among the states and in 2002 was ranked 3<sup>rd</sup>, its highest ranking ever.

Chart 22  
State Parks and Recreation Areas

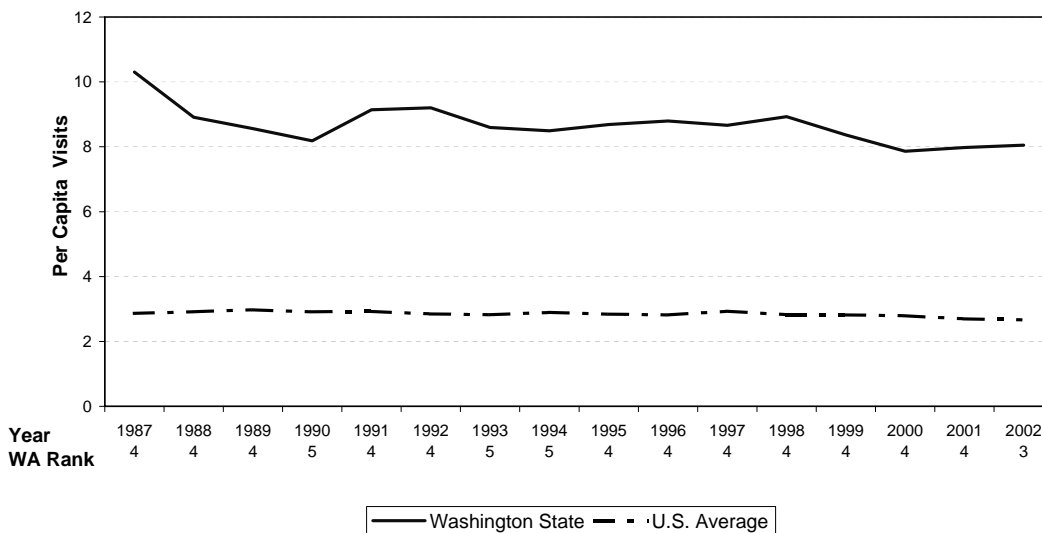




Table 22  
 Quality of Life  
**State Parks and Recreational Areas**  
 (Per Capita Park Visits)

	1998	1999	2000	2001	2002	1998-02
Alabama	1.3	1.4	1.3	1.2	1.2	1.3
Alaska	5.6	6.2	6.2	5.8	6.7	6.1
Arizona	0.5	0.5	0.5	0.5	0.4	0.5
Arkansas	2.8	2.5	2.5	2.9	3.0	2.8
California	2.6	2.3	2.9	2.3	2.4	2.5
Colorado	2.9	2.3	2.4	2.4	2.5	2.5
Connecticut	2.6	2.4	2.2	2.2	2.6	2.4
Delaware	3.5	5.3	5.0	4.0	4.0	4.3
Florida	0.9	1.0	1.0	1.1	1.1	1.0
Georgia	2.0	2.0	2.0	1.8	1.7	1.9
Hawaii	11.8	12.7	15.0	15.2	5.1	12.0
Idaho	1.8	1.9	2.0	1.8	1.9	1.9
Illinois	3.3	3.5	3.6	3.5	3.5	3.5
Indiana	3.0	3.1	3.0	2.9	2.7	3.0
Iowa	4.7	5.1	5.2	5.2	5.3	5.1
Kansas	2.6	2.7	2.7	2.8	2.9	2.7
Kentucky	2.2	1.9	1.9	1.9	1.9	2.0
Louisiana	0.3	0.3	0.4	0.4	0.4	0.4
Maine	1.6	2.0	1.8	1.8	2.0	1.8
Maryland	1.9	2.1	1.9	1.8	1.9	1.9
Massachusetts	2.1	2.2	2.0	1.9	1.8	2.0
Michigan	2.7	2.8	2.8	2.6	2.5	2.7
Minnesota	1.8	1.8	1.7	1.7	1.6	1.7
Mississippi	1.7	1.5	1.5	1.5	1.5	1.5
Missouri	3.2	3.2	3.2	3.2	3.1	3.2
Montana	1.6	1.7	1.5	1.5	1.3	1.5
Nebraska	5.7	5.6	5.6	5.8	5.7	5.7
Nevada	1.9	1.5	1.7	1.6	1.5	1.6
New Hampshire	3.1	3.6	4.1	5.3	5.3	4.3
New Jersey	1.8	1.8	1.8	1.8	1.8	1.8
New Mexico	2.9	2.7	2.5	2.2	2.1	2.5
New York	3.7	3.4	3.1	2.9	3.0	3.2
North Carolina	1.7	1.7	1.5	1.5	1.5	1.6
North Dakota	1.7	1.7	1.7	1.7	1.7	1.7
Ohio	4.2	5.3	4.9	5.2	5.0	4.9
Oklahoma	4.9	4.6	4.7	4.4	4.0	4.5
Oregon	12.0	11.7	11.2	11.4	11.2	11.5
Pennsylvania	2.9	3.0	3.0	3.0	3.0	3.0
Rhode Island	5.0	6.4	5.9	6.0	6.8	6.0
South Carolina	2.6	2.5	2.3	2.2	2.0	2.3
South Dakota	9.2	9.3	9.3	10.0	11.6	9.9
Tennessee	5.7	5.8	5.3	5.0	4.5	5.3
Texas	1.1	1.1	0.9	0.8	0.8	0.9
Utah	3.7	3.3	3.0	2.8	2.6	3.1
Vermont	1.3	1.4	1.2	1.3	1.6	1.4
Virginia	0.7	0.8	0.8	0.8	0.9	0.8
<b>Washington</b>	<b>8.9</b>	<b>8.4</b>	<b>7.9</b>	<b>8.0</b>	<b>8.1</b>	<b>8.2</b>
West Virginia	4.4	4.6	4.4	4.5	4.1	4.4
Wisconsin	2.6	2.7	2.9	3.0	2.9	2.8
Wyoming	4.6	4.5	5.1	4.8	5.6	4.9
U.S. Average	2.8	2.8	2.8	2.7	2.7	2.8
<b>Washington's Rank</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>4</b>

Source: National Association of State Parks Directors. Washington State Parks and Recreation Commission. Annual Information Exchange 1981-2002.

# State Arts

State arts agencies play a major role in making the arts accessible to the public. They support special events such as concerts in the park, touring artist groups, arts festivals. State arts agencies also support public art programs, which is specifically for the integration of artwork (sculpture, murals, paintings, glass-work, etc.) in the renovation or construction of certain state buildings, such as schools or departmental offices. Some theaters, operas, and orchestras are able to offer reduced price seating or special free performances due in part to government support.

It is difficult to quantify the effectiveness of state art programs. However, we can use the total revenue collected by state arts agencies to get a sense of the commitment a state makes to the arts. Total state art agency revenue\* includes state legislative appropriations, funds from the National Endowment for the Arts (NEA), private support, and other state funds, including transfer funds and special funding mechanisms. Some of the discipline areas that these dollars support include dance, theatre, visual arts, photography, literature, folk arts, and the humanities. State dollars make up more than 85% of the state arts agency's total revenue in Washington.

Although Washington has one of the oldest and highest funded public art programs in the nation, overall state arts support is below the national average. Between fiscal years 1999 and 2003, Washington's total state art agency revenue per capita averaged \$0.79 compared to the national average of \$1.60, ranking 42<sup>nd</sup> over this five-year period. In fiscal year 2003, Washington's per capita figure of \$0.92 increased from \$0.83 in 2002, but was still considerably lower than the national average of \$1.55, placing it at 36<sup>th</sup> among all states.

\*Though state arts agencies are the primary source for state funding, some states also fund the arts through other agencies, such as arts education funding through the Department of Education.

Chart 23  
State Arts

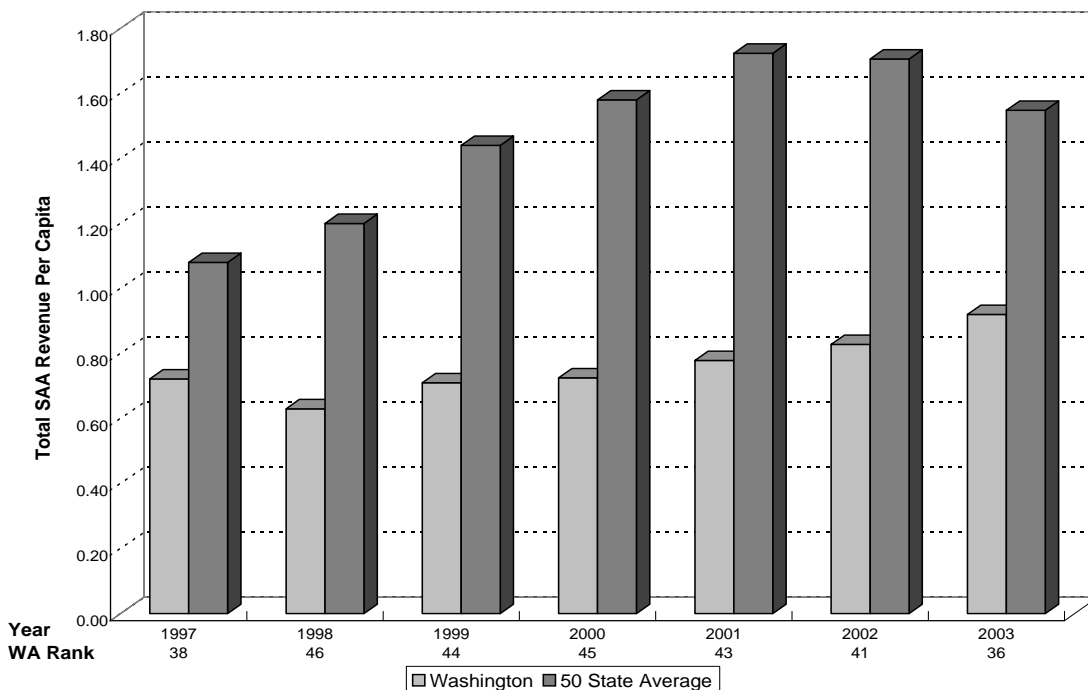


Table 23  
Quality of Life  
State Arts

Total Per Capita State Arts Agency Revenue\*

(Fiscal Years)	1999	2000	2001	2002	2003	1999-03
Alabama	1.20	1.23	1.51	1.41	1.22	1.31
Alaska	1.58	1.59	1.70	1.65	1.69	1.64
Arizona	0.92	0.94	0.97	0.93	0.89	0.93
Arkansas	0.82	0.95	0.81	0.92	0.75	0.85
California	1.41	1.57	2.03	1.28	0.62	1.38
Colorado	1.09	1.05	0.92	0.81	0.44	0.86
Connecticut	3.61	5.85	6.30	6.54	5.39	5.54
Delaware	2.73	2.80	2.82	2.84	2.83	2.80
Florida	2.36	1.90	2.35	2.04	1.84	2.10
Georgia	0.68	0.70	0.66	0.69	0.60	0.67
Hawaii	5.69	5.75	5.40	5.62	5.31	5.55
Idaho	1.25	1.14	1.13	1.19	1.10	1.16
Illinois	1.45	1.87	1.66	1.68	1.48	1.63
Indiana	0.60	0.73	0.72	0.69	0.65	0.68
Iowa	0.77	0.85	0.92	0.73	0.63	0.78
Kansas	0.75	0.82	0.78	0.80	0.76	0.78
Kentucky	1.15	1.16	1.15	1.12	1.14	1.14
Louisiana	1.28	1.28	1.23	1.30	1.25	1.27
Maine	1.00	1.40	1.02	1.05	1.07	1.11
Maryland	1.82	2.21	2.52	2.67	2.39	2.32
Massachusetts	2.92	3.05	3.03	3.19	1.34	2.71
Michigan	2.27	2.26	2.66	2.76	2.30	2.45
Minnesota	2.88	2.86	2.79	2.85	2.65	2.81
Mississippi	1.05	1.07	1.46	1.43	1.87	1.38
Missouri	1.98	2.22	2.23	1.67	0.74	1.77
Montana	1.94	1.83	1.94	2.04	1.88	1.92
Nebraska	1.63	1.63	1.37	1.30	1.08	1.40
Nevada	1.02	1.14	0.98	0.95	0.98	1.01
New Hampshire	1.03	1.07	0.86	0.97	0.98	0.98
New Jersey	2.03	2.46	2.72	2.77	2.63	2.52
New Mexico	1.88	1.71	1.30	1.34	1.25	1.49
New York	2.55	2.80	3.03	2.75	2.73	2.77
North Carolina	0.88	1.10	1.05	0.86	0.80	0.94
North Dakota	1.41	1.43	1.47	1.64	1.66	1.52
Ohio	1.41	1.55	1.49	1.39	1.23	1.41
Oklahoma	1.46	1.48	1.49	1.55	1.41	1.48
Oregon	0.62	0.60	0.69	0.56	0.47	0.59
Pennsylvania	0.94	1.05	1.20	1.19	1.18	1.11
Rhode Island	1.41	1.54	2.75	2.92	2.96	2.32
South Carolina	1.36	1.63	1.59	1.30	1.29	1.43
South Dakota	1.31	1.38	1.40	1.55	1.62	1.45
Tennessee	0.77	0.88	0.96	0.84	0.95	0.88
Texas	0.30	0.37	0.26	0.30	0.29	0.30
Utah	2.02	1.99	1.86	1.65	1.39	1.78
Vermont	2.58	2.60	2.72	2.56	2.29	2.55
Virginia	0.64	0.71	0.74	0.76	0.66	0.70
<b>Washington</b>	<b>0.71</b>	<b>0.73</b>	<b>0.78</b>	<b>0.83</b>	<b>0.92</b>	<b>0.79</b>
West Virginia	1.42	2.00	2.18	2.61	2.87	2.22
Wisconsin	0.67	0.68	0.57	0.58	0.56	0.61
Wyoming	1.85	2.05	2.00	2.18	2.37	2.09
U.S. Average	1.44	1.58	1.72	1.71	1.55	1.60
<b>Washington's Rank</b>	<b>44</b>	<b>45</b>	<b>43</b>	<b>41</b>	<b>36</b>	<b>42</b>

\*Though state arts agencies are the primary source for state funding, some states also fund the arts through other agencies, such as arts education funding through the Department of Education.

Source: National Assembly of State Arts Agencies, July 2003.

# Public Library Service

Public libraries contribute to the quality of life by providing a multitude of educational and recreational functions and services. Public libraries serve people of all ages and backgrounds by providing spaces for community meetings and study halls, storing a wealth of information and entertainment in books, and providing computer and Internet access.

The benchmark, total circulation per capita, is used to gauge the quality, magnitude, and availability of public library resources and services. Circulation is the checking out of items (i.e., books, CDs, videos) to the public and is a reliable indicator because most transactions are electronically recorded. This data is collected from every state and the National Center for Educational Statistics (NCES) presents the cumulative form.

Washington has had excellent performance in this arena, with an average state ranking of 5th from the years 1997 to 2001. During that period, the state had an average per capita circulation of 9.7 compared to the national average of 6.5. Washington's 2001 state ranking was 6<sup>th</sup>, with per capita circulation of 9.6 compared to the national average of 6.5.

Chart 24  
Public Library Service

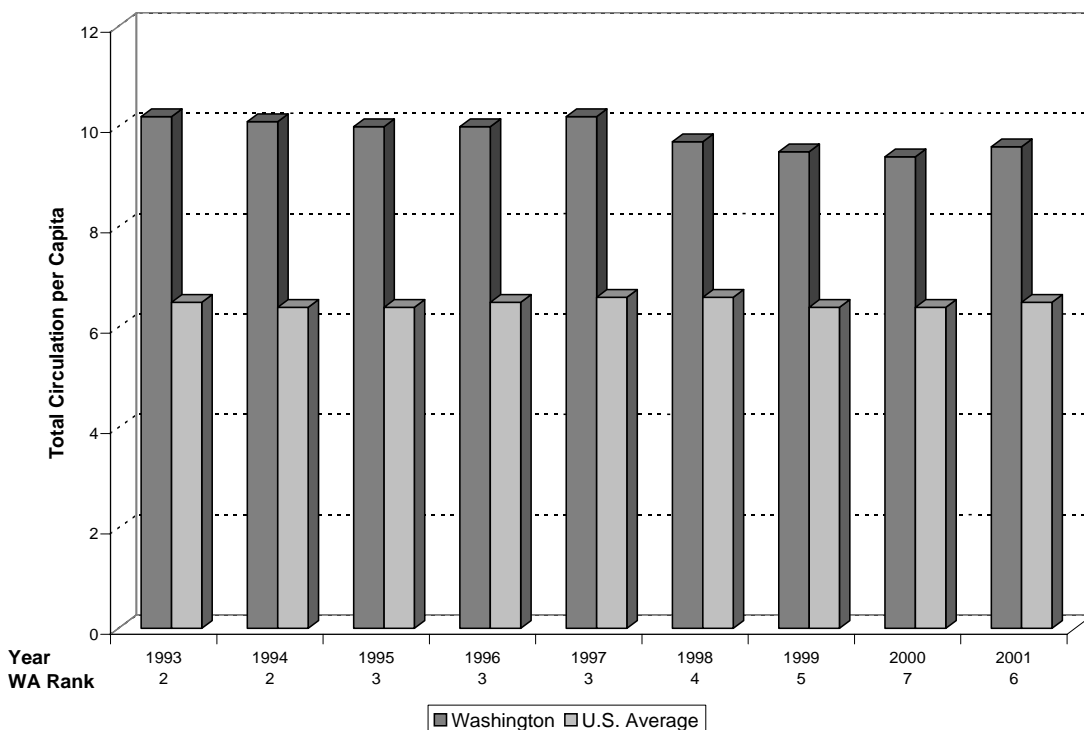


Table 24  
Quality of Life  
**Public Library Service**  
(Circulation per Capita)

	1997	1998	1999	2000	2001	1997-2001
Alabama	4.0	4.0	3.6	3.5	3.6	3.7
Alaska	6.1	6.1	6.2	5.8	5.8	6.0
Arizona	6.3	6.2	6.2	6.4	6.5	6.3
Arkansas	4.3	4.0	4.0	4.2	4.1	4.1
California	4.9	5.0	4.9	4.8	5.0	4.9
Colorado	8.8	9.2	9.5	9.5	10.4	9.5
Connecticut	8.6	8.5	8.4	8.5	8.4	8.5
Delaware	5.3	5.5	5.8	6.3	5.8	5.7
Florida	5.1	4.9	4.9	4.7	5.0	4.9
Georgia	4.6	4.5	4.6	4.4	4.6	4.5
Hawaii	6.4	6.5	6.2	5.8	5.6	6.1
Idaho	7.9	7.8	7.8	7.4	7.7	7.7
Illinois	7.9	7.9	7.8	7.7	7.4	7.7
Indiana	11.0	10.9	10.6	11.1	11.1	10.9
Iowa	9.0	9.0	8.5	8.6	8.7	8.8
Kansas	9.8	9.7	9.5	9.6	9.6	9.6
Kentucky	5.4	5.5	5.1	5.1	5.2	5.3
Louisiana	4.4	4.3	4.1	4.0	4.1	4.2
Maine	7.8	7.9	7.2	7.0	6.9	7.4
Maryland	9.2	8.9	8.9	8.9	9.0	9.0
Massachusetts	7.4	7.7	7.5	7.4	7.2	7.4
Michigan	5.5	5.5	5.4	5.5	5.2	5.4
Minnesota	9.5	9.1	8.7	8.9	8.9	9.0
Mississippi	3.3	3.3	3.1	3.1	3.2	3.2
Missouri	8.4	8.6	8.4	8.1	7.6	8.2
Montana	5.9	5.8	5.5	5.5	5.3	5.6
Nebraska	8.0	8.1	7.8	8.0	8.6	8.1
Nevada	5.1	5.0	4.5	4.8	5.1	4.9
New Hampshire	7.6	7.5	7.3	7.2	7.1	7.3
New Jersey	6.1	5.9	5.7	5.5	5.9	5.8
New Mexico	5.4	5.6	5.3	5.2	4.9	5.3
New York	7.4	7.4	7.3	7.3	7.2	7.3
North Carolina	5.8	5.7	5.6	5.6	5.4	5.6
North Dakota	7.2	7.3	7.3	7.2	7.1	7.2
Ohio	12.6	12.5	12.4	12.8	13.8	12.8
Oklahoma	6.0	5.9	5.9	5.9	5.4	5.8
Oregon	10.2	10.2	10.3	11.1	12.2	10.8
Pennsylvania	4.7	4.8	4.7	4.7	4.7	4.7
Rhode Island	6.6	6.6	6.5	6.2	6.3	6.4
South Carolina	4.5	4.5	4.5	4.5	4.5	4.5
South Dakota	9.3	8.9	8.6	7.4	8.0	8.4
Tennessee	4.0	4.0	4.0	3.8	3.9	3.9
Texas	4.4	4.3	4.2	4.3	4.2	4.3
Utah	9.0	9.7	9.8	10.0	11.0	9.9
Vermont	7.4	6.9	7.2	7.2	6.7	7.1
Virginia	7.6	7.6	7.5	7.8	7.9	7.7
<b>Washington</b>	<b>10.2</b>	<b>9.7</b>	<b>9.5</b>	<b>9.4</b>	<b>9.6</b>	<b>9.7</b>
West Virginia	5.3	5.1	4.7	4.6	4.4	4.8
Wisconsin	9.2	9.0	8.8	8.7	9.2	9.0
Wyoming	7.7	7.8	7.8	7.7	7.6	7.7
U.S. Average*	6.6	6.6	6.4	6.4	6.5	6.5
<b>Washington's Rank</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>7</b>	<b>6</b>	<b>5</b>

Source: U.S. Department of Education. National Center for Education Statistics, Public Libraries in the United States: FY 1996-2001.

\*U.S. Average includes Washinton D.C.

# Housing Opportunity Index

(Not updated due to unavailability of data)

The Housing Opportunity Index (HOI), created by the National Association of Home Builders, is a measure of the percentage of new and existing homes sold in an area that a family earning the median income in that area can afford to buy. The index for the first quarter of 2002 was based on an analysis of more than 580,000 completed home sales in 191 metropolitan area markets nationwide. The average HOI for this period was 64.8, up from 56.9 in the first quarter of 2001, indicating that 64.8 percent of the homes sold in these metropolitan areas would be affordable to someone earning the median income for all of the areas.

Seven Washington metropolitan areas are included in the index: Bellingham, Bremerton, Olympia, Spokane, Tacoma, the Tri-Cities, and the Seattle-Bellevue-Everett area. Of these areas, two, Olympia and Spokane, had HOIs above the national average with index values of 64.9 and 66.1, respectively. Spokane had the highest HOI among the included Washington areas while the Tri-Cities had the lowest with a HOI of 54.6. Spokane's HOI ranked 126<sup>th</sup> among the 191 metropolitan areas included in the index, while the Tri-Cities' ranked 155<sup>th</sup>.

Table 25

## Quality of Life

**Housing Opportunity Index**

(First Quarter 2002)

Metropolitan Area	Share of Homes Affordable for Median Income	Family Income (000s)	Median Sales Price (000s)	Affordability Rank
Akron, OH PMSA+	79.9	55.6	109	53
Albany-Schenectady-Troy, NY MSA+	68.5	55.5	132	112
Amarillo, TX MSA*	68.7	44.8	98	111
Anchorage, AK MSA+	75.6	60.5	153	84
Ann Arbor, MI PMSA+	60.2	76.0	190	143
Asheville, NC*	67.2	49.0	127	121
Atlanta, GA MSA#	81.8	71.2	146	34
Atlantic-Cape May, NJ PMSA+	62.4	51.8	138	137
Austin-San Marcos, TX MSA#	67.9	71.1	178	118
Bakersfield, CA MSA+	69.4	40.3	110	107
Baltimore, MD PMSA#	77.4	66.4	143	70
Barnstable-Yarmouth, MA MSA*	36.7	56.5	227	174
Baton Rouge, LA MSA+	81.6	49.2	111	35
Beaumont-Port Arthur, TX MSA+	80.6	46.8	83	44
<b>Bellingham, WA*</b>	<b>59.6</b>	<b>50.2</b>	<b>160</b>	<b>146</b>
Benton Harbor, MI MSA*	70.2	55.1	111	103
Bergen-Passaic, NJ PMSA#	61.5	78.9	227	140
Biloxi-Gulfport-Pascagoula, MS MSA+	71.6	44.4	109	97
Birmingham, AL MSA+	73.4	52.7	134	94
Boise City, ID+	77.7	54.5	131	66
Boston, MA-NH PMSA#	48.2	74.2	257	161
Boulder-Longmont, CO PMSA+	62.4	87.9	255	137
Brazoria, TX PMSA*	65.2	57.1	147	128
<b>Bremerton, WA PMSA*</b>	<b>62.5</b>	<b>51.5</b>	<b>154</b>	<b>136</b>
Buffalo-Niagara Falls, NY MSA#	80.1	50.8	86	50
Burlington, VT MSA*	64.6	57.4	157	130
Canton-Massillon, OH MSA+	83.0	51.9	103	28
Champaign-Urbana, IL MSA*	87.0	59.6	89	12
Charleston, WV+	83.2	45.9	92	26
Charleston-North Charleston, SC MSA+	68.5	49.2	138	112
Charlotte-Gastonia-Rock Hill, NC-SC MSA#	73.7	64.1	153	92
Chicago, IL PMSA#	73.7	75.4	176	92
Chico-Paradise, CA MSA*	40.9	39.2	153	167
Cincinnati, OH-KY-IN PMSA#	83.6	64.3	125	24
Cleveland-Lorain-Elyria, OH PMSA#	79.9	60.0	123	53

\*Denotes population below 250,000; + Denotes population of 250,000 to 1 million;

# Denotes population over 1 million.

"MSA" Metropolitan Statistical Area

"PMSA" Primary Metropolitan Statistical Area

Source: National Association of Home Builders (www.nahb.com), July 2002

<b>Housing Opportunity Index (cont.)</b>		<b>Median</b>		
<b>Metropolitan Area</b>	<b>Share of Homes Affordable for Median Income</b>	<b>Family Income (000s)</b>	<b>Sales Price (000s)</b>	<b>Affordability Rank</b>
Colorado Springs, CO MSA+	60.1	56.8	174	144
Columbia, SC MSA+	81.5	56.4	120	37
Columbus, OH MSA#	78.2	63.4	140	63
Dallas, TX PMSA#	70.5	66.5	155	100
Danbury, CT PMSA*	60.6	98.1	270	142
Davenport-Moline-Rock Island, IA-IL MSA+	89.8	53.6	82	7
Dayton-Springfield, OH MSA+	90.0	60.2	101	6
Denver, CO PMSA#	59.6	69.9	208	146
Des Moines, IA+	84.5	66.9	120	21
Detroit, MI PMSA#	67.1	69.9	156	122
Duluth-Superior, MN-WI MSA*	81.1	50.8	109	41
El Paso, TX MSA+	68.8	36.3	86	109
Elkhart-Goshen, IN MSA*	94.9	59.3	111	1
Eugene-Springfield, OR+	38.9	43.8	135	169
Fargo-Moorhead, ND-MN*	94.5	55.9	88	3
Fayetteville, NC+	80.0	43.7	95	52
Flint, MI PMSA+	66.5	55.6	124	125
Fort Collins-Loveland, CO MSA*	57.2	60.8	187	153
Fort Lauderdale, FL PMSA#	70.3	60.2	140	102
Fort Myers-Cape Coral, FL MSA+	74.2	52.1	125	91
Fort Pierce-Port St. Lucie, FL MSA+	78.4	52.4	115	61
Fort Walton Beach, FL MSA*	83.8	50.4	116	23
Fort Worth-Arlington, TX PMSA#	79.7	61.3	127	56
Fresno, CA MSA+	52.1	40.3	134	156
Gainesville, FL MSA*	76.1	48.1	113	80
Galveston-Texas City, TX PMSA*	58.9	52.5	138	149
Goldsboro, NC MSA*	76.4	45.3	108	77
Grand Rapids-Muskegon-Holland, MI MSA#	80.6	61.3	123	44
Greeley, CO PMSA*	41.3	47.9	165	166
Greensboro-Winston-Salem-High Point, NC MSA#	83.2	56.1	125	26
Greenville, NC MSA*	71.6	49.1	110	97
Greenville-Spartanburg-Anderson, SC MSA+	81.5	53.2	116	37
Hagerstown, MD PMSA*	76.6	53.5	129	76
Hamilton-Middletown, OH PMSA+	83.9	62.6	133	22
Harrisburg-Lebanon-Carlisle, PA MSA+	80.4	55.4	116	47
Hartford, CT MSA#	75.8	66.6	146	83
Hattiesburg, MS MSA*	68.5	39.1	100	112
Honolulu, HI MSA+	59.7	62.6	195	145
Houma, LA MSA*	67.1	38.3	111	122
Houston, TX PMSA#	67.8	59.6	138	119

\*Denotes population below 250,000; + Denotes population of 250,000 to 1 million;

# Denotes population over 1 million.

“MSA” Metropolitan Statistical Area

“PMSA” Primary Metropolitan Statistical Area

Source: National Association of Home Builders (www.nahb.com), July 2002



**Housing Opportunity Index (cont.)**

<b>Metropolitan Area</b>	<b>Share of Homes Affordable for Median Income</b>	<b>Family Income (000s)</b>	<b>Median Sales Price (000s)</b>	<b>Affordability Rank</b>
Indianapolis, IN MSA#	88.6	64.1	125	11
Jackson, MS MSA+	81.3	53.1	110	40
Jacksonville, FL MSA#	77.8	55.6	128	64
Jersey City, NJ PMSA+	45.4	60.1	200	164
Kalamazoo-Battle Creek, MI MSA+	67.0	53.8	116	124
Kansas City, MO-KS MSA#	86.4	64.5	125	13
Knoxville, TN+	77.7	52.0	113	66
Kokomo, IN*	94.8	61.9	99	2
Lafayette, IN*	86.1	58.8	123	14
Lafayette, LA+	62.7	37.4	110	134
Lakeland-Winter Haven, FL MSA+	85.5	47.0	95	17
Lansing-East Lansing, MI MSA+	80.9	60.1	112	42
Las Vegas, NV-AZ MSA#	70.2	54.3	153	103
Lawrence, MA-NH PMSA+	38.1	67.4	260	171
Lexington, KY MSA+	80.6	56.3	123	44
Little Rock-North Little Rock, AR+	77.0	49.7	113	72
Los Angeles-Long Beach, CA PMSA#	34.4	55.1	240	176
Louisville, KY-IN MSA+	77.8	56.3	124	64
Lowell, MA-NH PMSA+	35.6	75.2	300	175
Mansfield, OH MSA*	83.5	49.2	90	25
Medford-Ashland, OR MSA*	29.1	41.9	149	179
Melbourne-Titusville-Palm Bay, FL MSA+	84.9	52.9	106	19
Memphis, TN-AR-MS MSA#	76.1	57.3	126	80
Merced, CA MSA*	33.0	39.4	163	178
Miami, FL PMSA#	58.1	48.2	138	151
Milwaukee-Waukesha, WI PMSA#	76.0	67.2	130	82
Minneapolis-St. Paul, MN-WI MSA#	76.7	76.7	180	74
Mobile, AL+	78.7	45.1	97	58
Modesto, CA+	33.6	46.5	182	177
Muncie, IN*	89.1	48.9	99	9
Naples, FL MSA*	68.8	69.8	178	109
Nashua, NH PMSA*	58.7	71.1	197	150
Nashville, TN MSA#	78.6	61.6	139	59
Nassau-Suffolk, NY PMSA#	74.8	83.0	190	90
New Bedford, MA PMSA*	39.9	47.5	180	168
New Haven-Meriden, CT PMSA+	75.5	65.3	143	86
New London-Norwich, CT-RI MSA+	70.0	58.6	150	105
New Orleans, LA MSA#	69.5	44.0	121	106
New York, NY PMSA#	49.9	62.8	217	159
Newark, NJ PMSA#	62.1	78.7	204	139

\*Denotes population below 250,000; + Denotes population of 250,000 to 1 million;

# Denotes population over 1 million.

“MSA” Metropolitan Statistical Area

“PMSA” Primary Metropolitan Statistical Area

Source: National Association of Home Builders (www.nahb.com), July 2002

<b>Housing Opportunity Index (cont.)</b>			<b>Median</b>	
<b>Metropolitan Area</b>	<b>Share of Homes Affordable for Median Income</b>	<b>Family Income (000s)</b>	<b>Sales Price (000s)</b>	<b>Affordability Rank</b>
Norfolk-Virginia Beach-Newport News, VA-NC MS	75.5	53.8	125	86
Oakland, CA PMSA#	23.9	74.5	350	182
Ocala, FL MSA*	82.8	41.6	86	29
Oklahoma City, OK MSA#	80.1	46.0	92	50
<b>Olympia, WA PMSA*</b>	<b>64.9</b>	<b>53.0</b>	<b>150</b>	<b>129</b>
Omaha, NE-IA MSA+	82.2	64.4	119	33
Orange County, CA PMSA#	37.7	75.6	315	172
Orlando, FL MSA#	75.5	54.7	134	86
Panama City, FL MSA*	80.2	46.3	109	49
Pensacola, FL MSA+	82.8	45.3	105	29
Peoria-Pekin, IL MSA+	90.8	57.8	85	5
Philadelphia, PA-NJ PMSA#	76.7	63.3	132	74
Phoenix-Mesa, AZ MSA#	75.4	57.9	146	89
Pittsburgh, PA MSA#	69.4	48.9	101	107
Pittsfield, MA MSA*	65.7	50.4	129	127
Portland-Vancouver, OR-WA PMSA#	46.6	57.2	167	163
Portsmouth-Rochester, NH-ME PMSA*	21.5	57.3	240	184
Providence-Fall River-Warwick, RI-MA, MSA#	76.8	54.1	128	73
Provo-Orem, UT MSA+	60.7	50.4	157	141
Pueblo, CO MSA*	64.1	39.4	108	131
Punta Gorda, FL MSA*	80.3	44.9	92	48
Raleigh-Durham-Chapel Hill, NC MSA#	75.6	71.3	162	84
Reading, PA MSA+	79.9	53.3	109	53
Redding, CA MSA*	50.2	39.0	134	158
Reno, NV MSA+	70.8	62.3	170	99
<b>Richland-Kennewick-Pasco, WA, MSA*</b>	<b>54.6</b>	<b>49.5</b>	<b>150</b>	<b>155</b>
Richmond-Petersburg, VA MSA+	79.3	65.9	149	57
Riverside-San Bernardino, CA PMSA#	49.6	50.3	177	160
Rochester, NY MSA#	78.6	54.9	97	59
Rockford, IL MSA+	84.9	59.8	111	19
Rocky Mount, NC MSA*	76.4	48.8	106	77
Sacramento, CA PMSA#	43.7	57.3	218	165
Saginaw-Bay City-Midland, MI MSA+	82.6	55.1	85	32
Salem, OR PMSA+	50.4	46.7	131	157
Salinas, CA MSA+	7.7	53.8	319	191
Salt Lake City-Ogden, UT MSA#	68.3	57.2	154	117
San Antonio, TX MSA#	68.5	46.2	112	112
San Diego, CA MSA#	21.6	60.1	290	183
San Francisco, CA PMSA#	9.2	86.1	525	189
San Jose, CA PMSA#	20.1	96.0	451	185

\*Denotes population below 250,000; + Denotes population of 250,000 to 1 million;

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“MSA” Metropolitan Statistical Area

“PMSA” Primary Metropolitan Statistical Area

Source: National Association of Home Builders (www.nahb.com), July 2002

**Housing Opportunity Index (cont.)**

<b>Metropolitan Area</b>	<b>Share of Homes Affordable for Median Income</b>	<b>Family Income (000s)</b>	<b>Median Sales Price (000s)</b>	<b>Affordability Rank</b>
San Luis Obispo-Atascadero-Paso Robles, CA MS	13.0	50.3	290	188
Santa Barbara-Santa Maria-Lompoc, CA MSA+	25.2	56.8	272	181
Santa Cruz-Watsonville, CA PMSA*	8.0	69.0	420	190
Santa Fe, NM, MSA*	59.6	63.1	202	146
Santa Rosa, CA PMSA+	15.3	63.4	329	187
Sarasota-Bradenton, FL MSA+	72.6	53.4	134	95
<b>Seattle-Bellevue-Everett, WA PMSA#</b>	<b>63.1</b>	<b>77.9</b>	<b>234</b>	<b>133</b>
South Bend, IN MSA+	80.8	55.7	105	43
<b>Spokane, WA, MSA+</b>	<b>66.1</b>	<b>46.6</b>	<b>125</b>	<b>126</b>
Springfield, IL MSA*	92.6	64.9	90	4
Springfield, MA MSA+	76.4	50.7	122	77
Springfield, MO, MSA+	88.7	49.2	88	10
St. Louis, MO-IL MSA#	77.6	61.4	126	68
Stockton-Lodi, CA MSA+	27.2	47.5	220	180
Syracuse, NY MSA+	82.8	50.3	78	29
<b>Tacoma, WA PMSA+</b>	<b>54.7</b>	<b>52.0</b>	<b>165</b>	<b>154</b>
Tallahassee, FL MSA+	85.1	57.2	122	18
Tampa-St. Petersburg-Clearwater, FL MSA#	77.4	50.5	117	70
Toledo, OH MSA+	81.6	56.7	108	35
Trenton, NJ PMSA+	68.4	74.1	161	116
Tucson, AZ MSA+	70.4	49.2	129	101
Tulsa, OK MSA+	77.5	46.9	104	69
Vallejo-Fairfield-Napa, CA PMSA+	17.9	57.2	271	186
Ventura, CA PMSA+	36.9	74.7	303	173
Vineland-Millville-Bridgeton, NJ PMSA*	85.6	50.2	92	16
Visalia-Tulare-Porterville, CA MSA+	63.6	37.4	110	132
Washington, DC-MD-VA-WV PMSA#	78.3	91.5	200	62
Waterbury, CT PMSA*	62.7	62.2	168	134
West Palm Beach-Boca Raton, FL MSA+	72.6	62.8	147	95
Williamsport, PA MSA*	81.4	41.9	83	39
Wilmington-Newark, DE-MD PMSA+	89.4	75.9	149	8
Worcester, MA-CT PMSA+	57.4	58.4	180	152
Yolo, CA PMSA*	38.9	57.0	221	169
Youngstown-Warren, OH MSA+	85.8	46.4	82	15
Yuba City, CA MSA*	47.2	39.3	140	162
Yuma, AZ MSA*	67.5	36.8	97	120
<b>National</b>	<b>64.8</b>	<b>54.4</b>	<b>160</b>	

\*Denotes population below 250,000; + Denotes population of 250,000 to 1 million;

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“MSA” Metropolitan Statistical Area

“PMSA” Primary Metropolitan Statistical Area

Source: National Association of Home Builders (www.nahb.com), July 2002

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# Education and Skills of the Workforce

# Fourth Grade Reading and Mathematics

(Mathematics not updated due to unavailability of data)

The National Assessment of Education Progress (NAEP) program, sponsored by the U.S. Department of Education, is the only testing program that provides valid uniform educational achievement indicators allowing for state comparisons. The NAEP assesses students in grades 4, 8, and 12 in various academic subjects. These subjects include the arts, geography, reading, science, civics, mathematics, U.S. History, and writing. The Washington State Economic Climate Study tracks the average scale score of fourth grade reading and mathematics by state.

Prior to the 2002-03 school year, participation in the NAEP tests was voluntary, with single-subject tests held every two years, alternating subjects every two years. As such, states that either declined to participate or had an insufficient number of participating schools to create a valid average state score are excluded from the state rankings. Washington did not participate in the inaugural 1992 mathematics and reading tests, and had insufficient voluntary participation in the 2000 mathematics test. As of the 2002-03 school year, however, participation in the NAEP test is mandatory due to the provisions of the “No Child Left Behind Act”, which was passed by the Federal Government in 2001. Under the act, the NAEP tests in both reading and mathematics will be given to students in the 4<sup>th</sup> and 8<sup>th</sup> grades every two years, starting in the 2002-03 school year. Results for the 2003 mathematics test, taken between January and March, were not available in time for this publication but are scheduled to be released this year.

NAEP scores can be interpreted using the achievement level thresholds and their corresponding definitions outlined below. Reading achievement is measured with exercises that require students to read material for two different purposes, literary experience and knowledge retention. Washington first participated in the reading assessment in 1994 and ranked 19<sup>th</sup> with a score of 213 among the 39 participants. In 2002, Washington increased its ranking to 7<sup>th</sup> and further improved its score to 224 from 218 in 1998 (please note that the 1998 reading data was updated from the 2002 publication as the NEAP has switched to a scoring format that includes the scores of tests taken by students who needed accommodations for special needs). The skills and content covered in the mathematics section include spatial sense, data analysis, statistics, probability, algebra and functions. Washington participated in the mathematics assessment in 1996 and ranked 17<sup>th</sup> out of 43 participants with a score of 225. When released, the 2002-03 school year math scores will be available through the NCES website ([www.nces.ed.gov](http://www.nces.ed.gov)).

Chart 26  
Grade 4 Public School Students:  
Average Reading Proficiency Scores

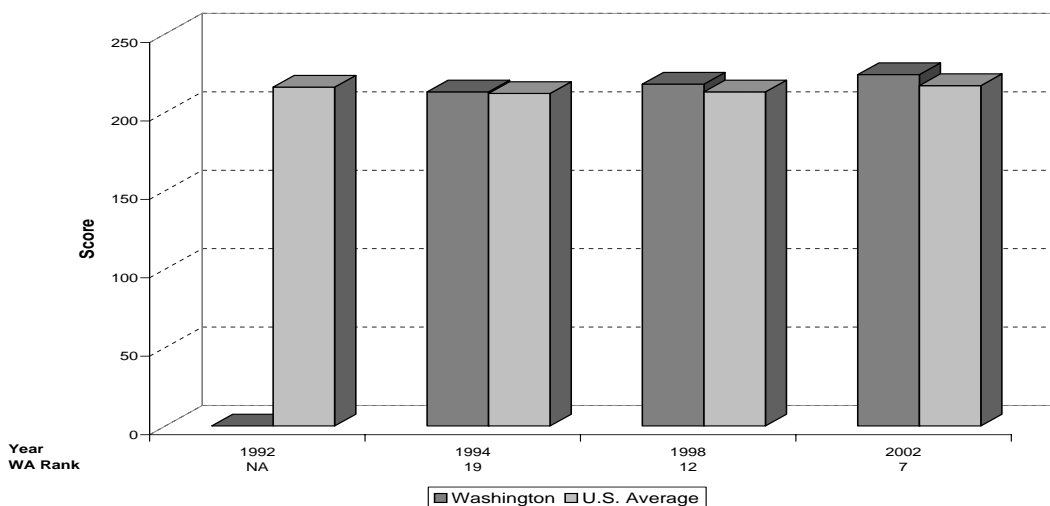


Table 26  
 Education and Skills of the Workforce  
**Grade 4 Public School Students:**  
 Average Reading Scale Scores

	1992	1994	1998	2002	1992-98
Alabama	207	208	211	207	208
Alaska	NA	NA	NA	NA	NA
Arizona	209	206	206	205	207
Arkansas	211	209	209	213	211
California	202	197	202	206	202
Colorado	217	213	220	NA	217
Connecticut	222	222	230	229	226
Delaware	213	206	207	224	213
Florida	208	205	206	214	208
Georgia	212	207	209	215	211
Hawaii	203	201	200	208	203
Idaho	219	NA	NA	220	220
Illinois	NA	NA	NA	NA	NA
Indiana	221	220	NA	222	221
Iowa	225	223	220	223	223
Kansas	NA	NA	221	222	222
Kentucky	213	212	218	219	216
Louisiana	204	197	200	207	202
Maine	227	228	225	225	226
Maryland	211	210	212	217	213
Massachusetts	226	223	223	234	227
Michigan	216	NA	216	219	217
Minnesota	221	218	219	225	221
Mississippi	199	202	203	203	202
Missouri	220	217	216	220	218
Montana	NA	222	225	224	224
Nebraska	221	220	NA	222	221
Nevada	NA	NA	206	209	208
New Hampshire	228	223	226	NA	226
New Jersey	223	219	NA	NA	221
New Mexico	211	205	205	208	207
New York	215	212	215	222	216
North Carolina	212	214	213	222	215
North Dakota	226	225	NA	224	225
Ohio	217	NA	NA	222	220
Oklahoma	220	NA	219	213	217
Oregon	NA	NA	212	220	216
Pennsylvania	221	215	NA	221	219
Rhode Island	217	220	218	220	219
South Carolina	210	203	209	214	209
South Dakota	NA	NA	NA	NA	NA
Tennessee	212	213	212	214	213
Texas	213	212	214	217	214
Utah	220	217	216	222	219
Vermont	NA	NA	NA	227	227
Virginia	221	213	217	225	219
<b>Washington</b>	<b>NA</b>	<b>213</b>	<b>218</b>	<b>224</b>	<b>218</b>
West Virginia	216	213	216	219	216
Wisconsin	224	224	222	NA	223
Wyoming	223	221	218	221	221
U.S. Average	216	212	213	217	215
<b>Washington's Rank</b>	<b>NA</b>	<b>19</b>	<b>12</b>	<b>7</b>	<b>22</b>

NA: State did not participate in the NAEP assessment during this year.  
 Source: National Center for Education Statistics National Assessment of Educational Progress (NAEP) 1992, 1994, 1998, and 2002 Reading Report Card for the States

### Grade 4 Reading Achievement Levels

**Basic  
208**

Fourth-grade students performing at the Basic level should demonstrate an understanding of the overall meaning of what they read. When reading text appropriate for fourth graders, they should be able to make relatively obvious connections between the text and their own experiences and extend the ideas in the text by making simple inferences.

**Proficient  
238**

Fourth-grade students performing at the Proficient level should be able to demonstrate an overall understanding of the text, providing inferential as well as literal information. When reading text appropriate to fourth grade, they should be able to extend the ideas in the text by making inferences, drawing conclusions, and making connections to their own experiences. The connection between the text and what the student infers should be clear.

**Advanced  
268**

Fourth-grade students performing at the Advanced level should be able to generalize about topics in the reading selection and demonstrate an awareness of how authors compose and use literary devices. When reading text appropriate to fourth grade, they should be able to judge text critically and, in general, give thorough answers that indicate careful thought.

### Grade 4 Mathematics Achievement Levels\*

**Basic  
214**

Fourth graders performing at the basic level should be able to estimate and use basic facts to perform simple computations with whole numbers; show some understanding of fractions and decimals; and solve some simple real-world problems in all NAEP content areas. Students at this level should be able to use--though not always accurately--four-function calculators, rulers, and geometric shapes. Their written responses are often minimal and presented without supporting information.

Fourth graders performing at the proficient level should be able to use whole numbers to estimate, compute, and determine whether results are reasonable. They should have a conceptual understanding of fractions

**Proficient  
249**

and decimals; be able to solve real-world problems in all NAEP content areas; and use four-function calculators, rulers, and geometric shapes appropriately. Students performing at the proficient level should employ problem-solving strategies such as identifying and using appropriate information. Their written solutions should be organized and presented both with supporting information and explanations of how they were achieved.

**Advanced  
282**

Fourth graders performing at the advanced level should be able to solve complex and nonroutine real-world problems in all NAEP content areas. They should display mastery in the use of four-function calculators, rulers, and geometric shapes. They students are expected to draw logical conclusions and justify answers and solution processes by explaining why, as well as how, they were achieved. They should go beyond the obvious in their interpretations and be able to communicate their thoughts clearly and concisely.

Chart 27  
Grade 4 Public School Students:  
Average Mathematics Scale Scores

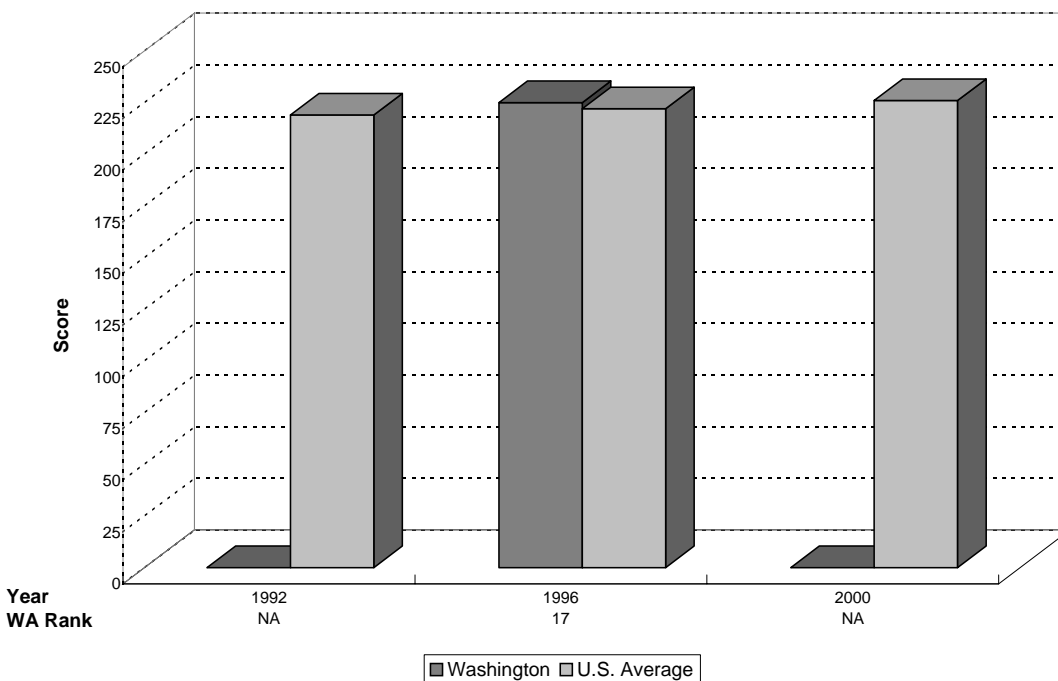




Table 27  
 Education and Skills of the Workforce  
**Grade 4 Public School Students:**  
 Average Mathematics Scale Scores

	1992	1996	2000	1992-96
Alabama	208	212	218	210
Alaska	NA	224	NA	224
Arizona	215	218	219	217
Arkansas	210	216	217	213
California	208	209	214	209
Colorado	221	226	NA	224
Connecticut	227	232	234	230
Delaware	218	215	NA	217
Florida	214	216	NA	215
Georgia	216	215	220	216
Hawaii	214	215	216	215
Idaho	NA	NA	NA	NA
Illinois	NA	NA	NA	NA
Indiana	221	229	234	225
Iowa	230	229	233	230
Kansas	NA	NA	NA	NA
Kentucky	215	220	221	218
Louisiana	204	209	218	207
Maine	232	232	231	232
Maryland	217	221	222	219
Massachusetts	227	229	235	228
Michigan	220	226	231	223
Minnesota	228	232	235	230
Mississippi	202	208	211	205
Missouri	222	225	229	224
Montana	NA	228	230	228
Nebraska	225	228	226	227
Nevada	NA	218	220	218
New Hampshire	NA	NA	NA	NA
New Jersey	227	227	NA	227
New Mexico	213	214	214	214
New York	218	223	227	221
North Carolina	213	224	232	219
North Dakota	229	231	231	230
Ohio	NA	NA	NA	NA
Oklahoma	NA	NA	NA	NA
Oregon	NA	223	227	223
Pennsylvania	224	226	NA	225
Rhode Island	215	220	225	218
South Carolina	212	213	220	213
South Dakota	NA	NA	NA	NA
Tennessee	211	219	220	215
Texas	218	229	233	224
Utah	224	227	227	226
Vermont	NA	225	232	225
Virginia	221	223	230	222
Washington	NA	225	NA	225
West Virginia	215	223	225	219
Wisconsin	229	231	NA	230
Wyoming	225	223	229	224
U.S. Average	219	222	226	221
<b>Washington's Rank</b>	<b>NA</b>	<b>17</b>	<b>NA</b>	<b>12</b>

NA: State did not participate in the NAEP assessment during this year.  
 Source: National Center for Education Statistics. National Assessment of Education Progress (NAEP) 1992, 1996, 2000 Reading Report Card.

# Tenth Grade WASL Scores

The Washington Assessment of Student Learning (WASL) is a statewide assessment designed to measure whether public school students have mastered the state's Essential Academic Learning Requirements in reading, writing, listening and mathematics in grades 4, 7 and 10. The WASL is administered each spring and is comprised of multiple-choice, short-answer and essay questions. In 2008, high school students must meet standards on the reading, writing, listening and mathematics sections of the tenth-grade WASL in order to graduate.

As the WASL is unique to Washington, test results cannot be compared to those in other states. The results are included here, however, as they provide an indication of Washington's progress in maximizing the number of students who are able to pass the WASL by the tenth grade.

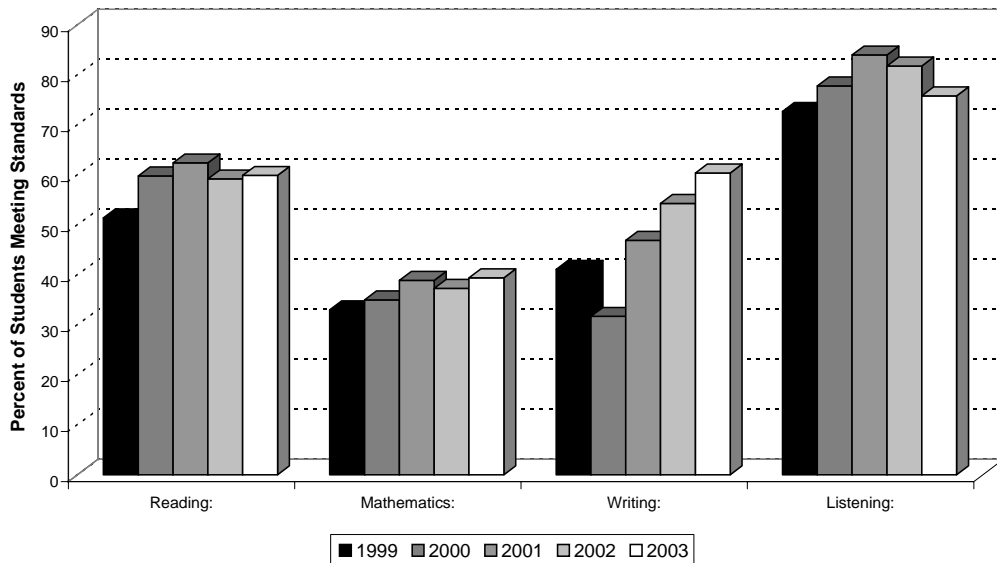
As can be seen in Table 28, 2003 tenth-grade WASL scores showed an improvement in all categories except for listening. 59.9% of tenth-graders met the standard in reading, 39.4% met the standard in mathematics, 60.4% met the standard in writing, and 75.8% met the standard in listening. Though tenth-graders showed an improvement in 2003, the Office of the Superintendent of Public Instruction (OSPI) has reported that in the 2003 WASL, the number of tenth-graders who either were absent for or refused to take the test was much higher than in other grades. Both the OSPI and local school districts are continuing to work on ways to improve tenth-grade participation in the WASL ahead of the 2008 mandatory passage date.

Table 28  
 Education and Skills of the Workforce  
**Tenth Grade WASL Test Scores**

	1999	2000	2001	2002	2003
Reading:	51.4	59.8	62.4	59.2	59.9
Mathematics:	33.0	35.0	38.9	37.3	39.4
Writing:	41.1	31.7	46.9	54.3	60.4
Listening:	72.7	77.8	84.0	81.8	75.8

Source: Office of Superintendent of Public Instruction, September 2003 (<http://www.k12.wa.us>)

Chart 28  
 Tenth Grade WASL Scores



# Student to Teacher Ratios

Over the last decade, there has been a nationwide movement to decrease the student to teacher ratios in public schools. The success of this movement to date is evident in the steady decline of the national ratio from 17.4 students per teacher in the 1992-93 school year to 16.0 in the 2000-01 school year.

Washington has shared in the national trend of declining student to teacher ratios since the 1995-96 school year, declining from 20.4 at that time to 19.7 in the 2000-2001 school year. As other states shared in the decline as well, however, Washington's rank among the states remained constant at 48<sup>th</sup> from 1995-96 through 1999-2000 before improving to 47<sup>th</sup> in the 2000-01 school year.

Recognizing Washington's low national rank in this category, the state's voters passed Initiative 728 in November 2000. Under the initiative, which took effect on July 1, 2001, lottery revenues will be redirected from the State's General Fund to the Student Achievement Fund and the Education Construction Fund for the purpose of hiring additional teachers and expanding school facilities. The effects of this initiative will begin to be seen in the student to teacher ratios in the 2001-02 school year.

Chart 29

Student to Teacher Ratios in Elementary and Secondary Public Schools

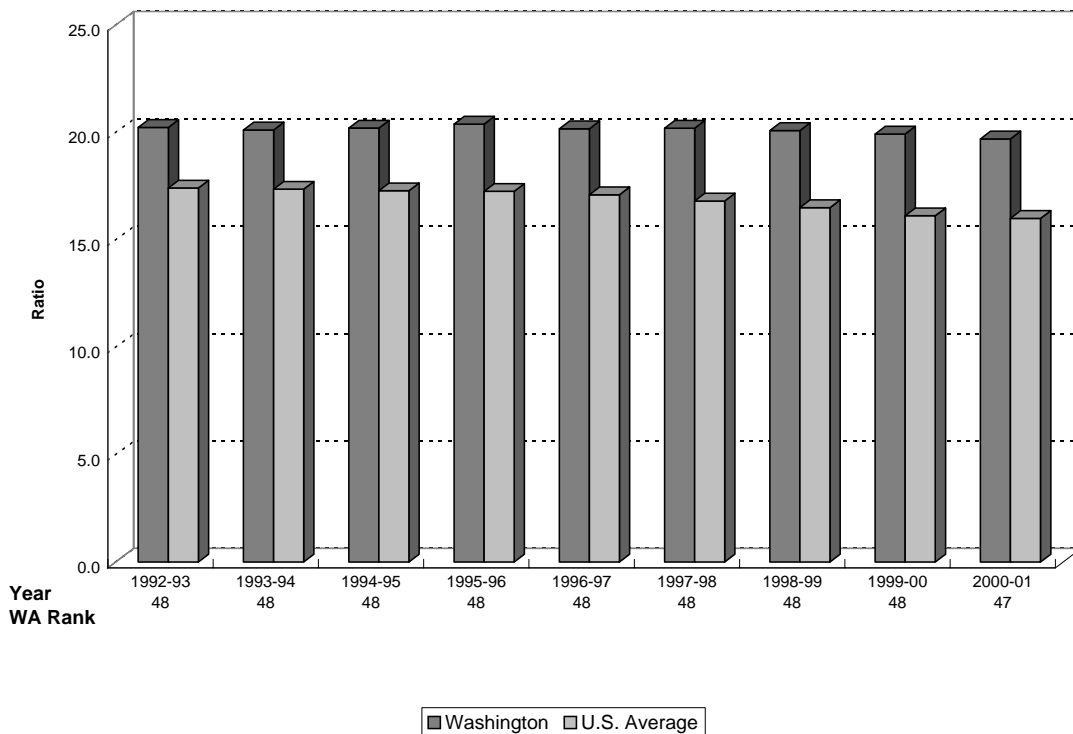


Table 29  
 Education and Skills of the Workforce  
**Pupil to Teacher Ratios in Elementary  
 and Secondary Public Schools**

	School Year					
	1996-97	1997-98	1998-99	1999-00	2000-01	1996-01
Alabama	16.6	16.3	15.7	15.2	15.4	15.8
Alaska	17.5	17.3	16.7	17.1	16.9	17.1
Arizona	19.7	19.8	20.0	19.4	19.8	19.8
Arkansas	17.1	16.9	16.2	14.4	14.1	15.8
California	22.9	21.6	21.0	21.0	20.6	21.4
Colorado	18.5	18.2	17.7	17.4	17.3	17.8
Connecticut	14.4	14.2	14.0	13.9	13.7	14.1
Delaware	16.6	16.3	16.0	15.4	15.3	15.9
Florida	18.6	18.4	18.4	18.3	18.4	18.4
Georgia	16.5	16.2	15.8	15.7	15.9	16.0
Hawaii	17.7	17.8	17.7	17.1	16.9	17.5
Idaho	18.8	18.5	18.2	18.0	17.9	18.3
Illinois	17.0	16.8	16.5	16.2	16.1	16.5
Indiana	17.3	17.2	17.0	16.8	16.7	17.0
Iowa	15.4	15.3	15.2	14.9	14.3	15.0
Kansas	15.1	14.9	14.8	14.3	14.4	14.7
Kentucky	16.7	16.5	16.1	15.4	16.8	16.3
Louisiana	16.6	16.6	16.6	16.6	16.6	16.6
Maine	13.7	13.5	13.2	12.8	12.5	13.2
Maryland	17.1	17.2	16.9	16.6	16.3	16.8
Massachusetts	14.5	14.1	13.8	12.5	14.5	13.9
Michigan	19.1	18.8	18.5	18.0	18.0	18.5
Minnesota	17.6	16.4	16.9	15.2	16.0	16.4
Mississippi	17.2	17.1	16.1	16.3	16.1	16.6
Missouri	15.2	15.0	14.7	14.3	14.1	14.6
Montana	16.0	15.9	15.7	15.2	14.9	15.5
Nebraska	14.5	14.5	14.3	13.9	13.6	14.2
Nevada	19.1	18.5	18.9	18.7	18.6	18.8
New Hampshire	15.6	15.6	15.4	14.7	14.5	15.2
New Jersey	14.0	13.9	13.8	13.4	13.1	13.7
New Mexico	16.7	16.9	16.5	16.4	15.2	16.3
New York	15.4	15.0	14.6	14.3	13.9	14.6
North Carolina	16.1	15.9	15.8	15.6	15.5	15.8
North Dakota	15.2	14.7	14.4	13.8	13.4	14.3
Ohio	17.0	16.7	16.2	15.8	15.5	16.2
Oklahoma	15.7	15.5	15.4	15.1	15.1	15.4
Oregon	20.1	20.1	20.0	19.6	19.4	19.8
Pennsylvania	17.0	16.8	16.4	15.9	15.5	16.3
Rhode Island	14.2	14.5	13.9	14.2	14.8	14.3
South Carolina	15.7	15.6	15.2	14.7	14.9	15.2
South Dakota	14.9	15.3	14.3	14.0	13.7	14.4
Tennessee	16.5	16.5	15.3	15.1	14.9	15.7
Texas	15.5	15.3	15.2	14.9	14.8	15.1
Utah	24.4	22.9	22.4	22.0	21.9	22.7
Vermont	13.7	13.4	12.8	12.3	12.1	12.9
Virginia	14.7	14.7	14.2	14.0	12.5	14.0
<b>Washington</b>	<b>20.2</b>	<b>20.2</b>	<b>20.1</b>	<b>19.9</b>	<b>19.7</b>	<b>20.0</b>
West Virginia	14.6	14.4	14.2	13.8	13.7	14.1
Wisconsin	16.1	15.4	14.4	14.4	14.1	14.9
Wyoming	14.7	14.5	14.2	13.3	13.3	14.0
U.S. Average	17.1	16.8	16.5	16.1	16.0	16.5
<b>Washington's Rank</b>	<b>48</b>	<b>48</b>	<b>48</b>	<b>48</b>	<b>47</b>	<b>48</b>

Source: U.S. Department of Education, National Center for Education Statistics. Digest of Educational Statistics, 2003, NCES 2001-034, by Thomas D. Synder and Charlene M. Hoffman, Washington, DC:2003. ([www.nces.gov](http://www.nces.gov))

# Education Attainment: Completed Four Years of High School or More

Educational attainment has a significant influence on income, employment, and other factors important to the wellbeing of a state's residents and economy. The 2002 Current Population Survey of the U.S. Bureau of the Census found that the average annual wage for a high school dropout in the year 2001 was only \$19,434 (in 2001 dollars) while that of a person with a high school diploma was \$28,343. In addition, the National Center for Educational Statistics reported that the 2000 unemployment rate for adults (25 years old and over) who had not completed high school was 6.4 percent compared with 3.5 percent for those with at least a high school degree.

In 2002, 90.4 percent of Washington's 25 and over population had completed 4 years of high school or more, ranking it 5<sup>th</sup> among the states. In the last 5 years, Washington has never ranked lower than 6<sup>th</sup> in this category. Washington's average percentage for the years 1998-2002 was 91.1 percent, 3<sup>rd</sup> among the states and well above the national average of 85.0 percent.

Chart 30  
Completed Four Years of High School or More

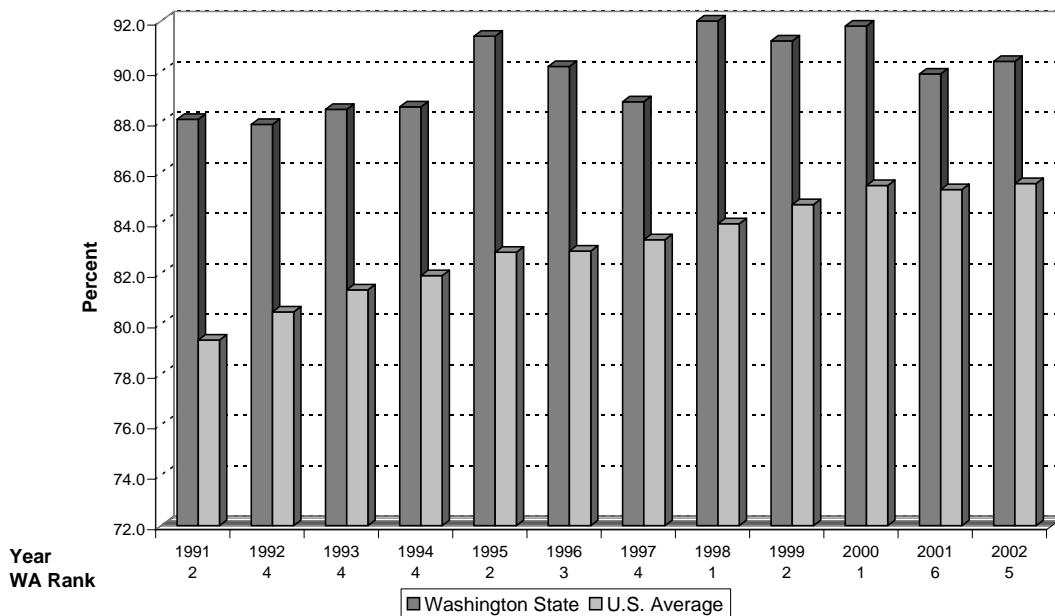


Table 30  
 Education and Skills of the Workforce  
**Educational Attainment: Completed Four Years of High School or More**  
 (Percent)\*

	1998	1999	2000	2001	2002	1998-02
Alabama	78.8	81.1	77.5	80.2	78.9	79.3
Alaska	90.6	92.8	90.4	91.1	92.2	91.4
Arizona	81.9	83.1	85.1	83.8	84.6	83.7
Arkansas	76.8	78.9	81.7	80.5	81.0	79.8
California	80.1	80.4	81.2	81.0	80.2	80.6
Colorado	89.6	90.4	89.7	88.6	87.6	89.2
Connecticut	83.7	83.7	88.2	87.5	88.0	86.2
Delaware	85.2	84.5	86.1	84.7	88.5	85.8
Florida	81.9	82.8	84.0	84.1	83.3	83.2
Georgia	80.0	80.7	82.6	82.5	82.9	81.7
Hawaii	84.6	88.0	87.4	89.1	87.9	87.4
Idaho	82.7	84.8	86.2	87.3	86.8	85.5
Illinois	84.2	85.4	85.5	86.2	85.9	85.4
Indiana	83.5	82.8	84.6	84.4	85.3	84.1
Iowa	87.7	89.8	89.7	87.8	88.3	88.7
Kansas	89.2	87.6	88.1	87.8	87.5	88.0
Kentucky	77.9	78.2	78.7	79.0	80.8	78.9
Louisiana	78.6	78.3	80.8	81.0	78.8	79.5
Maine	86.7	88.9	89.3	85.4	87.4	87.5
Maryland	84.7	84.7	85.7	88.1	87.5	86.1
Massachusetts	85.6	85.1	85.1	85.7	86.5	85.6
Michigan	85.4	85.5	86.2	86.3	86.5	86.0
Minnesota	89.4	91.1	90.8	92.6	92.2	91.2
Mississippi	77.3	78.0	80.3	81.7	79.1	79.3
Missouri	82.9	85.0	86.6	88.2	88.1	86.2
Montana	89.1	88.8	89.6	90.2	89.7	89.5
Nebraska	87.7	89.3	90.4	89.7	89.8	89.4
Nevada	89.1	86.4	82.8	84.9	85.8	85.8
New Hampshire	84.0	86.5	88.1	89.3	90.2	87.6
New Jersey	86.5	87.4	87.3	86.6	85.9	86.7
New Mexico	79.6	80.9	82.2	81.2	81.6	81.1
New York	81.5	81.9	82.5	83.2	83.7	82.6
North Carolina	81.4	79.8	79.2	80.0	80.1	80.1
North Dakota	84.3	84.9	85.5	87.0	89.0	86.1
Ohio	86.2	86.1	87.0	88.2	87.3	87.0
Oklahoma	84.6	83.5	86.1	85.8	85.1	85.0
Oregon	85.5	86.2	88.1	86.6	87.7	86.8
Pennsylvania	84.1	86.1	85.7	85.9	86.1	85.6
Rhode Island	80.7	80.9	81.3	78.7	80.1	80.3
South Carolina	78.6	78.6	83.0	81.9	80.2	80.5
South Dakota	86.3	88.7	91.8	87.7	89.2	88.7
Tennessee	76.9	79.1	79.9	78.1	80.1	78.8
Texas	78.3	78.2	79.2	78.4	78.1	78.4
Utah	89.3	91.0	90.7	90.0	91.0	90.4
Vermont	86.7	89.3	90.0	86.8	87.4	88.0
Virginia	82.6	87.3	86.6	84.6	86.7	85.6
<b>Washington</b>	<b>92.0</b>	<b>91.2</b>	<b>91.8</b>	<b>89.9</b>	<b>90.4</b>	<b>91.1</b>
West Virginia	76.4	75.1	77.1	79.5	78.5	77.3
Wisconsin	88.0	86.7	86.7	87.0	86.8	87.0
Wyoming	90.0	90.7	90.0	90.2	91.6	90.5
50 State Average	84.0	84.7	85.5	85.3	85.6	85.0
<b>Washington's Rank</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>6</b>	<b>5</b>	<b>3</b>

\*Percent of persons 25 years or older who have completed 4 years of high school or more.

Source: U.S. Department of Commerce, Bureau of the Census, Educational Attainment in the United States: March 1998-2002. (www.census.gov)

# Education Attainment: Completed Bachelors Degree or More

The 2002 Current Population Survey of the U.S. Bureau of the Census found that while the average annual wage for a person with a high school diploma in the year 2001 was \$28,343 (in 2001 dollars), that of a person who held at least a Bachelor's Degree was \$54,069. In addition, the National Center for Educational Statistics reported that the 2000 unemployment rate for adults (25 years old and over) with at least a high school degree was 3.5 percent compared with 1.7 percent for those who held at least a Bachelor's Degree. These examples illustrate the potential positive impacts that people holding at least a Bachelor's Degree can have on a state's economy.

In 2002, 28.3 percent of Washington's population 25 years of age and over had completed a Bachelor's degree or more, well above the national average of 26.0 percent. This represented an increase in this measure from 26.9 percent in 2001 and improved Washington's rank among the states from 18<sup>th</sup> to 14<sup>th</sup>.

Chart 31  
Completed Bachelor's Degree or More

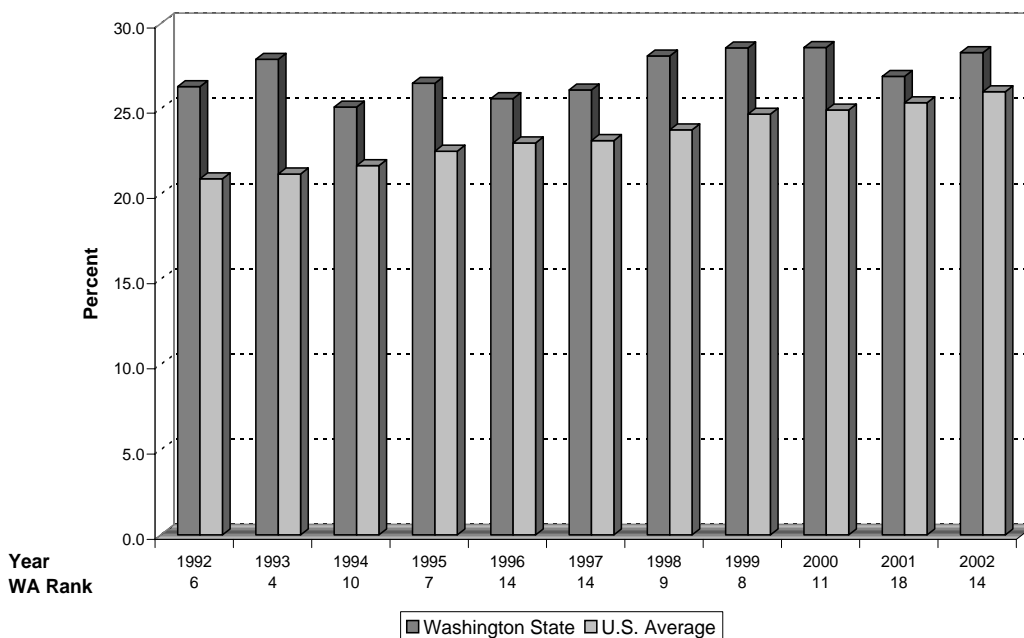




Table 31  
 Education and Skills of the Workforce  
**Educational Attainment: Completed Bachelor's Degree or More**  
 (Percent)\*

	1998	1999	2000	2001	2002	1998-02
Alabama	20.6	21.8	20.4	20.2	22.7	21.1
Alaska	24.2	25.5	28.1	25.7	25.6	25.8
Arizona	21.9	24.2	24.6	24.4	26.3	24.3
Arkansas	16.2	17.3	18.4	18.6	18.3	17.8
California	26.4	27.1	27.5	29.1	27.9	27.6
Colorado	34.0	38.7	34.6	35.2	35.7	35.6
Connecticut	31.4	33.5	31.6	32.4	32.6	32.3
Delaware	25.1	24.0	24.0	28.6	29.5	26.2
Florida	22.5	21.6	22.8	24.6	25.7	23.5
Georgia	20.7	21.5	23.1	24.2	25.0	22.9
Hawaii	24.0	26.2	26.3	27.9	26.8	26.2
Idaho	20.3	20.8	20.0	21.2	20.9	20.6
Illinois	25.8	25.6	27.1	26.7	27.3	26.5
Indiana	17.7	18.4	17.1	21.2	23.7	19.6
Iowa	20.3	21.7	25.5	23.9	23.1	22.9
Kansas	28.5	26.5	27.3	27.9	29.1	27.9
Kentucky	20.1	19.8	20.5	20.4	21.6	20.5
Louisiana	19.5	20.7	22.5	19.7	22.1	20.9
Maine	19.2	22.9	24.1	22.2	23.8	22.4
Maryland	31.8	34.7	32.3	35.7	37.6	34.4
Massachusetts	31.0	31.0	32.7	32.5	34.3	32.3
Michigan	22.1	21.3	23.0	24.0	22.5	22.6
Minnesota	31.0	32.0	31.2	31.4	30.5	31.2
Mississippi	19.5	19.2	18.7	23.3	20.9	20.3
Missouri	22.4	23.0	26.2	25.3	26.7	24.7
Montana	23.9	23.9	23.8	22.8	23.6	23.6
Nebraska	20.9	20.4	24.6	25.7	27.1	23.7
Nevada	20.6	20.2	19.3	20.8	22.1	20.6
New Hampshire	26.6	27.2	30.1	31.6	30.1	29.1
New Jersey	30.1	30.5	30.1	30.7	31.4	30.6
New Mexico	23.1	24.5	23.6	22.0	25.4	23.7
New York	26.8	26.9	28.7	28.9	28.8	28.0
North Carolina	23.3	23.9	23.2	23.1	22.4	23.2
North Dakota	22.5	22.3	22.6	24.4	25.3	23.4
Ohio	21.5	25.5	24.6	24.1	24.5	24.0
Oklahoma	20.5	23.6	22.5	21.1	20.4	21.6
Oregon	27.7	26.8	27.2	27.2	27.1	27.2
Pennsylvania	22.1	23.9	24.3	25.8	26.1	24.4
Rhode Island	27.8	26.9	26.4	27.4	30.1	27.7
South Carolina	21.3	20.9	19.0	23.4	23.3	21.6
South Dakota	21.8	25.6	25.7	23.6	23.6	24.1
Tennessee	16.9	17.7	22.0	21.0	21.5	19.8
Texas	23.3	24.4	23.9	23.8	26.2	24.3
Utah	27.6	27.9	26.4	27.9	26.8	27.3
Vermont	27.1	28.3	28.8	29.0	30.8	28.8
Virginia	30.3	31.6	31.9	30.6	34.6	31.8
<b>Washington</b>	<b>28.1</b>	<b>28.6</b>	<b>28.6</b>	<b>26.9</b>	<b>28.3</b>	<b>28.1</b>
West Virginia	16.3	18.0	15.3	15.8	15.9	16.3
Wisconsin	22.3	23.6	23.8	24.9	24.7	23.9
Wyoming	19.8	22.3	20.6	19.2	19.6	20.3
U.S. Average	23.8	24.7	24.9	25.4	26.0	24.9
<b>Washington's Rank</b>	<b>9</b>	<b>8</b>	<b>11</b>	<b>18</b>	<b>14</b>	<b>12</b>

Source: U.S. Department of Commerce, Bureau of the Census. Educational Attainment in the United States: March 1998-2002. ([www.census.gov](http://www.census.gov))

\* Percent of persons 25 years old and over who have obtained a Bachelor's degree or higher.

# Public Two and Four Year College Combined Participation Rate

Washington, more than most states, relies heavily on the community college system to provide the first two years of a college education. As a result of this, Washington and states with a similar policy have higher than average two-year participation rates and lower than average four-year participation rates. Since two- and four-year participation rates presented separately give a skewed view of Washington's overall participation rate, this report combines the two statistics to produce a participation rate inclusive of two and four-year participants. With this adjustment, states that are more reliant on the community college system can be better compared to other states. Due to the lag of data available on this subject, the most recent study for participation rates is from 1998.

In 1998, Washington had a public two and four year college participation rate of 6.2 percent, which was a decline from 1997 when Washington's rate was at 6.6. Washington's rank also declined in this period from 10<sup>th</sup> in the country, to 15<sup>th</sup>. Even with this decline, Washington's rate remained above the U.S. average of 5.7. Washington's rate of 6.5 percent for the years 1994 through 1998 was also above the national average of 5.8 percent, ranking Washington 12<sup>th</sup> among the states for that period. It is important to note that the data from 1993 to present included students enrolled in five technical colleges. This accounts for the increase from 6.1 to 6.7 percent and improvement in rank from 23<sup>rd</sup> to 14<sup>th</sup> from 1992 to 1993.

Chart 32  
Total Public Two and Four Year Combined Participation Rate

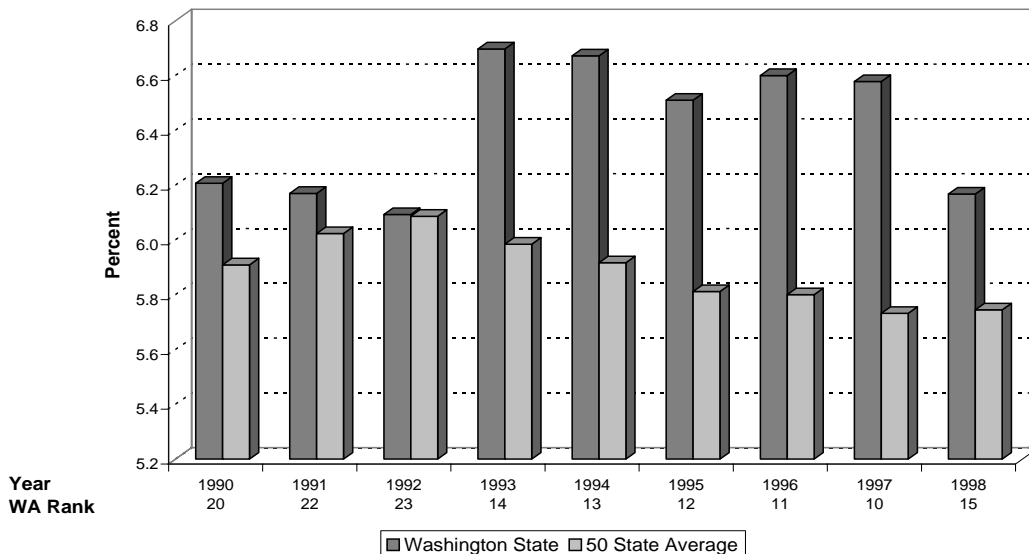


Table 32  
 Education and Skills of the Workforce  
**Total Public Two and Four Year College Combined Participation Rate**  
 (Participation Rate)\*

	1994	1995	1996	1997	1998	1994-98
Alabama	7.5	6.3	6.0	5.9	5.7	6.3
Alaska	6.5	6.7	6.5	6.2	6.2	6.4
Arizona	8.4	8.3	7.9	7.7	7.8	8.0
Arkansas	4.6	4.7	5.2	5.3	5.5	5.1
California	6.8	6.7	7.0	7.0	7.0	6.9
Colorado	7.7	7.5	7.5	7.5	7.5	7.5
Connecticut	4.1	4.0	3.9	3.8	3.8	3.9
Delaware	6.7	6.6	6.6	6.4	6.5	6.6
Florida	4.9	4.8	5.0	5.1	5.0	5.0
Georgia	4.6	4.6	4.6	4.5	4.4	4.6
Hawaii	5.8	5.6	5.3	5.0	5.1	5.4
Idaho	6.0	5.9	5.8	5.7	5.7	5.8
Illinois	6.2	6.0	6.0	6.0	5.9	6.0
Indiana	5.2	5.1	5.0	5.1	5.1	5.1
Iowa	5.7	5.7	5.8	5.9	5.9	5.8
Kansas	8.0	8.4	8.3	8.4	8.2	8.3
Kentucky	5.2	5.1	5.2	5.1	5.1	5.1
Louisiana	5.6	5.5	5.9	5.9	5.9	5.7
Maine	4.1	4.0	4.0	3.9	4.0	4.0
Maryland	5.9	5.8	5.7	5.6	5.6	5.7
Massachusetts	3.8	3.8	3.7	3.7	3.8	3.7
Michigan	6.6	6.5	6.2	6.2	6.2	6.3
Minnesota	6.7	6.3	6.1	5.8	5.6	6.1
Mississippi	5.5	5.6	5.7	5.9	5.9	5.7
Missouri	4.8	4.7	4.7	4.7	4.8	4.8
Montana	5.5	5.8	5.8	5.8	5.8	5.7
Nebraska	8.0	7.8	8.1	7.2	7.2	7.7
Nevada	5.8	5.8	6.0	5.8	6.1	5.9
New Hampshire	4.1	4.2	4.1	4.0	3.6	4.0
New Jersey	4.5	4.5	4.3	4.2	4.3	4.4
New Mexico	8.2	8.0	8.1	8.1	8.0	8.1
New York	4.4	4.3	4.1	4.1	4.1	4.2
North Carolina	5.6	5.5	5.4	5.3	5.5	5.5
North Dakota	7.7	7.6	7.6	7.2	7.3	7.5
Ohio	5.0	4.9	4.8	4.8	4.9	4.9
Oklahoma	6.7	6.5	6.6	6.5	6.8	6.6
Oregon	6.0	6.0	5.8	5.8	5.8	5.9
Pennsylvania	3.7	3.6	3.7	3.6	3.8	3.7
Rhode Island	5.1	5.1	4.9	4.9	5.0	5.0
South Carolina	5.4	5.3	5.3	5.1	5.2	5.3
South Dakota	5.9	5.6	6.0	6.0	6.3	5.9
Tennessee	4.8	4.8	4.9	4.7	4.8	4.8
Texas	6.3	6.2	6.0	6.0	5.9	6.1
Utah	8.5	8.3	8.3	8.4	8.1	8.3
Vermont	4.6	4.6	4.5	4.5	4.5	4.5
Virginia	5.8	5.8	5.7	5.8	5.9	5.8
<b>Washington</b>	<b>6.7</b>	<b>6.5</b>	<b>6.6</b>	<b>6.6</b>	<b>6.2</b>	<b>6.5</b>
West Virginia	5.4	5.2	5.3	5.3	5.6	5.4
Wisconsin	6.6	6.4	6.3	6.2	6.4	6.4
Wyoming	8.7	8.3	8.4	8.2	8.0	8.3
50 State Average	5.9	5.8	5.8	5.7	5.7	5.8
<b>Washington's Rank</b>	<b>13</b>	<b>12</b>	<b>11</b>	<b>10</b>	<b>15</b>	<b>12</b>

\*Participation rate: Headcount compared to population aged 17 & above.

Source: Integrated Post-Secondary Education Data System. National Center for Education Statistics, U.S. Department of Education. 1990-1995. Higher Education Enrollment Statistics and Projections. June 2003.

# Value Added Per Hour of Labor in Manufacturing

“Value added” in manufacturing is a measure of the difference between the value of a finished object and the value of the raw materials that went into its production. The total value added of an industry represents the amount of revenue available for payment of wages, rent, taxes, interest, profit, and all other business costs aside from raw materials.

The Annual Survey of Manufactures (ASM), published by the U.S. Census Bureau, provides estimates of worker hours and value added for all manufacturing establishments with one or more paid employee. As it is a sample survey, its estimates possess varying margins of error. To minimize the effects of these errors, the ASM estimates are presented in Table 32 as three-year moving averages. Due to ASM reclassification from the Standard Industrial Code (SIC) to the North American Industry Classification System (NAICS) in 1997, survey estimates prior to that date are not included due to non-comparability.

The amount of value added per hour of labor varies greatly among different industries. Highly automated industries such as semiconductors have very high value added per hour since one person can operate a machine that puts out a large volume of high-value product, while less automated industries such as furniture manufacturing require more labor per dollar of added value. (Highly automated industries, however, also have much higher equipment costs, so high value added does not necessarily imply high profit.) Within a specific industry, however, interstate differences in value added per worker hour may be interpreted as differences in worker productivity between states.

The differences in value-added across industries makes a state’s average value added per worker hour highly dependent upon its particular industry mix. States with a large percentage of high value added industries (such as semiconductors in New Mexico and Arizona) perform very well in this measure, reported as “Non-Weighted” in Table 32. Washington also performs well in this measure, indicating an industry mix of higher-than-average labor productivity.

To minimize the effects of industry mix on estimates of state productivity, the “Weighted” values in Table 32 represent value added per worker hour as if each state had an identical mix of industries. In this case, state worker hours in each of the 21 major NAICS manufacturing groups were adjusted to be identical in proportion to the national average. When measured in this way, Washington’s average value added per worker hour moves to slightly below the national average. This method, however, is still susceptible to error for two main reasons. The first reason is that most states are either totally lacking in several industries or have only one representative of an industry, which makes the data unreportable by the Census due to disclosure laws (though the data is included in the totals). These omissions are treated as an undifferentiated “remainder” industry that can skew a state’s average greatly depending upon what the productivity of the hidden industry is and the proportion of total hours the remainder represents. Alaska is a prime example, with all industries except food products hidden by disclosure laws. The second reason is that there is still a large degree of productivity variation within major NAICS categories. For example, NAICS group 334 includes semiconductor manufacturing along with computer, electronic instrument, and other electronics manufacturing industries with much lower labor productivity than semiconductors. When each state is given the same number of hours in group 334, therefore, those states who have a large percentage of semiconductor worker hours in that group will still record higher-than-average productivity in that group. For this reason, both Arizona and New Mexico still perform above average in the weighted results. Nevertheless, by accounting for most of the industry mix variation, the weighted results can still provide a general idea of where each state lies in the labor productivity spectrum.

**Chart 33**  
**Value Added Per Hour of Labor in Manufacturing**

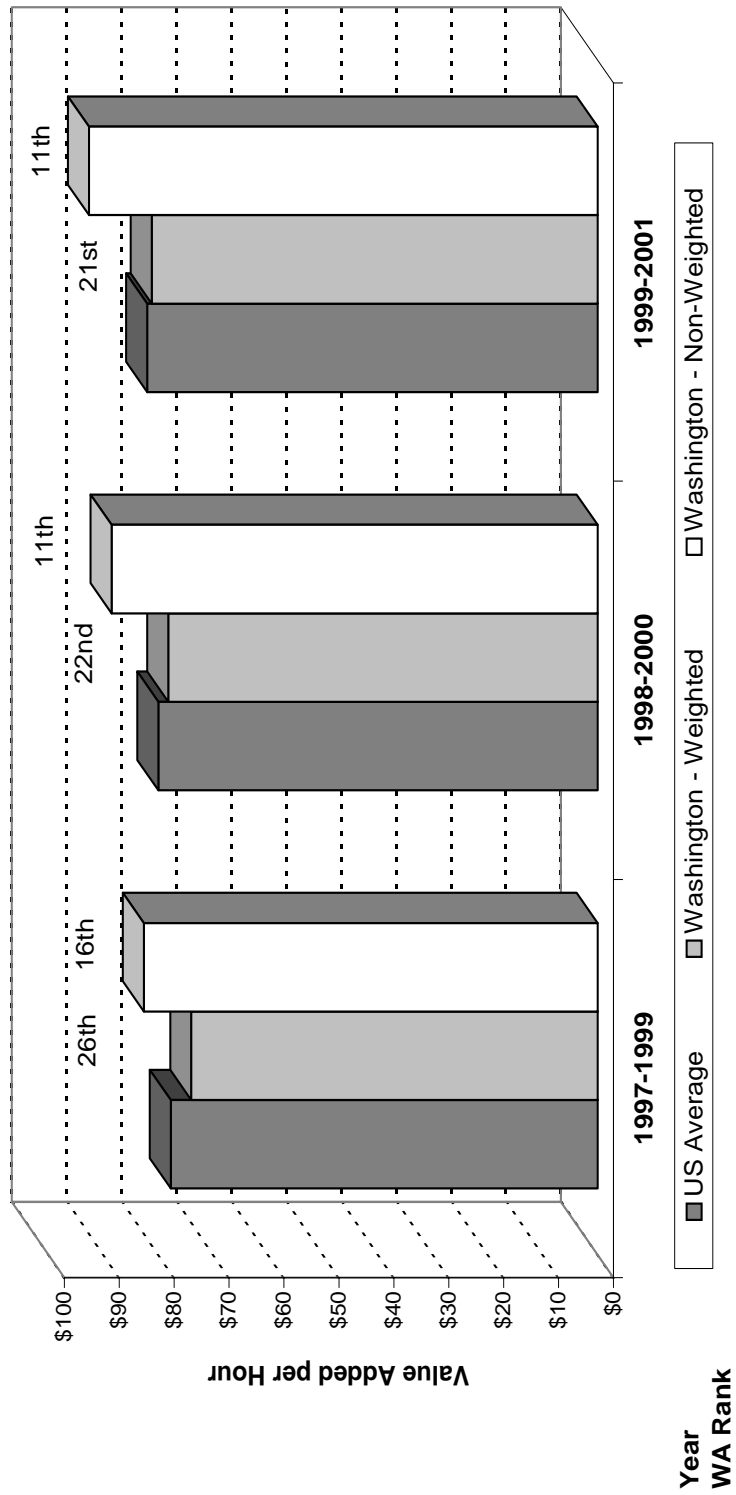


Table 33  
 Education and Skills of the Workforce  
**Value Added per Hour of Labor in Manufacturing**  
 (Three Year Average, Dollars)

	Weighted 1997-1999	Weighted 1998-2000	Weighted 1999-2001	Non-Weighted 1997-1999	Non-Weighted 1998-2000	Non-Weighted 1999-2001
Alabama	57.38	59.12	60.67	54.02	55.60	56.81
Alaska	121.75	114.76	101.36	61.29	59.12	54.30
Arizona	92.80	95.24	101.01	122.02	124.13	128.56
Arkansas	60.54	63.36	64.28	53.90	55.02	55.51
California	81.75	84.59	86.32	89.81	93.79	96.70
Colorado	78.16	78.77	78.92	86.63	86.40	87.21
Connecticut	89.88	92.50	97.98	88.56	90.67	95.30
Delaware	78.60	80.51	88.41	86.26	91.43	104.66
Florida	69.22	69.67	70.15	72.55	73.13	74.37
Georgia	75.23	77.29	79.20	70.89	73.18	75.04
Hawaii	73.68	99.21	103.25	65.59	67.86	66.11
Idaho	71.39	71.40	46.72	74.91	85.34	73.75
Illinois	74.09	76.79	79.87	75.61	78.11	80.87
Indiana	77.34	82.44	86.01	72.40	75.82	78.03
Iowa	79.50	81.12	86.49	77.96	77.83	80.99
Kansas	64.32	68.04	79.39	67.06	67.93	69.85
Kentucky	80.15	77.57	77.37	87.60	82.75	78.13
Louisiana	67.68	67.09	67.94	107.84	108.89	106.30
Maine	58.76	64.19	69.33	58.32	64.61	68.86
Maryland	80.41	81.51	83.64	85.87	86.66	88.83
Massachusetts	79.53	83.21	86.29	90.61	95.25	97.41
Michigan	70.83	71.81	73.46	73.37	74.84	76.47
Minnesota	76.00	78.97	80.82	73.96	77.95	80.25
Mississippi	51.87	52.48	53.33	47.11	47.46	49.07
Missouri	80.30	79.57	82.78	84.66	83.53	80.89
Montana	82.22	78.26	84.39	64.81	62.24	65.45
Nebraska	68.17	69.79	70.92	62.53	64.87	67.06
Nevada	69.16	72.20	74.39	65.44	66.94	67.59
New Hampshire	71.40	72.71	74.87	79.40	75.64	70.37
New Jersey	75.42	79.62	83.51	90.05	93.29	97.59
New Mexico	102.06	93.69	91.81	217.52	197.99	186.18
New York	72.46	75.35	77.47	74.40	78.16	81.17
North Carolina	74.43	76.16	79.78	70.62	74.93	81.13
North Dakota	58.24	61.92	70.13	68.93	71.44	76.21
Ohio	79.64	81.11	81.43	77.54	78.75	78.62
Oklahoma	75.06	74.32	86.79	70.09	70.10	73.62
Oregon	71.48	75.50	76.52	80.81	84.80	83.38
Pennsylvania	76.57	78.77	81.66	74.13	76.49	78.74
Rhode Island	53.88	55.44	57.45	54.48	57.25	60.17
South Carolina	67.08	69.01	71.38	64.41	65.82	68.61
South Dakota	61.22	65.65	66.78	80.32	85.42	81.88
Tennessee	64.75	67.20	72.33	62.48	64.49	67.40
Texas	82.37	83.78	84.66	94.90	94.99	94.83
Utah	68.70	71.41	72.19	70.82	74.55	74.97
Vermont	79.45	84.39	87.39	74.61	79.97	83.59
Virginia	76.79	80.06	83.55	85.43	92.21	100.06
<b>Washington</b>	<b>74.01</b>	<b>78.21</b>	<b>81.18</b>	<b>82.62</b>	<b>88.52</b>	<b>92.62</b>
West Virginia	60.27	62.28	62.47	81.52	80.09	77.42
Wisconsin	71.68	75.39	79.42	68.53	71.49	74.49
Wyoming	69.57	71.68	76.50	83.93	86.01	91.71
U.S.	77.72	80.02	82.03	77.72	80.02	82.03
<b>WA Rank</b>	<b>26</b>	<b>22</b>	<b>21</b>	<b>16</b>	<b>11</b>	<b>11</b>

Source: U.S. Department of Commerce, Census Bureau, *Annual Survey of Manufactures* (data),  
 Office of the Forecast Council (calculations)

# Infrastructure

# Interstate Miles in Poor Condition

Since 1990, the Federal Highway Administration (FHWA) has required states to report road roughness according to the International Roughness Index (IRI). The IRI is collected in accordance with the Highway Performance Monitoring System Field Manual for the Continuing Analytical and Statistical Database. This document mandates standard codes for the collection and publication of the IRI and therefore ensures that various data will be reported in a consistent format. The IRI is used in the development of Federal highway legislation and is published annually in the FHWA's Highway Statistics. On a state level, this information is used as an aid to highway planning, programming, budgeting, forecasting and fiscal management. Maintaining interstate and highway conditions is crucial for ensuring safety, improving efficiency, and allowing fluid movement of people and goods throughout the state.

In 2001, Washington's percentage of interstate miles in poor condition increased slightly to 2.0 from its record low of 1.4 in 2000, ranking Washington 29<sup>th</sup> overall in the nation. Between the years 1997 and 2001, Washington has a four year average of 3.0 percent, ranking 26<sup>th</sup> in the nation over this time period and comparing favorably to the national average of 4.3 percent.

Chart 34  
Interstate Highways in Poor Condition

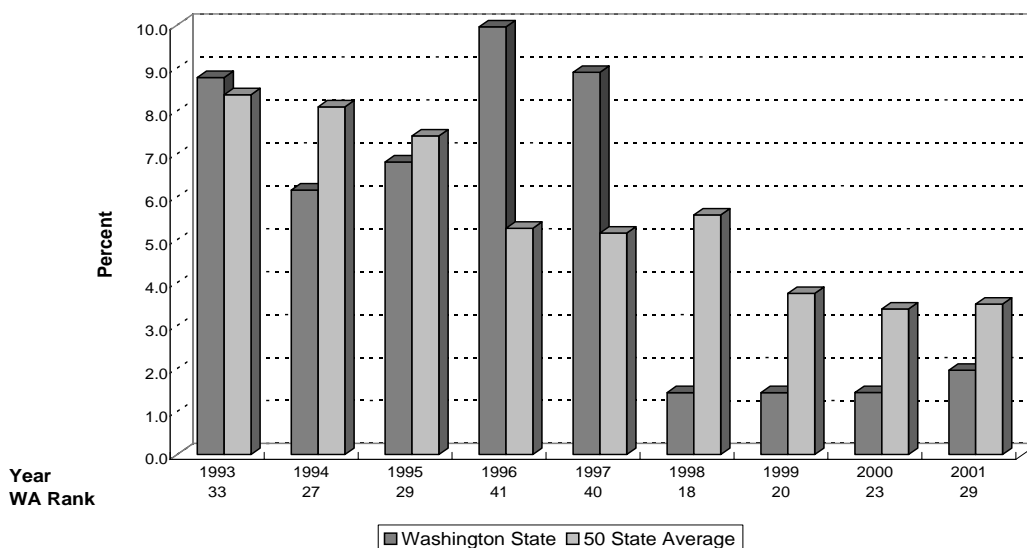




Table 34  
 Infrastructure  
**Interstate Miles in Poor Condition**  
 (Percent)

	1997	1998	1999	2000	2001	1997-2001
Alabama	0.6	0.6	1.1	1.1	0.3	0.7
Alaska	9.1	8.0	4.3	0.1	3.0	4.9
Arizona	0.6	1.4	0.2	0.1	0.0	0.4
Arkansas	28.7	39.1	30.7	26.3	27.7	30.5
California	10.9	10.8	10.7	13.6	14.2	12.0
Colorado	17.6	12.7	0.5	0.0	0.1	6.2
Connecticut	7.2	6.3	6.9	5.8	4.6	6.2
Delaware	29.3	29.3	28.2	28.2	28.2	28.6
Florida	0.2	0.0	0.6	0.8	0.0	0.3
Georgia	0.0	0.0	0.2	0.0	0.0	0.0
Hawaii*	NA	NA	NA	NA	34.5	34.5
Idaho	1.5	1.5	2.1	2.3	2.0	1.9
Illinois**	4.3	NA	2.5	2.3	2.3	2.8
Indiana	3.5	1.1	0.5	0.5	0.4	1.2
Iowa	2.4	2.8	2.8	2.0	2.2	2.4
Kansas	2.0	0.8	0.8	0.2	0.2	0.8
Kentucky	0.8	1.2	2.0	1.6	1.1	1.3
Louisiana	8.4	14.2	12.9	9.3	5.9	10.1
Maine	0.0	0.0	0.0	0.3	0.0	0.1
Maryland	4.4	5.4	4.0	3.9	4.5	4.4
Massachusetts	1.8	0.9	1.4	1.1	1.9	1.4
Michigan	5.2	11.3	7.9	7.8	13.4	9.1
Minnesota	2.6	6.7	0.3	0.0	0.2	2.0
Mississippi	6.0	5.5	4.7	4.7	3.7	4.9
Missouri	3.5	3.8	3.4	4.1	5.6	4.1
Montana	0.9	0.9	1.1	1.1	1.6	1.1
Nebraska	5.0	6.2	2.3	7.7	2.9	4.8
Nevada	5.4	5.3	1.6	1.6	0.4	2.9
New Hampshire	0.0	0.4	0.4	0.0	0.0	0.2
New Jersey	32.7	32.7	7.1	6.6	16.7	19.2
New Mexico	12.7	3.7	5.4	3.7	0.7	5.2
New York	12.2	12.3	16.6	12.0	10.3	12.7
North Carolina	16.3	14.3	6.7	5.5	3.9	9.3
North Dakota	0.0	0.0	0.0	0.0	0.0	0.0
Ohio	0.6	0.3	1.1	0.6	0.6	0.7
Oklahoma	6.8	6.8	7.1	7.1	5.9	6.7
Oregon	0.1	43.1	0.1	0.0	0.1	8.7
Pennsylvania	7.4	1.5	3.5	2.3	2.6	3.5
Rhode Island	0.0	1.5	1.4	1.5	1.4	1.2
South Carolina	0.1	0.4	1.3	0.1	0.1	0.4
South Dakota	8.0	6.4	3.0	3.2	0.3	4.2
Tennessee	3.9	2.5	0.9	0.6	0.7	1.7
Texas	0.6	0.7	0.6	0.8	1.3	0.8
Utah	0.0	3.2	2.0	2.0	4.9	2.4
Vermont	0.0	0.0	2.8	2.2	1.6	1.3
Virginia	1.9	2.1	1.8	0.9	1.0	1.5
<b>Washington</b>	<b>8.9</b>	<b>1.4</b>	<b>1.4</b>	<b>1.4</b>	<b>2.0</b>	<b>3.0</b>
West Virginia	1.8	1.6	5.3	5.3	2.4	3.3
Wisconsin	3.2	3.9	1.5	0.0	0.0	1.7
Wyoming	0.1	0.1	0.2	0.1	0.4	0.2
U.S. Average	5.2	5.6	3.8	3.4	3.5	4.3
<b>Washington's Rank</b>	<b>40</b>	<b>18</b>	<b>20</b>	<b>23</b>	<b>29</b>	<b>26</b>

\*The FHWA has recently found that between 1993 and 2000, the state of Hawaii did not use the International Roughness Index as an indicator of pavement conditions and instead used a system of measurement not up to FHWA standards. Their source was also unable to be verified and as a result, the FHWA has recalled the figures for Hawaii between 1993 and 2000.

\*\*Illinois has chosen to withhold their 1998 figures.

Source: Highway Statistics, 1993-2001. Table Hm-64, Federal Highway Administration.

# Urban Roadway Congestion Index

The Urban Roadway Congestion Index (RCI) is a traffic density indicator calculated as a ratio of daily traffic volume to the optimum volume for a given road system. The index is calculated by the Texas Transportation Institute. It currently includes a sample of 75 urban areas selected to represent those areas with populations greater than 800,000 or those with a significant amount of congestion, although only the original 49 areas (50 before the consolidation of Dallas and Fort Worth) are presented here for historical continuity. An RCI greater than or equal to one indicates that congestion may exist throughout the area.

For 2001, the RCI for the Seattle-Everett area was unchanged at 1.23. The area's rank among the 49 areas represented here, however, improved from 34<sup>th</sup> to 32<sup>nd</sup> due to increased congestion elsewhere. This increase was reflected in an increase of the 49-area average RCI from 1.13 to 1.14. Progress in reducing the area's congestion is also indicated by the fact that the index has not increased in the last two years and is below its 1997 level, while the 49-area average has been increasing throughout the same period.

While an RCI above one indicates a larger-than-optimal volume of traffic, the amount of congestion the extra volume causes can be diminished by programs such as on-ramp metering, HOV lanes, and improved incident response. The current study quantifies the effects of these improvements for the first time and reports them in the study's Travel Time Index. Consideration of these strategies in the Seattle-Everett area resulted in an improvement in rank in the Travel Time Index from 74<sup>th</sup> in 2000 to 64<sup>th</sup> in 2001.

Chart 35  
Urban Roadway Congestion Index

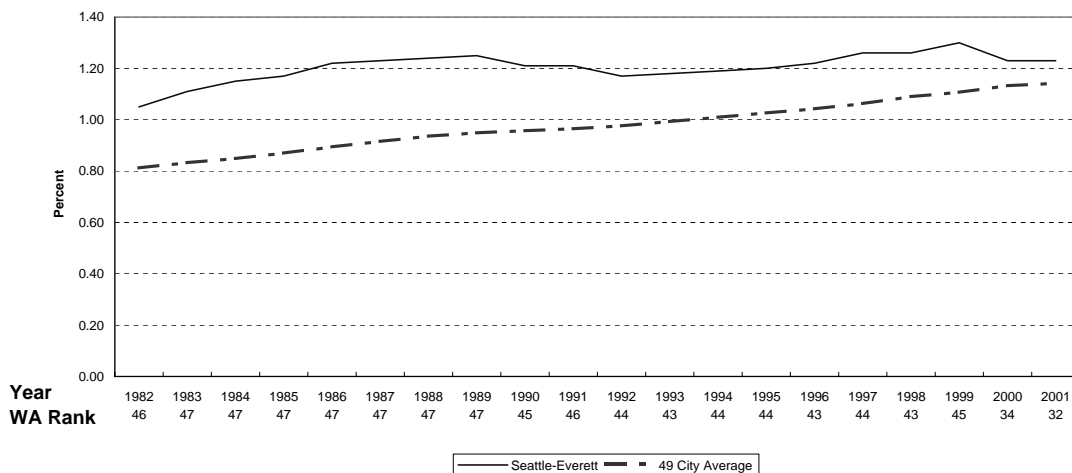


Table 35

## Infrastructure

**Urban Roadway Congestion Index**

(Values greater than 1 indicate congestion)

	1997	1998	1999	2000	2001	1997-01
Albuquerque NM	1.05	1.12	1.13	1.09	1.05	1.09
Atlanta GA	1.23	1.28	1.27	1.32	1.33	1.29
Austin TX	1.03	1.04	1.06	1.11	1.17	1.08
Baltimore MD	1.05	1.06	1.07	1.10	1.14	1.08
Boston MA	1.24	1.27	1.28	1.30	1.31	1.28
Charlotte NC	1.04	1.09	1.14	1.15	1.17	1.12
Chicago IL-Northwestern IN	1.28	1.31	1.31	1.31	1.34	1.31
Cincinnati OH-KY	1.08	1.11	1.12	1.13	1.12	1.11
Cleveland OH	1.01	0.98	0.99	0.97	0.94	0.98
Columbus OH	1.04	1.05	1.05	1.02	1.08	1.05
Corpus Christi TX	0.72	0.70	0.71	1.10	0.71	0.79
Dallas-Ft. Worth TX	1.01	1.07	1.07	1.10	1.12	1.07
Denver CO	1.08	1.18	1.20	1.23	1.28	1.19
Detroit MI	1.18	1.18	1.20	1.22	1.24	1.20
El Paso TX-NM	0.86	0.91	0.94	0.98	0.99	0.94
Ft. Lauderdale-Hillywd-Pompano Beach FL	1.08	1.12	1.17	1.23	1.28	1.18
Hartford-Middletown CT	0.90	0.91	0.94	0.97	0.98	0.94
Honolulu HI	1.06	1.06	1.06	1.04	1.04	1.05
Houston TX	1.07	1.10	1.10	1.09	1.19	1.11
Indianapolis IN	1.05	1.12	1.11	1.13	1.19	1.12
Jacksonville FL	0.93	1.01	1.00	1.02	1.02	1.00
Kansas City MO-KS	0.76	0.77	0.79	0.81	0.84	0.79
Los Angeles CA	1.51	1.58	1.58	1.59	1.56	1.56
Louisville KY	1.04	1.08	1.09	1.09	1.08	1.08
Memphis TN-AR-MS	0.96	0.99	0.98	1.00	1.03	0.99
Miami-Hialeah FL	1.26	1.22	1.23	1.28	1.29	1.26
Milwaukee WI	1.01	1.02	1.05	1.08	1.08	1.05
Minn-St. Paul MN	1.13	1.18	1.20	1.22	1.25	1.20
Nashville TN	0.96	0.97	1.01	0.98	1.03	0.99
New Orleans LA	0.99	1.00	0.99	0.97	0.97	0.98
New York NY-Northeastern NJ	1.11	1.14	1.15	1.16	1.15	1.14
Norfolk VA	0.97	0.96	0.97	0.96	0.96	0.96
Oklahoma City OK	0.85	0.86	0.88	0.87	0.86	0.86
Orlando FL	0.93	1.05	1.05	1.11	1.14	1.06
Philadelphia PA-NJ	1.05	1.05	1.06	1.10	1.11	1.07
Phoenix AZ	1.13	1.16	1.21	1.27	1.29	1.21
Pittsburgh PA	0.76	0.78	0.78	0.77	0.78	0.77
Portland-Vancouver OR-WA	1.22	1.22	1.24	1.27	1.28	1.25
Sacramento CA	1.14	1.18	1.20	1.25	1.28	1.21
Salt Lake City UT	1.04	1.01	1.00	0.97	1.08	1.02
San Antonio TX	0.92	0.96	1.02	1.05	1.04	1.00
San Bernardino-Riv CA	1.15	1.20	1.24	1.26	1.30	1.23
San Diego CA	1.12	1.19	1.25	1.32	1.35	1.25
San Fran-Oak CA	1.33	1.37	1.39	1.45	1.41	1.39
San Jose CA	1.08	1.13	1.19	1.34	1.36	1.22
<b>Seattle-Everett WA</b>	<b>1.26</b>	<b>1.26</b>	<b>1.30</b>	<b>1.23</b>	<b>1.23</b>	<b>1.26</b>
St. Louis MO-II	1.03	1.01	1.03	1.03	1.02	1.02
Tampa FL	1.07	1.08	1.10	1.13	1.16	1.11
Washington DC-MD-VA	1.33	1.35	1.34	1.35	1.34	1.34
49 City Average	1.06	1.09	1.11	1.13	1.14	1.11
<b>Washington's Rank</b>	<b>44</b>	<b>43</b>	<b>45</b>	<b>34</b>	<b>32</b>	<b>43</b>

# FAA Air Traffic Delays

The FAA's annual Air Traffic Activity and Delay Report provides air traffic information for the 55 largest airports. Air traffic delays can occur at any phase of the flight and are characterized as delays that exceed 15 minutes. For comparison purposes, the report states the number of delays per 1000 operations.

In 2002, the Seattle-Tacoma airport ranked 31<sup>st</sup> among the 55 largest airports with 6.0 delays per 1000 operations, below the airports' average of 14.3 delays per 1000 operations. While the Seattle-Tacoma airport ranked 38<sup>th</sup> among the airports for the period 1998-2002, its average of 12.6 delays per 1000 operations for that period was below the average value for the airports, which was 16.6.

Chart 36  
FAA Air Traffic Delays



Table 36  
 Infrastructure  
**FAA Air Traffic Delays**  
 Delays Per 1000 Operations

	1998	1999	2000	2001	2002	1998-02
Albuquerque	0.5	0.4	0.7	0.1	0.1	0.4
Anchorage	0.8	1.2	0.7	1.2	0.9	1.0
Andrews AFB	1.4	1.9	1.3	1.2	0.5	1.3
Atlanta Hartsfield	33.1	36.0	30.9	24.3	33.5	31.5
Baltimore-Washington	2.6	5.2	6.9	5.1	4.4	4.8
Boston Logan	31.8	29.8	47.5	34.5	10.7	30.8
Bradley International	1.2	2.0	3.0	3.8	3.0	2.6
Charlotte Douglas	3.6	2.9	6.0	5.2	7.2	5.0
Chicago Midway	5.1	9.7	11.9	8.1	9.8	8.9
Chicago O'Hare	32.1	54.8	63.3	59.5	57.6	53.5
Cincinnati Tower	15.4	17.6	15.4	10.2	13.7	14.5
Cleveland Hopkins	6.3	10.9	11.4	6.4	7.6	8.5
Dallas/Ft. Worth	11.5	19.3	23.8	22.0	24.1	20.1
Dayton Cox	1.3	1.5	1.1	1.5	2.0	1.5
Denver Stapleton	1.7	2.5	2.2	3.7	2.6	2.6
Detroit Metro	9.4	20.6	17.6	15.5	12.9	15.2
Fairbanks	0.0	0.1	0.1	0.0	0.0	0.0
Ft. Lauderdale	2.1	2.7	3.7	5.3	7.0	4.2
Honolulu	0.1	0.1	0.0	0.1	0.0	0.1
Houston Hobby	3.4	4.4	2.5	4.3	2.9	3.5
Houston Intercontinental	22.2	20.6	28.1	33.0	41.4	29.0
Indianapolis	0.4	0.7	0.9	0.6	0.3	0.6
Kahului/Maui	0.0	0.0	0.0	0.1	0.0	0.0
Kansas City	0.9	1.1	1.1	1.0	0.5	0.9
Las Vegas McCarran	6.3	7.1	8.0	5.4	7.3	6.8
Los Angeles	9.7	13.7	21.9	22.6	5.3	14.6
Memphis	0.8	0.8	0.4	0.9	3.3	1.2
Miami	6.3	8.2	11.3	11.3	8.6	9.2
Minneapolis-St. Paul	7.2	17.2	12.7	14.5	17.2	13.8
Nashville	0.6	0.6	0.6	0.3	0.2	0.5
New Orleans Moisant	0.6	1.1	0.8	0.9	0.3	0.7
New York Kennedy	36.3	38.1	38.8	24.6	25.2	32.6
New York La Guardia	68.4	77.3	155.9	77.0	34.4	82.6
Newark	69.1	78.9	81.2	60.3	33.6	64.6
Ontario	1.2	0.7	1.2	1.8	0.7	1.1
Orlando	5.9	6.3	6.3	4.0	3.3	5.2
Palm Beach	0.5	0.5	2.1	2.0	6.0	2.2
Philadelphia	24.6	30.2	44.5	40.5	35.1	35.0
Phoenix Sky Harbor	19.9	21.1	21.9	15.3	14.7	18.6
Pittsburgh	3.6	2.1	3.8	2.7	2.9	3.0
Portland	1.1	1.5	0.5	0.3	0.4	0.8
Raleigh-Durham	0.6	1.3	2.1	1.5	0.6	1.2
Salt Lake City	2.8	1.9	2.0	2.3	1.3	2.0
San Antonio	0.7	1.2	0.8	0.3	0.3	0.6
San Diego Lindbergh	4.1	3.8	2.5	4.9	3.2	3.7
San Francisco	65.7	48.1	56.9	38.3	35.3	48.9
San Jose	1.6	2.2	5.7	6.3	3.4	3.9
San Juan	2.0	0.6	0.2	0.8	0.1	0.7
<b>Seattle-Tacoma</b>	<b>7.5</b>	<b>18.4</b>	<b>10.4</b>	<b>20.8</b>	<b>6.0</b>	<b>12.6</b>
St. Louis Lambert	31.7	19.2	18.2	18.1	15.4	20.5
Tampa	3.7	2.3	1.6	2.8	2.3	2.5
Teterboro	21.3	17.5	19.0	25.3	21.2	20.9
Washington Dulles	12.1	19.1	19.4	8.0	1.0	11.9
Washington National	5.9	6.6	8.0	10.6	4.7	7.1
Westchester Co.	3.0	2.5	3.5	8.6	6.9	4.9
U.S. Major Airport Avg.	14.6	17.1	20.4	16.7	14.3	16.6
<b>Seattle-Tacoma Rank*</b>	<b>38</b>	<b>41</b>	<b>34</b>	<b>43</b>	<b>31</b>	<b>38</b>

\* Out of the 55 largest airports

Source: FAA Air Traffic System Management, Air Traffic Activity and Delay Report, December 1990-2002.

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# Cost of Doing Business

# State and Local Tax Collections Per \$1000 Personal Income

The relative tax position of Washington is of considerable interest to taxpayers and government officials alike. The Census Bureau of the U.S. Department of Commerce annually collects data in order to compare tax burdens across states. Using this figure, tax burdens are then calculated using several different methods; this report compares tax collections per \$1000 personal income. This measure is computed by dividing the total state and local taxes by total state personal income.

In fiscal year 2000, Washington's state and local tax burden amounted to \$107.53 for each \$1,000 of personal income. This is the fifth year of continuous decline in the Washington's state and local tax burden relative to personal income, bringing this benchmark to its lowest level in over a decade. In 2000, Washington's tax burden ranked 19<sup>th</sup> among the states and was \$4.75 below the national average of \$112.28 per \$1,000 of personal income. The decrease in Washington's state and local tax burdens in 2000 is largely due to the elimination of the motor vehicle excise tax (MVET), which became effective January 1, 2000. As the tax's elimination only affected the second half of the 2000 fiscal year, it will have a greater effect in fiscal year 2001, potentially leading to further reduction in Washington's tax collection rate for that year.

## Initial Incidence of State and local Taxes

The "initial incidence" of a tax refers to the party from whom the tax is collected. Initial incidence does not always indicate who actually bears the tax burden, because taxes initially paid by business may sometimes be recovered in the form of higher prices or lower wages, shifting the tax burden to consumers or workers.

The Washington Department of Revenue estimates that in fiscal year 2000, businesses directly paid 45% of major state and local taxes, governments paid 4% and households paid 51%.

Chart 37  
State and Local Tax Collections Per \$1,000 Personal Income

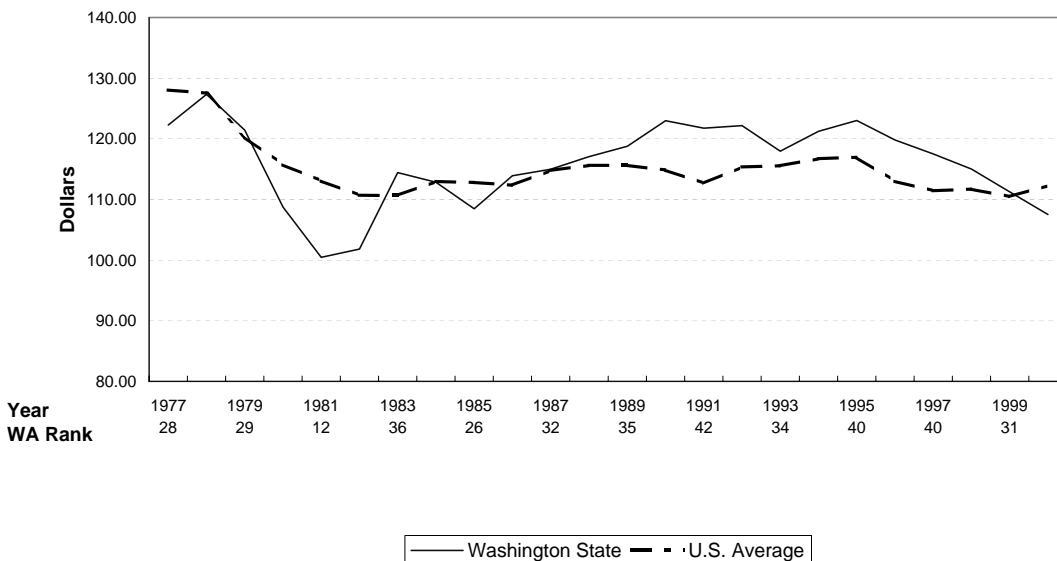




Table 37  
 Cost of Doing Business  
**State and Local Tax Collections Per \$1,000 Personal Income**  
 (Dollars)

	1996	1997	1998	1999	2000	1996-00
Alabama	93.55	91.24	91.33	91.11	93.65	92.18
Alaska	158.85	153.00	122.29	102.62	132.18	133.79
Arizona	117.59	108.83	106.77	108.65	111.73	110.71
Arkansas	107.89	105.14	106.51	112.62	106.50	107.73
California	113.38	111.42	114.50	113.58	120.39	114.65
Colorado	102.97	100.99	100.87	102.24	103.53	102.12
Connecticut	120.54	125.64	124.52	121.48	120.23	122.48
Delaware	108.60	111.30	118.84	112.34	115.69	113.35
Florida	102.73	100.34	100.50	100.24	100.06	100.77
Georgia	110.56	105.07	106.15	107.74	109.07	107.72
Hawaii	131.63	126.63	125.89	123.01	126.45	126.72
Idaho	115.58	112.48	113.76	112.63	115.43	113.98
Illinois	109.44	106.07	104.66	104.95	107.50	106.52
Indiana	104.35	110.80	105.75	104.70	105.64	106.25
Iowa	117.45	111.22	109.80	107.95	111.09	111.50
Kansas	113.74	112.57	115.74	107.59	108.72	111.67
Kentucky	115.63	113.73	112.84	110.99	111.62	112.96
Louisiana	102.71	109.58	109.02	108.02	109.57	107.78
Maine	129.48	134.47	144.46	139.08	138.64	137.23
Maryland	106.43	105.38	107.86	104.63	110.01	106.86
Massachusetts	112.37	111.63	113.28	108.53	110.36	111.23
Michigan	108.72	111.79	112.75	113.60	114.17	112.21
Minnesota	131.86	128.86	127.69	123.26	123.87	127.11
Mississippi	114.30	109.65	109.73	110.54	110.75	110.99
Missouri	100.62	101.58	101.57	101.56	99.45	100.96
Montana	111.02	113.65	113.78	108.85	110.53	111.57
Nebraska	118.92	113.39	112.36	107.66	109.44	112.35
Nevada	114.31	105.41	100.82	101.79	104.59	105.38
New Hampshire	89.13	91.03	88.39	88.37	88.18	89.02
New Jersey	115.74	111.10	115.10	113.68	113.46	113.82
New Mexico	126.36	127.72	131.39	121.73	126.74	126.79
New York	144.42	142.13	141.92	140.34	141.18	142.00
North Carolina	108.58	105.83	107.40	105.52	106.60	106.79
North Dakota	120.65	116.05	122.02	114.89	119.48	118.62
Ohio	111.38	110.03	110.35	109.86	112.90	110.90
Oklahoma	107.69	107.50	107.17	104.78	106.67	106.76
Oregon	106.65	106.75	100.96	100.19	105.60	104.03
Pennsylvania	106.47	106.62	107.27	107.18	106.56	106.82
Rhode Island	114.85	117.49	117.15	115.56	118.11	116.63
South Carolina	105.01	102.28	103.50	104.75	104.82	104.07
South Dakota	100.80	92.15	97.80	95.06	94.56	96.07
Tennessee	90.36	89.08	90.01	87.99	89.17	89.32
Texas	102.51	101.61	98.71	96.79	96.87	99.30
Utah	120.68	115.91	118.15	116.78	119.50	118.20
Vermont	122.25	123.74	125.08	121.82	121.53	122.88
Virginia	98.48	99.03	100.81	101.64	102.80	100.55
<b>Washington</b>	<b>119.79</b>	<b>117.49</b>	<b>115.00</b>	<b>111.25</b>	<b>107.53</b>	<b>114.21</b>
West Virginia	112.66	114.07	112.30	116.65	116.33	114.40
Wisconsin	133.33	128.22	129.10	127.08	129.44	129.43
Wyoming	117.28	116.93	122.04	113.41	117.74	117.48
U.S. Average	112.99	111.43	111.70	110.48	112.28	111.78
<b>Washington's Rank</b>	<b>39</b>	<b>40</b>	<b>34</b>	<b>31</b>	<b>19</b>	<b>35</b>

Source: Washington State Department of Revenue. Comparative State/Local Taxes, 1977-2000. ([www.dor.wa.gov](http://www.dor.wa.gov))

# Unemployment Insurance Costs

Unemployment insurance programs are designed to provide economic security against the effects of unemployment. Unemployment insurance provides temporary compensation to most workers who are out of work due to no fault of their own.

Unemployment insurance is provided by a combined Federal-State system, primarily financed through a payroll tax on employers. Under this system, the Federal Government sets minimum standards of eligibility and benefits that the states are free to exceed. As a result, there is a wide degree of variation in the eligibility for and benefits paid under the unemployment insurance programs of different states, as well as variation in the number of employers that pay into the programs.

In 2002, Washington had the second highest unemployment insurance cost as a percent of total wages in the country with an average rate of 1.21 percent, up 0.04 percent from the previous year. The national average rate for 2002 was 0.54 percent. Washington, however, has one of the most generous unemployment insurance programs in the country in terms of benefits, eligibility, and duration. While the increased benefits come at a cost, they provide increased security to workers and help insulate local economies from large swings in income and spending when layoffs occur in localized industries. The optimum level of benefits relative to the costs of providing them is a subject of continuous debate.

Chart 38  
Unemployment Insurance Costs

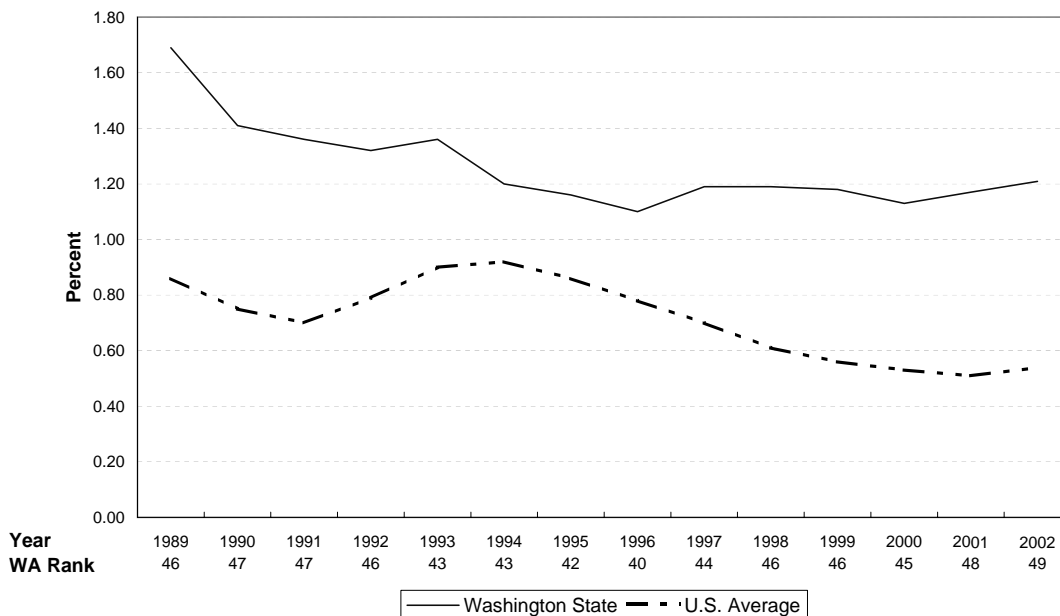


Table 14  
Economic Performance  
**Unemployment Rate**

	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>1998-02</b>
Alabama	4.2	4.8	4.5	5.3	5.9	4.9
Alaska	5.8	6.4	6.7	6.4	7.7	6.6
Arizona	4.1	4.4	4.0	4.7	6.2	4.7
Arkansas	5.5	4.5	4.4	5.0	5.4	5.0
California	5.9	5.2	4.9	5.4	6.7	5.6
Colorado	3.8	2.9	2.8	3.7	5.7	3.8
Connecticut	3.4	3.2	2.2	3.3	4.3	3.3
Delaware	3.8	3.5	3.9	3.4	4.2	3.8
Florida	4.3	3.9	3.6	4.8	5.5	4.4
Georgia	4.2	4.0	3.7	4.0	5.1	4.2
Hawaii	6.2	5.6	4.3	4.6	4.2	5.0
Idaho	5.0	5.2	4.9	5.0	5.8	5.2
Illinois	4.5	4.3	4.3	5.4	6.5	5.0
Indiana	3.1	3.0	3.2	4.4	5.1	3.8
Iowa	2.8	2.5	2.6	3.3	4.0	3.0
Kansas	3.8	3.0	3.7	4.3	5.1	4.0
Kentucky	4.6	4.5	4.1	5.4	5.6	4.8
Louisiana	5.7	5.1	5.4	5.9	6.1	5.6
Maine	4.4	4.1	3.5	3.9	4.4	4.1
Maryland	4.6	3.5	3.8	4.0	4.4	4.1
Massachusetts	3.3	3.2	2.6	3.7	5.3	3.6
Michigan	3.9	3.8	3.5	5.3	6.2	4.5
Minnesota	2.5	2.8	3.3	3.7	4.4	3.3
Mississippi	5.4	5.1	5.6	5.5	6.8	5.7
Missouri	4.2	3.4	3.4	4.7	5.5	4.2
Montana	5.6	5.2	5.0	4.6	4.6	5.0
Nebraska	2.7	2.9	3.0	3.1	3.6	3.1
Nevada	4.3	4.4	4.0	5.3	5.5	4.7
New Hampshire	2.9	2.7	2.8	3.5	4.7	3.3
New Jersey	4.6	4.6	3.7	4.2	5.8	4.6
New Mexico	6.2	5.6	5.0	4.8	5.4	5.4
New York	5.6	5.2	4.6	4.9	6.1	5.3
North Carolina	3.5	3.2	3.6	5.5	6.7	4.5
North Dakota	3.2	3.4	3.0	2.9	4.0	3.3
Ohio	4.3	4.3	4.0	4.2	5.7	4.5
Oklahoma	4.5	3.4	3.1	3.8	4.5	3.9
Oregon	5.6	5.7	4.9	6.3	7.5	6.0
Pennsylvania	4.6	4.4	4.1	4.7	5.7	4.7
Rhode Island	4.9	4.1	4.1	4.7	5.1	4.6
South Carolina	3.8	4.5	3.8	5.3	6.0	4.7
South Dakota	2.9	2.9	2.3	3.4	3.1	2.9
Tennessee	4.2	4.0	3.9	4.4	5.1	4.3
Texas	4.8	4.6	4.2	4.8	6.3	4.9
Utah	3.8	3.7	3.3	4.4	6.1	4.3
Vermont	3.4	3.0	2.9	3.6	3.7	3.3
Virginia	2.9	2.8	2.2	3.4	4.1	3.1
<b>Washington</b>	<b>4.8</b>	<b>4.7</b>	<b>5.2</b>	<b>6.4</b>	<b>7.3</b>	<b>5.7</b>
West Virginia	6.6	6.6	5.5	4.8	6.1	5.9
Wisconsin	3.4	3.0	3.6	4.5	5.5	4.0
Wyoming	4.8	4.9	3.9	3.9	4.2	4.3
U.S. Average	4.5	4.2	4.0	4.7	5.8	4.6
<b>Washington's Rank</b>	<b>35</b>	<b>37</b>	<b>46</b>	<b>49</b>	<b>48</b>	<b>46</b>

Source: U.S. Department of Labor, Bureau of Labor Statistics, June 2003 (www.bls.gov)

# Workers' Compensation Premium Costs

The Oregon Department of Consumer & Business Services produces the workers' compensation premium index every two years in order to make a state-by-state comparison of workers' compensation premiums. The premium index is calculated by selecting Oregon's fifty largest business classes as defined by the workers' compensation costs and computing what those compensation claims would cost in other states.

In 2002, Washington's premium costs for the industries examined by the study were \$1.65 per \$100 of payroll, ranking 7<sup>th</sup> among the states. This is the sixth consecutive decline in this measure of Washington's premium costs and is less than half of its level in 1994. Washington's average rate of \$2.30 per \$100 of payroll for the period from 1994 through 2002 ranked 11<sup>th</sup> among the states and was well below that national average of \$3.07.

Washington's compensation system is atypical of other states' systems as employees pay a portion of their industrial premiums into a state fund and the Department of Labor and Industries acts as both the insurer and administrator of the workers' compensation system. Washington's results over the past decade suggest an effective and successful workers' compensation system.

Chart 39  
Workers' Compensation Premium Cost Index

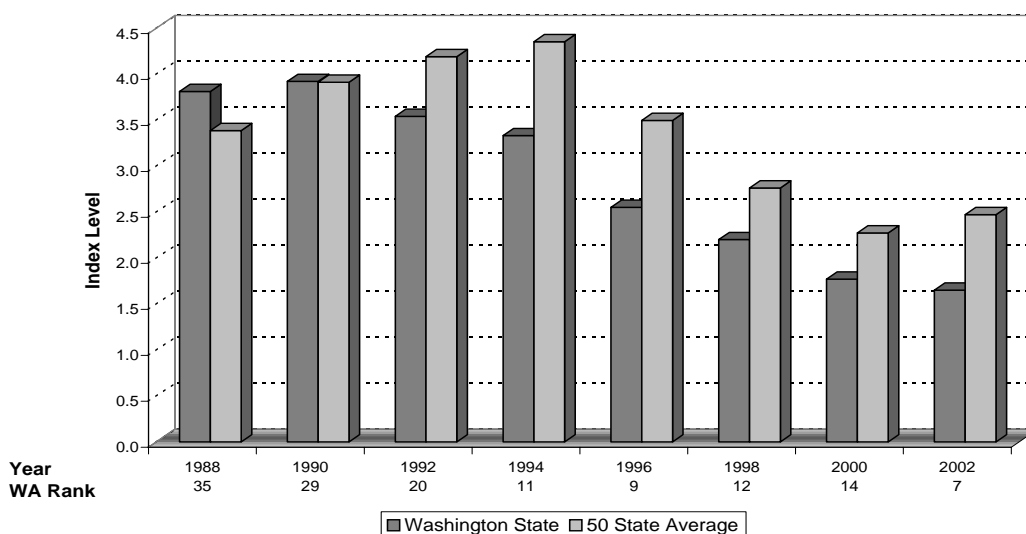


Table 39  
 Cost of Doing Business  
**Workers' Compensation Premium Costs**  
 (Dollar amount per \$100 of payroll)

	1994	1996	1998	2000	2002	1994-02
Alabama	4.78	3.64	3.70	2.56	2.96	3.53
Alaska	3.92	3.41	2.70	2.18	2.87	3.02
Arizona	4.18	3.38	2.60	1.77	1.63	2.71
Arkansas	3.69	3.04	2.29	1.68	1.62	2.46
California	5.04	4.11	4.86	3.34	5.23	4.52
Colorado	5.28	3.34	2.87	2.64	2.73	3.37
Connecticut	5.34	4.64	3.67	2.58	2.90	3.83
Delaware	3.18	3.54	3.20	2.58	3.38	3.18
Florida	5.72	5.26	4.28	4.08	4.50	4.77
Georgia	4.52	4.04	2.95	2.42	2.32	3.25
Hawaii	6.06	5.75	3.24	2.99	3.48	4.30
Idaho	3.88	3.00	2.48	2.11	2.37	2.77
Illinois	5.48	3.77	2.96	2.62	2.73	3.51
Indiana	2.26	1.71	1.55	1.32	1.37	1.64
Iowa	3.47	2.17	1.87	1.66	1.74	2.18
Kansas	3.49	2.64	1.82	1.56	1.84	2.27
Kentucky	5.46	3.77	2.58	2.32	2.87	3.40
Louisiana	6.98	5.47	4.06	3.36	3.19	4.61
Maine	5.87	3.91	2.69	2.52	2.30	3.46
Maryland	3.08	2.23	2.03	1.58	1.84	2.15
Massachusetts	4.98	3.71	3.10	1.77	1.98	3.11
Michigan	4.54	3.05	2.86	2.40	2.25	3.02
Minnesota	5.29	4.03	2.94	2.40	2.60	3.45
Mississippi	3.70	3.30	2.62	2.10	2.21	2.79
Missouri	4.35	3.45	2.65	2.26	2.39	3.02
Montana	6.91	4.71	3.50	2.75	3.04	4.18
Nebraska	3.31	2.04	1.62	1.62	1.93	2.10
Nevada	4.55	3.96	3.86	3.10	3.02	3.70
New Hampshire	4.73	4.13	3.32	2.47	2.85	3.50
New Jersey	3.58	3.20	2.49	2.19	2.25	2.74
New Mexico	5.75	3.55	2.43	1.66	2.01	3.08
New York	5.38	4.90	3.53	3.05	3.13	4.00
North Carolina	3.41	3.05	2.02	1.64	2.17	2.46
North Dakota	2.53	2.34	2.19	1.79	1.24	2.02
Ohio	4.42	4.12	3.12	2.89	2.89	3.49
Oklahoma	4.86	4.65	3.10	2.85	2.82	3.66
Oregon	3.70	3.15	2.27	1.93	2.06	2.62
Pennsylvania	5.02	4.37	2.69	2.31	2.57	3.39
Rhode Island	5.75	4.81	3.74	3.18	3.29	4.15
South Carolina	2.91	2.38	1.47	1.51	1.82	2.02
South Dakota	3.88	3.20	2.31	1.63	1.61	2.53
Tennessee	3.60	3.59	2.79	2.10	2.30	2.88
Texas	5.91	4.19	4.11	3.05	3.29	4.11
Utah	3.62	2.64	1.88	1.58	1.67	2.28
Vermont	4.21	3.60	2.41	1.98	2.45	2.93
Virginia	2.76	1.19	1.74	1.27	1.50	1.69
<b>Washington</b>	<b>3.33</b>	<b>2.55</b>	<b>2.20</b>	<b>1.77</b>	<b>1.65</b>	<b>2.30</b>
West Virginia	2.93	2.91	2.26	2.72	2.53	2.67
Wisconsin	3.17	2.34	2.36	2.01	2.22	2.42
Wyoming	2.84	2.85	2.05	1.75	1.97	2.29
50 State Average*	4.35	3.50	2.76	2.27	2.47	3.07
<b>Washington's Rank</b>	<b>11</b>	<b>9</b>	<b>12</b>	<b>14</b>	<b>7</b>	<b>11</b>

Source: Oregon Workers' Compensation Premium Rate Rankings, Calendar Year 1988, 1990, 1992, 1994, 1996, 1998, 2000, 2002.  
 Research and Analysis Section of the Oregon Department of Consumer and Business Services.

# Electricity Prices

While many industrial and commercial operations rely on energy sources other than electricity, electrical power represents the main energy cost for most businesses. This indicator presents the average price of the commercial and industrial electricity purchases made annually in each state, expressed in cents per Kilowatts hour (kW-hr). To facilitate comparisons between states, each state is assumed to have had the same ratio of commercial to industrial sales as the U.S. had in each of the years indicated.

Due to the state's abundant hydrological resources, Washington has long enjoyed some of the lowest electricity prices in the country, ranking either 1<sup>st</sup> or 2<sup>nd</sup> in lowest electricity prices among the states in the years 1990 through 1999. Deregulation difficulties in California and drought conditions over the entire West Coast, however, caused electricity prices in several western states to increase relative to the rest of the country in late 2000 and early 2001. As a result, Washington's rank decreased to 5<sup>th</sup> in 2000 and decreased further to 22<sup>nd</sup> in 2001. While the effects of 2001's West Coast electricity problems were still being felt in 2002, Washington's average electricity price for that year managed to decline more in both absolute terms and in percentage than both the U.S. and California. Washington's 2002 average price of 5.25 cents per kW-hr ranked 18<sup>th</sup> in the country, below the national average of 6.38. The potential for Washington's return to the top levels of low-electricity-cost states can be seen in the state's average price of 4.48 cents per kW-hr for the period of 1998 through 2002, ranking 6<sup>th</sup> among the states and well below the U.S. average of 6.09 cents.

Chart 40  
Electricity Prices

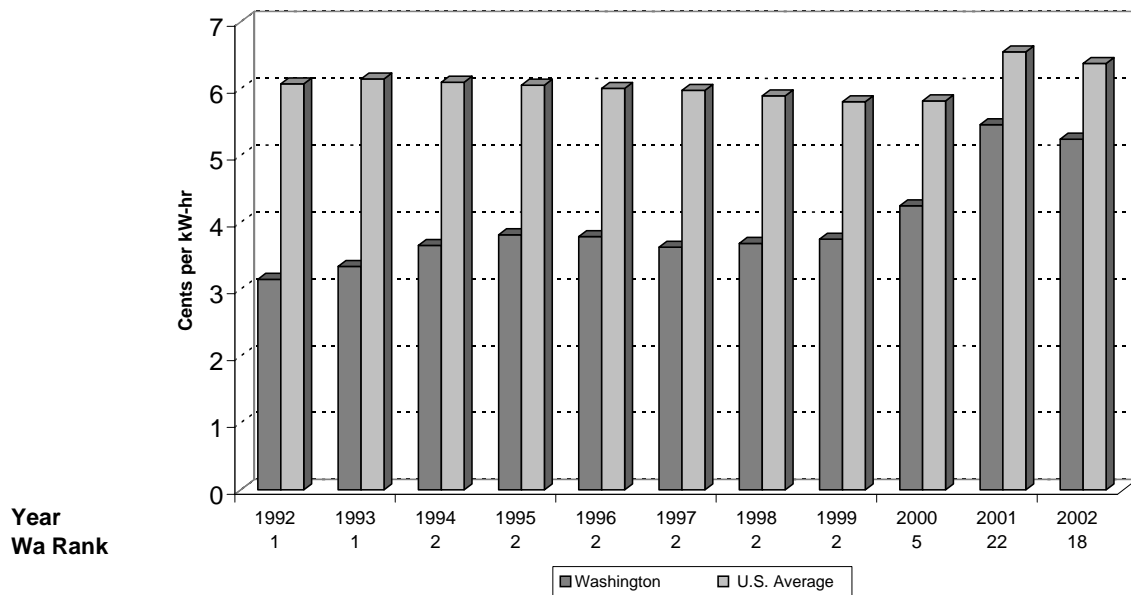


Table 40

## Cost of Doing Business

**Electricity Prices**

(Weighted Average of Industrial and Commercial Rates, Cents per Kilowatt Hour)

	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>1998-2002</b>
Alabama	5.17	5.14	5.28	5.31	5.29	5.24
Alaska	8.28	8.23	8.64	9.00	8.94	8.62
Arizona	6.39	6.24	6.17	6.40	6.30	6.30
Arkansas	5.00	4.95	5.07	5.39	5.10	5.10
California	8.07	8.57	7.41	11.03	10.99	9.21
Colorado	4.98	4.98	5.03	5.08	5.05	5.02
Connecticut	8.81	8.52	8.28	8.49	8.50	8.52
Delaware	5.82	6.02	5.69	5.70	5.74	5.80
Florida	5.57	5.48	5.57	6.23	6.00	5.77
Georgia	5.57	5.38	5.29	5.55	5.24	5.41
Hawaii	10.81	11.18	13.25	12.97	12.24	12.09
Idaho	3.53	3.45	3.69	4.43	5.20	4.06
Illinois	6.39	6.17	5.67	6.16	6.94	6.27
Indiana	4.98	4.94	4.81	4.94	5.00	4.93
Iowa	5.28	5.14	5.22	5.50	5.29	5.29
Kansas	5.37	5.34	5.36	5.43	5.40	5.38
Kentucky	4.06	4.10	4.02	4.20	4.20	4.11
Louisiana	5.31	5.39	6.16	6.60	5.59	5.81
Maine	8.40	8.41	8.47	9.21	7.19	8.33
Maryland	5.43	5.51	5.33	5.25	5.34	5.37
Massachusetts	8.74	8.31	8.58	9.83	9.10	8.91
Michigan	6.37	6.42	6.48	6.45	6.19	6.38
Minnesota	5.33	5.41	5.38	5.33	5.05	5.30
Mississippi	5.38	5.08	5.35	5.80	5.59	5.44
Missouri	5.18	5.15	5.17	5.23	5.20	5.19
Montana	4.48	4.55	4.40	5.60	5.05	4.81
Nebraska	4.49	4.48	4.50	4.64	4.75	4.57
Nevada	5.50	5.69	5.80	7.54	8.20	6.55
New Hampshire	10.49	10.27	10.25	9.88	9.45	10.07
New Jersey	8.98	8.69	7.67	8.72	8.25	8.46
New Mexico	6.08	5.85	5.85	6.50	6.04	6.06
New York	8.17	7.89	8.54	8.86	8.48	8.39
North Carolina	5.46	5.43	5.49	5.59	5.60	5.51
North Dakota	5.22	5.09	4.95	4.94	5.00	5.04
Ohio	5.93	5.95	6.01	6.37	6.19	6.09
Oklahoma	4.62	4.56	5.17	5.30	4.80	4.89
Oregon	4.22	4.23	4.24	5.03	5.95	4.73
Pennsylvania	6.90	6.52	5.29	7.00	7.04	6.55
Rhode Island	8.41	7.92	9.13	9.87	8.10	8.69
South Carolina	4.92	4.97	4.89	5.26	5.19	5.05
South Dakota	5.49	5.60	5.53	5.50	5.45	5.51
Tennessee	5.19	5.21	5.43	5.39	5.35	5.31
Texas	5.21	5.21	5.63	6.60	5.80	5.69
Utah	4.54	4.30	4.24	4.64	4.65	4.47
Vermont	8.64	8.96	8.94	9.57	9.49	9.12
Virginia	4.68	4.67	4.77	5.03	4.95	4.82
<b>Washington</b>	<b>3.69</b>	<b>3.75</b>	<b>4.25</b>	<b>5.46</b>	<b>5.25</b>	<b>4.48</b>
West Virginia	4.64	4.64	4.60	4.59	4.60	4.61
Wisconsin	4.83	4.86	5.00	5.40	5.45	5.11
Wyoming	4.28	4.28	4.34	4.44	4.65	4.40
U.S. Average	5.89	5.81	5.82	6.55	6.38	6.09
<b>Washington's Rank</b>	<b>2</b>	<b>2</b>	<b>5</b>	<b>22</b>	<b>18</b>	<b>5</b>

Source: U.S. Energy Information Administration (<http://www.eia.doe.gov>), June 2003

# Average Wage by Sector

The Occupational Employment Statistics (OES) program, produced by the U.S. Department of Labor, Bureau of Labor Statistics, conducts a yearly mail survey designed to produce estimates of employment and wages for specific occupations in states and metropolitan areas. The OES program collects data on wage and salary workers in nonfarm establishments in order to produce employment and wage estimates for over 800 occupations. Data from self-employed persons are not collected and are not included in the estimates. The most recent year of wage data available under this program is 2001.

Under the OES program, occupations are classified under the Standard Occupational Classification (SOC) system. This system includes twenty-two major occupational groups, which can be broken down into 821 specific occupations. State wages for the major groups are presented in Table 41, while wages for the 821 specific occupations can be found at the BLS web site ([www.bls.gov](http://www.bls.gov)).

As compared to the other states, Washington's wages range in rank from 23<sup>rd</sup> in the Legal sector to 2<sup>nd</sup> in Personal Care and Service. Overall, however, Washington wages are higher than the national average in all but two major sectors, and in the top ten of all but three.

While information on average state wage levels alone can be useful in some business decisions, care must be taken in using them to analyze actual business costs. This is because the OES survey does not attempt to account for differences in productivity or industry mix between the states. A higher-than-average wage level may simply indicate a larger concentration of high-productivity jobs within an occupational group, or higher productivity levels in the same occupation due to differences in average state levels of capital or training. For example, Washington's high average wage in Healthcare Practitioners and Technical may be due to a higher-than-average number of higher-paid workers in biotechnology labs rather than having higher paid doctors and nurses. There are also considerable differences in wage levels between different parts of the state, with the highly populated areas affecting the average wage more than more sparsely populated areas that may have lower wages. The specific occupational and metropolitan area data available from the BLS can present a clearer picture of the range of labor costs in the states.



Table 41  
 Cost of Doing Business  
 Average Wages, 2001  
 (Dollars)

	Management SOC 11-0000	Business and Financial Operations SOC 13-0000	Computer and Mathematical SOC 15-0000	Architecture and Engineering SOC 17-0000	Life, Physical and Social Science SOC 19-0000	Community and Social Services SOC 21-0000
Alabama	29.33	22.12	25.26	26.11	21.59	14.56
Alaska	30.69	24.98	24.95	31.31	24.59	17.18
Arizona	31.87	22.69	28.02	26.53	21.97	15.00
Arkansas	27.63	19.46	20.44	22.41	18.90	13.58
California	39.58	26.25	32.88	30.69	26.41	18.35
Colorado	35.46	24.83	30.81	28.05	23.83	16.64
Connecticut	41.31	28.28	30.79	27.76	29.09	19.12
Delaware	33.45	24.35	30.48	27.04	28.42	16.69
Florida	32.19	22.75	25.84	23.93	21.41	16.26
Georgia	34.33	23.29	27.94	25.54	21.55	15.99
Hawaii	32.22	22.58	24.78	26.05	22.75	17.15
Idaho	27.28	21.06	24.39	24.36	20.68	15.72
Illinois	32.86	24.36	29.52	25.69	22.53	15.94
Indiana	30.18	20.76	24.12	22.90	19.25	14.38
Iowa	28.22	20.22	24.52	23.18	20.08	14.22
Kansas	30.60	22.22	26.24	25.20	21.18	14.29
Kentucky	28.93	20.69	23.95	24.50	19.29	14.91
Louisiana	27.87	19.97	23.51	25.91	23.23	15.05
Maine	27.69	20.04	23.27	24.25	21.02	15.05
Maryland	33.01	24.70	30.55	28.05	27.41	15.36
Massachusetts	37.98	26.89	33.01	29.46	26.10	17.32
Michigan	38.18	26.09	27.62	29.08	21.62	18.32
Minnesota	36.41	23.49	28.46	26.06	25.02	16.08
Mississippi	26.44	19.21	21.19	22.08	20.17	14.83
Missouri	30.81	21.59	26.69	25.02	22.83	15.05
Montana	23.24	18.52	19.93	21.81	20.27	12.53
Nebraska	29.48	20.93	25.35	24.02	19.56	13.23
Nevada	33.14	22.61	23.07	25.25	20.81	19.25
New Hampshire	31.50	23.13	27.96	25.71	21.95	13.83
New Jersey	42.75	27.49	32.87	29.23	27.52	18.45
New Mexico	27.72	20.36	25.93	27.36	27.31	14.39
New York	42.63	28.27	30.73	28.08	26.39	18.57
North Carolina	32.28	23.41	29.36	24.67	23.08	14.91
North Dakota	24.46	18.88	19.03	20.84	19.13	13.34
Ohio	32.55	22.00	26.76	25.58	21.42	16.25
Oklahoma	26.67	20.42	21.05	24.34	20.37	13.35
Oregon	33.08	22.52	25.79	25.25	22.36	16.29
Pennsylvania	32.38	22.52	26.68	25.26	21.52	15.21
Rhode Island	37.19	25.11	25.60	26.77	22.20	17.04
South Carolina	27.69	20.28	24.17	25.96	19.88	14.34
South Dakota	29.78	18.78	19.65	20.79	17.10	14.62
Tennessee	28.55	22.74	24.47	24.83	23.05	13.68
Texas	31.93	23.82	29.07	27.94	22.83	16.50
Utah	29.32	21.05	23.18	23.86	18.86	14.34
Vermont	36.07	23.88	27.07	26.77	21.88	15.70
Virginia	35.27	25.62	29.76	27.42	25.69	17.00
<b>Washington</b>	<b>39.25</b>	<b>26.28</b>	<b>30.95</b>	<b>29.52</b>	<b>25.80</b>	<b>17.04</b>
West Virginia	25.30	19.57	22.31	22.04	20.48	11.81
Wisconsin	30.70	21.59	26.73	24.19	20.94	16.56
Wyoming	25.81	21.08	18.46	23.50	20.36	13.30
U.S. Average	34.04	24.32	29.02	27.08	23.90	16.44
<b>Washington's Rank</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>9</b>	<b>10</b>

Source: "Occupational Employment Statistics," US Department of Commerce, Bureau of Labor Statistics (www.bls.gov), June 2003

Table 41(cont.)  
 Cost of Doing Business  
**Average Wages, 2001**  
 (Dollars)

	<b>Legal</b> SOC 23-0000	<b>Education, Training, and Library</b> SOC 25-0000	<b>Arts, Design, Entertainment, Sports, and Media</b> SOC 27-0000	<b>Healthcare Practitioners and Technical</b> SOC 29-0000	<b>Healthcare Support</b> SOC 31-0000	<b>Protective Service</b> SOC 33-0000
Alabama	27.17	16.47	15.13	20.72	8.76	12.75
Alaska	33.38	20.43	15.61	27.67	14.25	17.43
Arizona	31.67	16.34	17.51	24.35	10.11	15.25
Arkansas	23.19	15.48	14.39	19.96	8.32	12.16
California	38.16	20.88	23.55	27.00	12.00	18.36
Colorado	30.04	18.15	19.66	24.48	12.17	17.22
Connecticut	36.53	21.44	21.97	27.70	12.81	17.95
Delaware	28.93	22.85	17.89	25.46	11.07	14.04
Florida	33.46	19.18	17.01	23.18	10.06	14.92
Georgia	28.94	17.51	17.47	21.70	10.35	13.10
Hawaii	27.55	18.10	17.32	26.16	11.67	13.66
Idaho	26.69	16.33	13.85	21.97	9.19	13.32
Illinois	36.25	19.07	18.24	22.48	10.18	15.96
Indiana	25.20	17.46	13.69	21.61	9.96	12.78
Iowa	27.19	16.31	13.76	20.83	9.92	14.46
Kansas	27.32	15.21	14.62	21.49	9.58	13.34
Kentucky	26.30	16.51	14.69	21.87	9.61	11.91
Louisiana	24.92	15.18	15.43	21.16	7.96	11.51
Maine	29.22	16.19	15.83	23.85	9.96	12.83
Maryland	27.20	19.05	19.52	27.94	12.44	16.60
Massachusetts	34.71	20.23	21.34	25.60	12.20	17.14
Michigan	31.13	20.58	21.01	25.19	10.84	15.62
Minnesota	32.08	18.38	19.11	23.98	11.20	14.93
Mississippi	22.41	14.26	13.65	18.99	8.42	10.97
Missouri	31.08	16.36	16.69	21.11	9.43	13.98
Montana	24.35	14.81	13.06	19.75	9.00	13.59
Nebraska	29.59	17.03	14.80	20.84	9.78	14.44
Nevada	29.89	18.76	19.16	27.68	12.25	14.82
New Hampshire	27.28	16.51	17.29	23.85	11.39	14.46
New Jersey	38.46	21.36	22.22	27.46	11.45	18.80
New Mexico	23.70	15.22	15.82	24.00	9.52	12.95
New York	40.52	23.07	21.06	26.49	11.32	17.84
North Carolina	29.43	16.22	17.34	23.18	9.64	13.52
North Dakota	21.23	14.61	13.24	20.54	8.88	13.59
Ohio	29.08	18.82	16.98	23.38	10.19	15.07
Oklahoma	29.60	14.83	14.49	21.23	8.72	13.00
Oregon	30.23	18.37	17.95	25.90	11.37	16.62
Pennsylvania	30.16	20.60	18.04	23.12	10.42	16.16
Rhode Island	28.04	20.33	18.22	26.36	11.44	16.82
South Carolina	25.70	16.67	15.73	23.43	9.55	12.34
South Dakota	22.88	14.88	12.40	20.19	9.22	12.92
Tennessee	28.54	15.97	16.18	22.32	9.69	13.22
Texas	35.16	17.16	16.23	22.80	9.33	14.59
Utah	33.58	15.81	16.13	24.25	9.65	14.06
Vermont	26.08	16.41	17.64	24.98	10.49	14.11
Virginia	31.01	18.16	18.84	24.24	10.05	15.17
<b>Washington</b>	<b>29.53</b>	<b>18.31</b>	<b>21.70</b>	<b>27.33</b>	<b>11.79</b>	<b>17.89</b>
West Virginia	21.04	17.19	13.73	20.59	8.09	11.77
Wisconsin	31.24	18.15	16.49	23.20	10.55	15.91
Wyoming	22.63	15.89	12.90	21.49	9.29	14.71
U.S. Average	33.19	18.81	19.12	24.01	10.53	15.64
<b>Washington's Rank</b>	<b>23</b>	<b>18</b>	<b>4</b>	<b>6</b>	<b>8</b>	<b>4</b>

Source: "Occupational Employment Statistics," US Department of Commerce, Bureau of Labor Statistics (www.bls.gov), June 2003

Table 41 (cont.)  
 Cost of Doing Business  
**Average Wages, 2001**  
 (Dollars)

	<b>Food Preparation and Serving Related SOC 35-0000</b>	<b>Building and Grounds Cleaning and Maintenance SOC 37-0000</b>	<b>Personal Care and Service SOC 39-0000</b>	<b>Sales and Related SOC 41-0000</b>	<b>Office and Administrative Support SOC 43-0000</b>	<b>Farming, Fishing, and Forestry SOC 45-0000</b>
Alabama	6.85	8.26	8.41	12.45	11.36	10.99
Alaska	9.39	11.65	12.22	12.87	14.85	18.03
Arizona	7.41	8.87	10.48	13.62	12.47	7.61
Arkansas	7.11	7.92	7.54	11.02	10.68	9.74
California	8.59	10.51	11.36	15.52	14.53	8.38
Colorado	8.70	9.85	10.21	14.77	13.75	9.95
Connecticut	9.64	11.46	11.27	16.89	14.97	11.24
Delaware	8.66	9.88	9.32	13.58	13.26	11.29
Florida	7.85	8.88	9.40	13.80	12.07	7.96
Georgia	7.80	8.89	10.61	13.36	12.73	9.61
Hawaii	9.38	10.73	12.69	12.33	13.60	9.87
Idaho	7.26	8.86	8.40	11.45	11.60	11.31
Illinois	7.68	10.51	10.73	13.90	13.36	10.11
Indiana	7.41	9.28	8.92	12.39	11.57	10.57
Iowa	7.40	9.21	8.52	11.63	11.68	10.72
Kansas	7.48	9.03	8.87	12.92	11.87	12.11
Kentucky	7.45	8.82	11.06	11.75	11.71	9.93
Louisiana	7.17	7.73	7.85	11.42	11.08	11.25
Maine	8.10	9.70	8.80	12.32	11.85	12.48
Maryland	8.13	9.60	9.83	13.75	13.68	10.94
Massachusetts	10.26	11.57	11.44	15.50	14.69	11.50
Michigan	8.04	10.87	10.42	14.14	13.46	11.12
Minnesota	8.15	10.42	10.44	15.01	13.45	12.12
Mississippi	6.87	7.88	8.81	10.48	10.98	10.69
Missouri	7.76	9.19	9.20	12.66	12.25	9.84
Montana	7.23	8.25	8.10	11.34	10.63	13.04
Nebraska	7.48	9.22	9.28	11.92	11.58	10.11
Nevada	9.01	10.21	10.03	12.51	12.87	12.62
New Hampshire	8.45	10.34	9.55	13.64	12.74	12.78
New Jersey	8.95	10.90	10.55	16.27	14.51	9.76
New Mexico	7.16	8.21	8.28	11.06	11.34	6.62
New York	9.00	11.99	10.40	17.32	14.65	11.37
North Carolina	7.70	8.95	9.51	13.22	12.51	10.68
North Dakota	7.41	8.59	8.11	10.93	10.93	10.18
Ohio	7.69	10.03	9.19	13.53	12.56	10.90
Oklahoma	6.92	8.05	8.71	11.30	11.24	9.73
Oregon	8.49	10.30	10.58	14.62	12.99	12.70
Pennsylvania	7.72	9.94	9.38	12.69	12.59	11.22
Rhode Island	8.51	10.85	9.91	14.25	13.39	10.64
South Carolina	7.40	8.60	9.15	11.83	11.68	10.25
South Dakota	7.31	8.44	8.48	12.06	10.67	10.20
Tennessee	7.46	8.77	9.43	12.63	11.91	10.13
Texas	7.28	8.22	9.73	12.94	12.54	8.74
Utah	7.83	9.00	10.46	13.19	11.85	8.68
Vermont	8.96	9.89	9.40	12.67	12.39	10.78
Virginia	7.94	9.00	10.95	12.89	12.92	10.41
<b>Washington</b>	<b>9.19</b>	<b>10.96</b>	<b>12.31</b>	<b>15.79</b>	<b>14.07</b>	<b>11.68</b>
West Virginia	6.97	8.28	7.79	9.95	10.74	10.74
Wisconsin	7.93	9.84	9.55	13.49	12.55	11.79
Wyoming	7.38	8.83	8.38	10.70	11.00	11.75
U.S. Average	8.04	9.80	10.10	13.91	13.09	9.44
<b>Washington's Rank</b>	<b>5</b>	<b>5</b>	<b>2</b>	<b>4</b>	<b>7</b>	<b>11</b>

Source: "Occupational Employment Statistics," US Department of Commerce, Bureau of Labor Statistics (www.bls.gov), June 2003

Table 41(cont.)  
 Cost of Doing Business  
 Average Wages, 2001  
 (Dollars)

	<b>Construction and Extraction SOC 47-0000</b>	<b>Installation, Maintenance, and Repair SOC 49-0000</b>	<b>Production SOC 51-0000</b>	<b>Transportation and Material Moving SOC 53-0000</b>
Alabama	13.38	14.94	12.12	11.55
Alaska	22.99	21.78	18.53	17.84
Arizona	14.53	16.14	12.62	12.51
Arkansas	13.00	14.37	11.22	11.90
California	19.28	17.79	12.70	12.64
Colorado	16.93	17.37	13.18	13.48
Connecticut	19.82	18.68	14.97	13.31
Delaware	17.28	18.23	14.90	13.25
Florida	13.22	15.12	11.46	11.06
Georgia	14.40	16.67	12.10	12.70
Hawaii	22.36	18.14	13.17	14.17
Idaho	15.25	15.83	12.09	11.68
Illinois	21.41	18.03	12.91	13.71
Indiana	17.28	16.68	13.49	13.20
Iowa	15.39	15.26	13.12	12.39
Kansas	15.35	16.44	13.81	12.41
Kentucky	15.46	15.65	13.41	13.16
Louisiana	13.97	15.09	14.22	12.02
Maine	14.44	15.51	12.94	11.64
Maryland	16.73	17.19	13.71	12.97
Massachusetts	21.30	18.79	14.23	13.62
Michigan	20.09	18.58	16.43	13.80
Minnesota	20.53	18.02	14.25	13.36
Mississippi	12.88	14.03	11.10	11.15
Missouri	18.83	16.54	13.37	12.85
Montana	15.62	15.07	12.45	12.26
Nebraska	14.48	15.23	12.16	12.93
Nevada	18.98	17.75	13.38	12.37
New Hampshire	15.65	16.74	13.26	12.33
New Jersey	22.02	19.27	14.48	13.03
New Mexico	13.77	15.25	12.36	11.69
New York	21.53	18.40	13.35	14.10
North Carolina	13.68	15.98	12.20	12.20
North Dakota	14.79	15.44	12.51	12.18
Ohio	17.83	16.57	14.28	12.82
Oklahoma	13.67	15.03	12.63	12.13
Oregon	18.95	17.18	13.65	12.81
Pennsylvania	17.58	16.53	13.50	13.02
Rhode Island	18.44	16.80	12.62	12.07
South Carolina	13.45	15.35	12.92	11.52
South Dakota	12.98	14.46	11.27	11.45
Tennessee	14.25	15.55	12.51	12.49
Texas	13.67	15.54	12.34	12.33
Utah	15.34	16.26	12.31	14.10
Vermont	14.32	15.77	13.46	12.45
Virginia	14.92	16.80	12.95	12.77
<b>Washington</b>	<b>20.77</b>	<b>18.68</b>	<b>14.67</b>	<b>14.28</b>
West Virginia	15.41	15.35	13.44	11.38
Wisconsin	18.68	16.96	14.09	12.84
Wyoming	15.59	16.47	14.89	14.61
U.S. Average	17.05	16.81	13.27	12.77
<b>Washington's Rank</b>	<b>7</b>	<b>4</b>	<b>6</b>	<b>3</b>

Source: "Occupational Employment Statistics," US Department of Commerce, Bureau of Labor Statistics (www.bls.gov), June 2003

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