Washington State Economic Climate Study

Economic and Revenue Forecast Council
December 2017
Volume XVI

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Editor's Note

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 workforce, infrastructure, and the costs of doing business.

Washington State Economic Climate Study

Prepared by the
Economic and Revenue Forecast Council

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Executive Summary

- **The Economic Climate Study is a snapshot of Washington's performance and ranking both compared to other states and to its own history.**
- **The rankings are from best to worst from the perspective of businesses with a rank of one being the best.**
- **While Washington's overall performance relative to last year improved, the rankings relative to other states declined.**
- **Washington's Composite Rank fell two places to 20th highest in the nation.**

Washington's Economic Climate Study

The study provides information about our competitive standing in relation to the other states

This report updates the State of Washington's Economic Climate Study, last published in December 2015. The study provides information about Washington's competitive standing in relation to other 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.

Overall, forty-eight indicators are presented

The benchmarks considered in this study focus on the four themes: innovation drivers, business performance, economic growth and competitiveness, and quality of life. The category "Innovation Drivers" is broken into three sub-groups: talent and workforce, entrepreneurship and investment, and infrastructure. The category "business performance" is further broken down into business prosperity and cost of doing business. Overall, forty-eight indicators are presented.

Recent Performance

There were a few changes to the indicators in this year's Climate Study

In this year's climate study, three indicators were added, one removed, and three changed. The three indicators that were added were: Educational Attainment: Completed 9th Grade or Less, Educational Attainment: Completed Associate's Degree, and Income Spent on Rent. The indicator that was removed was:

Urban Roadway Travel Time Index. The indicators Fourth Grade Reading and Fourth Grade Math were changed to eighth grade reading and math, and The Housing Opportunity Index was changed to the Housing Affordability Index.

Washington's rank fell compared to other states

Overall, while Washington's performance relative to last year improved, the rankings relative to other states declined. Washington's rank improved in nineteen cases, worsened in twenty cases, and stayed the same in nine. None of the four major categories in the climate study had an improvement in rank from last year.

Innovation Drivers fell from 18th to 19th highest

Innovation Drivers slipped in this year's study, falling from 18th to 19th highest in the nation. Infrastructure was the only subcategory of the three that did not drop in ranking this year, remaining at 26th in the nation. Of the three indicators in infrastructure, two improved and one worsened. Entrepreneurship and Investment declined one spot to 11th in the nation with three indicators declining in rank and one remaining unchanged. Talent and Workforce lost two spots to 21st in the nation. Four indicators improved, five worsened, and one was unchanged. Of the seventeen indicators in Innovation Drivers, only six improved, nine worsened, and two were unchanged. Eighth Grade Reading fared the worst, dropping from 8th highest to 21st highest. Migration Rate and Educational Attainment: Completed 9th Grade or Less were the most improved indicators in Innovation Drivers, both increasing two spots relative to other states.

Business Performance fell from 15th to 16th highest

Business Performance also fell in this year's study with the composite rank in this category dropping from 15th to 16th best in the nation. Of the ten indicators updated in "Business Performance", Washington's rank improved in three, worsened in four, and was unchanged in three. The subcategory Business Prosperity remained at 8th highest in the nation while the subcategory Cost of Doing Business fell two places to 24th best in the nation. Foreign Exports Excluding Transportation Equipment fared the worst, dropping six places to 13th highest in the nation. Growth in High Wage Industries Share of Total Employment improved the most relative to other states, gaining five places to 1st highest in the nation.

Economic Growth and Competitive-ness fell from 19th to 22nd highest

Economic Growth and Competitiveness fell the most relative to other states in this year's climate study. The ranking in this category fell from 19th highest to 22nd highest in the nation. Of the eleven indicators in this category, four improved, four worsened, and three were unchanged. Per Capita Personal Income Growth Rate fell the most compared to other states, declining 26 places to 33rd in the nation. Median Household Income was the most improved, increasing seven places to 8th highest in the nation.

Quality of Life fell from 20th to 21st highest

Quality of Life dropped one place to 21st highest in the nation in this year's study. The state's rank both improved in six instances, worsened in three, and remained unchanged in one. Drinking Water was the worst performing indicator, falling from 3rd best to 23rd best. Arrests Per Violent Crime was the most improved indicator, increasing from 25th place to 16th in the nation.

This is a snapshot of Washington's performance

This report is a snapshot of Washington's ranking both compared to other states and to its own history. This analysis begins with a description of each indicator followed by a chart. Associated tables can be found at the end of each chapter. Each table ranks the states based on performance and each chart shows how Washington has fared over history. In each case, the ranking is from best to worst with a rank of one being the best.

Washington Overall Composite Rank

This year's study includes a composite rank

The 2016 Washington State Economic Climate Study incorporates all indicators into a composite rank. The Washington composite rank compares the state's overall performance against all other states in the nation. The composite rank also provides an indication as to how well the state has progressed from year to year.

Each chapter is equally weighted as 25 percent of the overall rank

In constructing the composite ranking, each chapter (Innovation Drivers, Business Performance, Economic Growth and Competitiveness, and Quality of Life) is equally weighted at twenty-five percent of the overall rank. Each benchmark within a chapter is then given equal weight. In cases where multiple areas of a state were measured, they were combined into a single state indicator so they could be appropriately included in the overall rank.

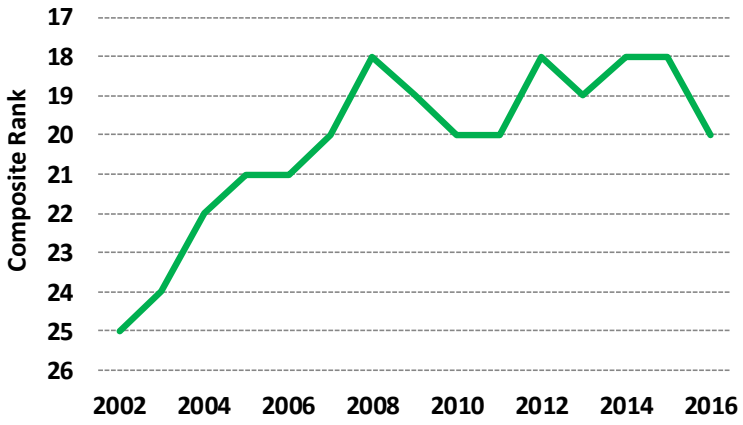
This weighting approach was selected to minimize subjectivity

This benchmark weighting approach was selected to minimize subjectivity regarding the importance of any given measure in constructing the composite state ranks. The drawback to weighting in this manner is that indicators in different chapters have weights that may not appear reasonable when compared. In chapters with only a few indicators, each measure is weighted more heavily than in chapters with a relatively large number of indicators.

Washington ranked 20th in the 2016 Economic Climate Study

In the 2016 study, Washington ranked 20th in the nation, a decline of two places since last year. The 2015 study rank is equal to the highest rank achieved in the state with data compiled back to 2002. Since 2002, Washington's overall rank has ranged from a low of 25th best in 2002 to a high of 18th best in 2008, 2012, 2014, and 2015. Washington's rank has averaged 20th best in the nation since 2002.

Figure ES.1: Washington Overall Composite Rank



Source: ERFC, data through 2016

Table ES.1: Washington Overall Composite Rank

Year	Composite Rank
2002	25
2003	24
2004	22
2005	21
2006	21
2007	20
2008	18
2009	19
2010	20
2011	20
2012	18
2013	19
2014	18
2015	18
2016	20

Source: ERFC, data through 2016

Table ES.2
Executive Summary
Current and Five-Year Average Rankings

Indicator/Benchmark	Rank Current	Rank 5Y Avg
Innovation Drivers	***19***	***19***
Talent and Workforce	***21***	***20***
Total Public Two and Four Year Combined College Participation Rate	30	30
Education Attainment: Completed 9th Grade or Less	23	22
Education Attainment: Completed Four Years of High School or More	16	16
Education Attainment: Completed Associate's Degree	9	10
Education Attainment: Completed Bachelor's Degree or More	11	11
Research Doctorates Awarded Per Capita	34	31
Student to Teacher Ratio	44	45
Eighth Grade Reading	21	17
Eighth Grade Math	12	13
Migration Rate	8	8
Entrepreneurship and Investment	***11***	***11***
Per Capita University Research and Development Spending	19	19
Per Capita Industry Research and Development Spending	5	4
Per Capita Government Research and Development Spending	15	18
Patents Issued Per 100,000 Residents	3	3
Infrastructure	***26***	***27***
Interstate Miles in Poor Condition	39	41
FAA Air Traffic	32	31
Unlinked Passenger Trips Per Capita	7	8
Business Performance	***16***	***14***
Business Prosperity	***8***	***9***
Foreign Exports	2	2
Foreign Exports Excluding Transportation Equipment	13	9
High Wage Industries' Share of Total Employment	16	16
Growth in High Wage Industries' Share of Total Employment	1	7
Value Added per Hour of Labor in Manufacturing (weighted)	12	13
Value Added per Hour of Labor in Manufacturing (unweighted)	5	5
Cost of Doing Business	***24***	***20***
Electricity Costs	2	1
State and Local Tax Collections Per $1,000 Personal Income	18	15
Unemployment Insurance Costs	39	35
Workers' Compensation Premium Costs	36	27

Table ES.2 (continued)
Executive Summary
Current and Five-Year Average Rankings

Indicator/Benchmark	Rank	
	Current	5y Avg
Economic Growth and Competitiveness	***23***	***20***
Per Capita Personal Income	12	12
Per Capita Personal Income Growth Rate	33	15
Relative Value of $100	41	41
Total Employment Growth Rate	9	9
Median Household Income	8	11
Annual Earnings Per Job	7	8
Annual Earnings Per Job Growth Rate	12	9
Unemployment Rate	34	33
Housing Affordability Index	45	43
Income Spent on Rent	41	33
Average Wage	8	8
Quality of Life	***21***	***19***
Property Crime	48	49
Violent Crime	17	20
Arrest Rates for Violent Crime	16	19
Air Quality	17	18
Drinking Water	23	3
Toxins Released	17	12
State Health Index	9	11
State Parks and Recreation Areas	9	8
State Arts	44	44
Public Library Service	6	6

Table ES.3
Executive Summary
Changes in Benchmark Performance and Rank

Indicator/Benchmark	Performance	Rank
Innovation Drivers		
Talent and Workforce		
Total Public Two and Four Year Combined College Participation Rate	Worsened	Improved
Education Attainment: Completed 9th Grade or Less	Improved	Worsened
Education Attainment: Completed Four Years of High School or More	Improved	Worsened
Education Attainment: Completed Associate's Degree	Improved	Improved
Education Attainment: Completed Bachelor's Degree or More	Improved	Unchanged
Research Doctorates Awarded Per Capita	Worsened	Worsened
Student to Teacher Ratio	Improved	Improved
Eighth Grade Reading	Worsened	Worsened
Eighth Grade Math	Worsened	Worsened
Migration Rate	Improved	Improved
Entrepreneurship and Investment		
Per Capita University Research and Development Spending	Worsened	Worsened
Per Capita Industry Research and Development Spending	Improved	Worsened
Per Capita Government Research and Development Spending	Worsened	Worsened
Patents Issued Per 100,000 Residents	Worsened	Unchanged
Infrastructure		
Interstate Miles in Poor Condition	Improved	Improved
FAA Air Traffic	Worsened	Worsened
Unlinked Passenger Trips Per Capita	Improved	Improved
Business Performance		
Business Prosperity		
Foreign Exports	Worsened	Unchanged
Foreign Exports Excluding Transportation Equipment	Worsened	Worsened
High Wage Industries' Share of Total Employment	Improved	Improved
Growth in High Wage Industries' Share of Total Employment	Improved	Improved
Value Added per Hour of Labor in Manufacturing (weighted)	Improved	Improved
Value Added per Hour of Labor in Manufacturing (unweighted)	Improved	Unchanged
Cost of Doing Business		
Electricity Costs	Worsened	Worsened
State and Local Tax Collections Per $1,000 Personal Income	Worsened	Worsened
Unemployment Insurance Costs	Improved	Unchanged
Workers' Compensation Premium Costs	Improved	Worsened
Economic Growth and Competitiveness		
Per Capita Personal Income	Improved	Unchanged
Per Capita Personal Income Growth Rate	Worsened	Worsened
Relative Value of $100	Worsened	Unchanged
Total Employment Growth Rate	Improved	Improved
Median Household Income	Improved	Improved
Annual Earnings Per Job	Improved	Improved
Annual Earnings Per Job Growth Rate	Improved	Improved
Unemployment Rate	Improved	Worsened
Housing Affordability Index	Worsened	Worsened
Income Spent on Rent	Worsened	Worsened
Average Wage	Improved	Unchanged

Table ES.3
Executive Summary
Changes in Benchmark Performance and Rank

Indicator/Benchmark	Performance	Rank
Quality of Life		
Property Crime	Improved	Improved
Violent Crime	Improved	Improved
Arrests Per Violent Crime	Unchanged	Improved
Air Quality	Improved	Worsened
Drinking Water	Worsened	Worsened
Toxins Released	Worsened	Worsened
State Health Index	Improved	Improved
State Parks and Recreation Areas	Worsened	Improved
State Arts	Improved	Improved
Public Library Service	Improved	Unchanged

Chapter 1: Innovation Drivers – Summary

- **The state's rank in *Innovation Drivers* declined in this year's study from 18th to 19th best in the nation. Of the seventeen indicators in this category, six improved, nine worsened, and two remained unchanged. Annual performance improved in nine indicators and worsened in eight.**
- **Two new metrics were added: Educational Attainment: Completed 9th Grade or Less, and Educational Attainment: Completed Associate's Degree. In addition, Fourth Grade Math and Fourth Grade Reading were changed to eight grade math and reading. One metric was removed: Urban Roadway Travel Time Index.**
- **In the subcategory *Talent and Workforce*, the state declined two ranks to 21st highest. Washington's rank improved in four indicators, worsened in five, and was unchanged in one.**
- **In the subcategory *Entrepreneurship and Investment*, Washington's rank fell one place to 11th highest. The state's rank did not improve in any of the four metrics, worsened in three and unchanged in one.**
- **In the subcategory *Infrastructure*, the state's ranking remained at 26th highest in the nation. Compared to other states, Washington's rank improved in two indicators and worsened in one.**

Talent and Workforce

Public Two and Four Year College Combined Participation Rate

Combined two- and four-year college participation rates allow more accurate comparisons

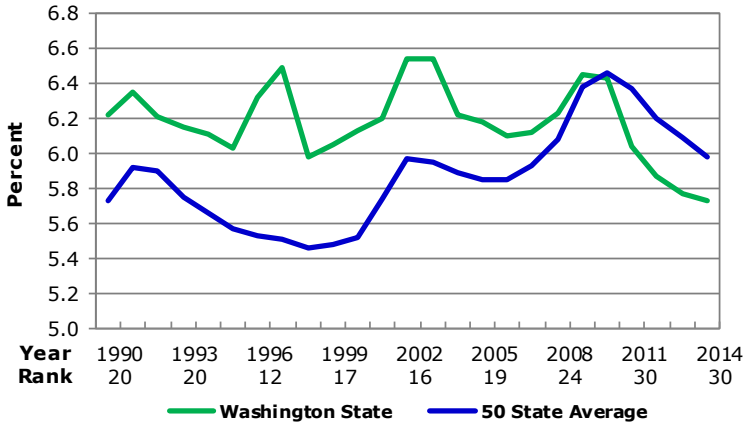
Washington, more than most states, relies heavily on the community college system to provide the first two years of a college education. As a result, Washington and states with similar policies have higher than average two-year participation rates and lower than average four-year participation rates. 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. With this adjustment, states that are more reliant on community college systems can be better compared to other states.

Washington is trailing the nation in public college participation

Historically, Washington's public two- and four-year college participation rate has been higher than the 50-state average. In the fall of 2010, however, the 50-state average rate surpassed

that of Washington for the first time in the history of this index, at 6.5 percent compared to Washington's 6.4 percent. Both the Washington and the 50-state average participation rates have been declining since 2010. In 2014, Washington participation decreased to 5.7 percent, slightly less than the 50-state average of 6.0. However, the state's ranking improved from 32nd to 30th. Washington's average participation rate from 2010-14 is 6.0 percent, just below the 50-state average and ranks 30th among the states.

Figure 1.1: Public Two and Four Year College Combined Participation Rate



Source: National Center for Education Statistics, U.S. Department of Education; Population Division, U.S. Census Bureau; data through 2014

Education Attainment: Completed Less than 9th Grade

The Census tabulates the percent of the population with less than a 9th grade education

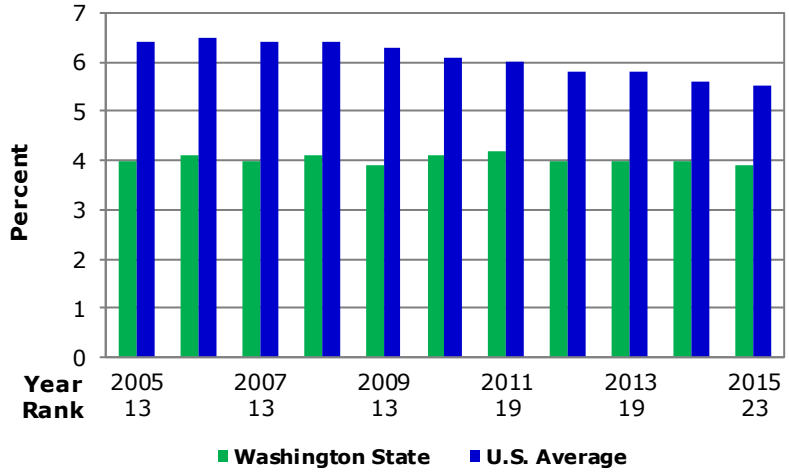
The U.S. Census Bureau, as a part of its annual American Community Survey, tabulates the percent of the population aged 25 years or older than has less than a 9th grade education. The less than 9th grade education indicator gives an important look at the approximate size of the pool of low-skill workers in the state economy. Additionally, this indicator has economic significance on personal incomes. For example, in 2015, a person who did not complete high school earned a median annual income of $21,230, which is significantly less than median incomes earned by workers with more education. Combined with other educational attainment indicators, this indicator helps give a complete picture of the educational attainment level of the state's population.

About 4 percent of Washington's population has less than a 9th grade education

In 2015, the Census Bureau reported that 3.9 percent of Washington's population aged 25 years or older had less than a 9th grade education, representing a slight decrease from 2014. The state outperformed the national average of 5.5 percent. Despite Washington's decrease in the number of its residents with less than a high school education, the state's ranking

declined from 21st to 23rd in the nation. The state's five-year average rank was higher, however, at 22nd overall. The state's 5-year average of 4.0 percent was lower than the U.S. five-year average of 5.7 percent.

Figure 1.2: Education Attainment: Completed Less than 9th Grade



Source: U.S. Department of Commerce, Bureau of the Census; data through 2015

Education Attainment: Completed Four Years of High School or More

The Census tabulates the percent of the population that has completed high school

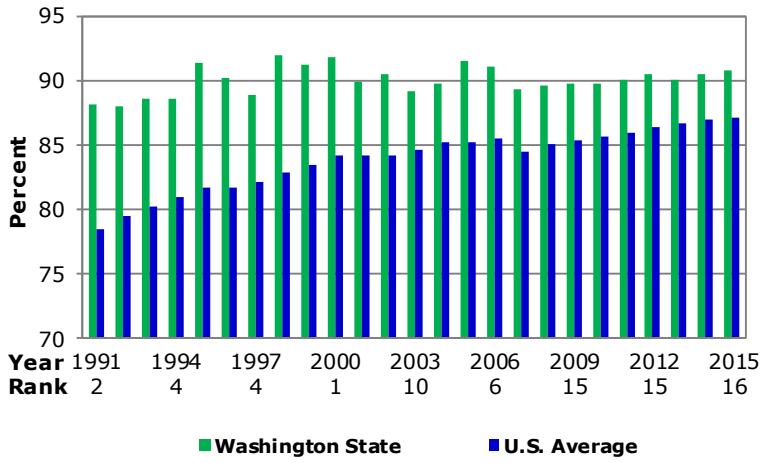
In the annual American Community Survey, the U.S. Census Bureau measures the percent of the population aged 25 years or older that has completed four years of high school. A completed high school level degree is necessary to continue on toward associates, bachelors, or other advanced degrees, so this indicator can be seen as the portion of the population that has completed four years of high school or more. As one indication of the economic relevance of this measure, in 2015 the median annual earnings for a person 25 years of age or older who did not graduate from high school was only $21,230 while that of a person with a high school diploma was $29,000.

In 2015, Washington's rank fell one place to 16th

In Washington, 90.8 percent of the population has completed four years of high school or more in 2015, slightly improving from 90.4 percent in 2014. The U.S. average was 87.1 percent in 2015. Despite being above the national average and slightly improving, the state's rank dropped one point to 16th overall in 2015. Historically, Washington used to perform highly in this category. The state ranked in the top five nationally from 1991 (when data started being collected) to 2000. Since then, however, the state's ranking has fallen and has recently averaged 16th over the past five years. The state's five-year average value of 90.4 percent, however, still remains about 4

percentage points higher than the five-year national average of 86.6 percent.

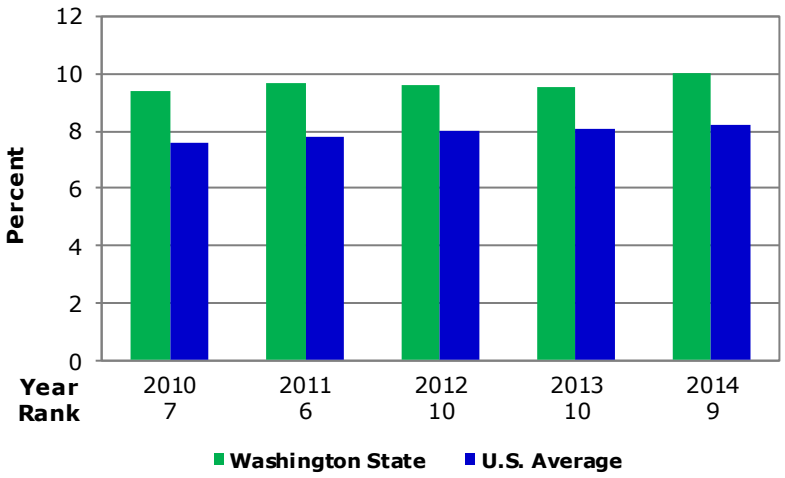
Figure 1.3: Education Attainment: Completed Four Years of High School or More



Source: U.S. Department of Commerce, Bureau of the Census; data through 2015

Education Attainment: Completed Associate's Degree

Figure 1.4: Education Attainment: Completed Associate's Degree



Source: U.S. Department of Commerce, Bureau of the Census; data through 2014

The state's ranking improved to 9th in the nation in 2014

The American Community Survey, conducted by the U.S. Census Bureau, reports the percent of the population aged 25 years or older that has obtained an associate's degree. Washington ranked 9th in the nation for the percent of its population with completed associate's degree in 2014. The percent of residents

age 25 or older with an associate's degree increased from 9.5 percent in 2013 to 10.0 percent in 2014. This is higher than the U.S. average of 8.2 percent. Washington's five-year average of 9.6 percent ranked 10th among the states and was above the national average of 7.9 percent.

Education Attainment: Completed Bachelor's Degree or More

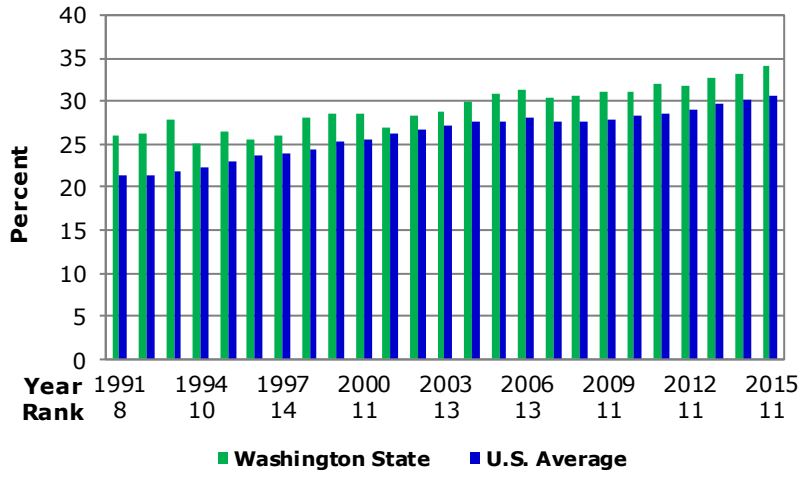
Higher educational attainment is associated with higher earnings

The American Community Survey, conducted by the U.S. Census Bureau, reports the percent of the population aged 25 years or older that has obtained a bachelor's degree or higher. Measuring the number of bachelor's degrees earned by a population is economically important because a population's educational attainment is indicative of the skill of its workforce. Additionally, higher educational attainment is associated with higher earnings. In 2015, for example, the median income for full-time adults with a bachelor's degree is $50,930, while the median was $29,000 for those with only a high school diploma.

The state's 2015 ranking remained unchanged at 11th in the nation

For the ninth consecutive year, Washington ranked 11th in the nation for the percent of its population with completed bachelor's degree or more. The number of residents age 25 or older with a bachelor's degree or more increased from 2014 to 2015, changing from 33.1 percent to 34.2 percent. This is higher than the U.S. average of 30.6 percent. Washington's five-year average of 32.7 percent also ranked 11th among the states and was above the national average of 29.6 percent.

Figure 1.5: Education Attainment: Completed Bachelor's Degree or More



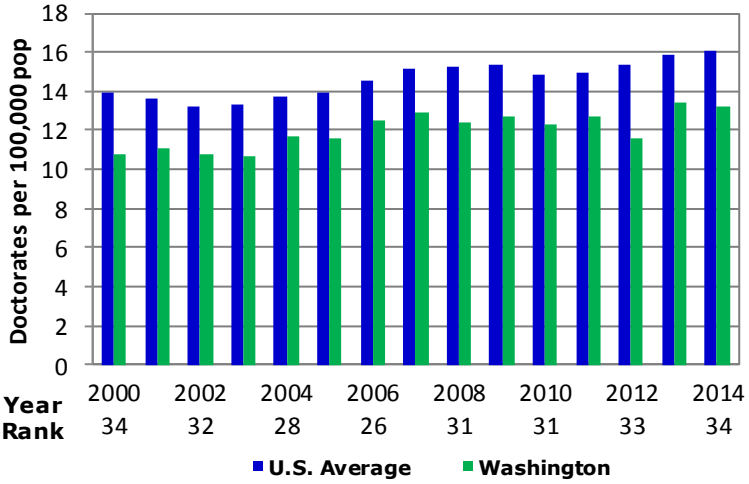
Source: U.S. Department of Commerce, Bureau of the Census; data through 2015

Education Attainment: Research Doctorates Awarded

The NSF conducts an annual census of research doctorates received

As part of the Survey of Earned Doctorates (SED), the National Science Foundation conducts an annual census of individuals who received a research doctorate in a given academic year from an accredited institution in the United States. A research doctorate, the most common being a Ph.D., requires the completion of a dissertation or equivalent cumulating project. Professional degrees such as the M.D., D.D.S., O.D., D.V.M., and J.D. are not covered by the SED.

Figure 1.6: Education Attainment: Research Doctorates Awarded, per 100,000 population



Source: National Science Foundation, National Center for Science and Engineering Statistics, Survey of Earned Doctorates; data through 2015

The state's 2014 ranking decreased to 34th in the nation

In 2014, the number of individuals who received research doctorates in Washington was 931. Washington awarded 13.2 doctoral degrees per 100,000 population in 2014, a slight decrease from 13.4 the previous year. The state's rank dropped from 29th to 34th highest in the nation. The U.S. average was 16.1 doctorates awarded per 100,000 population in 2014. Washington's five-year average of 12.6 research doctorates awarded ranked 31st among the states and was below the national average of 15.4.

Student to Teacher Ratios

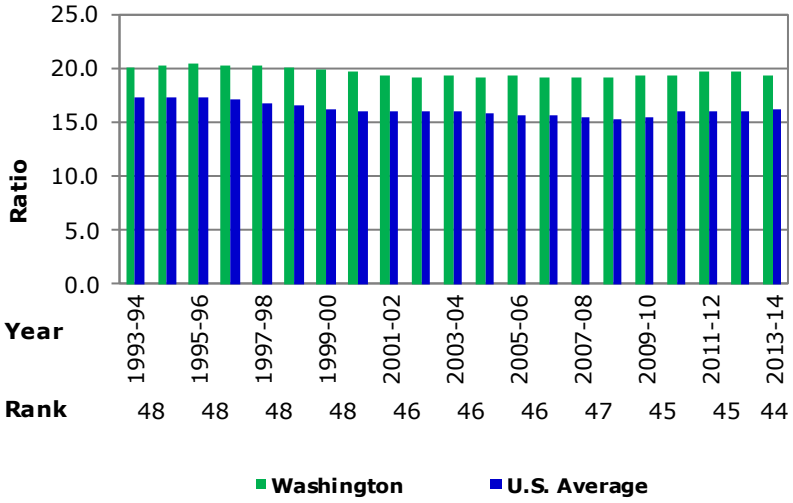
Since the early 1990's, the student to teacher ratio has decreased across the nation

Since the early 1990s, there has been a nationwide movement to lower student to teacher ratios in public schools. The success of this movement is evident in the steady decline of the national ratio from 17.4 students per teacher in the 1992-93 school year to a low of 15.3 in 2008-09. Washington has shared in this movement, but its progress has been somewhat slower, with a decline from 20.2 to 19.1 over the same period.

Washington has the 6th worst student teacher ratio in the nation

Nationally, the average student to teacher ratio increased from 16.0 to 16.1 during the 2013-14 school year. Washington's ratio, however, decreased from 19.6 to 19.3. The improvement in the state's ratio helped its ranking, moving from 45th in the nation to 44th. Washington's 5-year average student to teacher ratio still ranks 45th, since the state's ratio (19.5) remains above the 5-year national average of 15.9.

Figure 1.7: Student to Teacher Ratios



Source: U.S. Department of Education, National Center for Education Statistics. Digest of Educational Statistics; data through 2013-14 School Year

Eighth Grade Reading and Mathematics

Eighth grade scores can be tracked across states

The National Assessment of Educational Progress (NAEP) is the largest nationally representative and continuing assessment of what America's students know and can do in various subject areas. Assessments are conducted periodically in mathematics, reading, science, writing, the arts, civics, economics, geography, U.S. history, and technology and engineering literacy.

NAEP results serve as a common metric for all states

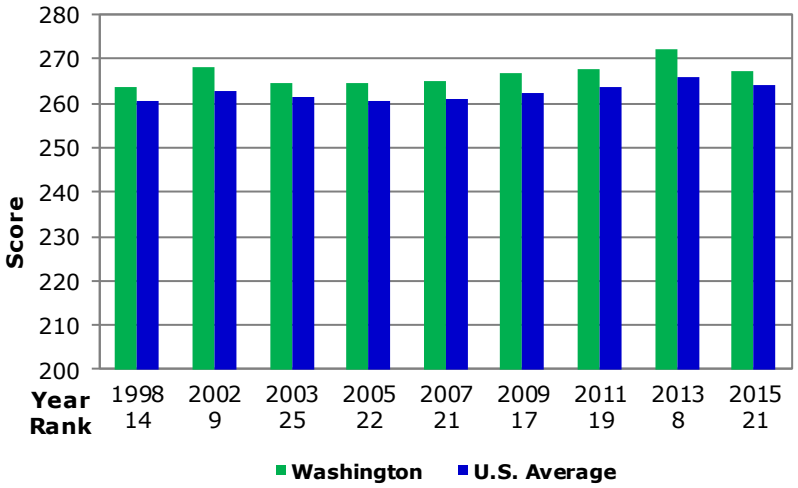
NAEP assessments are administered uniformly using the same sets of test booklets across the nation. Thus, NAEP results serve as a common metric for all states and selected urban districts. The assessment stays essentially the same from year to year, with only carefully documented changes. This permits NAEP to provide a clear picture of student academic progress over time. State assessments began in 1990; results for each participating state may be found using the State Profiles tool on the National Center for Education Statistics (NCES) website (www.nces.ed.gov).

In reading, Washington's rank among the states improved to 14th

NAEP scores can be interpreted using the achievement level thresholds and their corresponding definitions outlined below. Reading achievement is measured with exercises that require

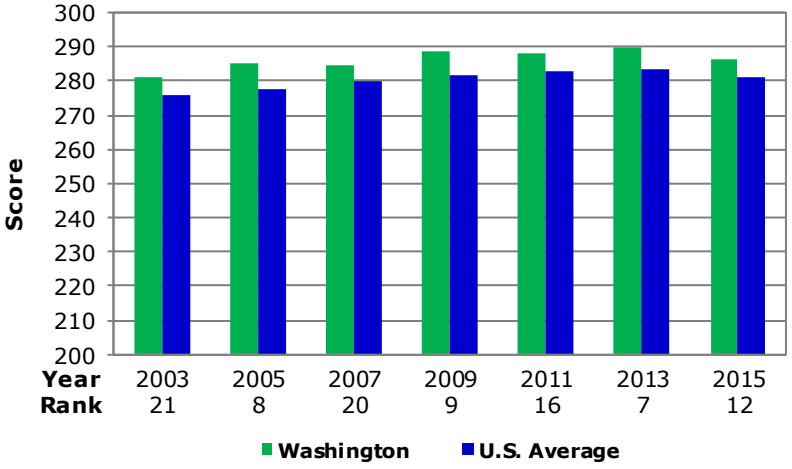
students to read material for two different purposes, literary experience and knowledge retention. In 2015, Washington's score dropped from 272 to 267, decreasing the state's national rank from 8th to 21st. Washington's average since the 2007 test is 268 points, ranking 17th, while the average national score was 263 over the same period.

Figure 1.8: Eighth Grade Reading



Source: National Center for Education Statistics National Assessment of Educational; data through 2015

Figure 1.9: Eighth Grade Mathematics



Source: National Center for Education Statistics National Assessment of Educational; data through 2015

In math, the state's rank improved to 8th despite a drop in score

Spatial sense, data analysis, statistics, probability, algebra and functions are some of the major topics covered in the mathematics exam. Washington's eighth graders in 2015 fared

worse than eighth grade test takers in 2013, with the average score falling slightly from 290 to 287. Washington remains above the national average, which also fell three points over the same period from 284 to 281. Despite similar declines, the state's rank decreased from 7th to 12th during this assessment period. The average score nationally over the past five testing periods, from 2007 to 2015, is 282. Washington State's five-period average score is six points higher than the national average at 288, helping the state rank 13th in the nation.

Migration Rate

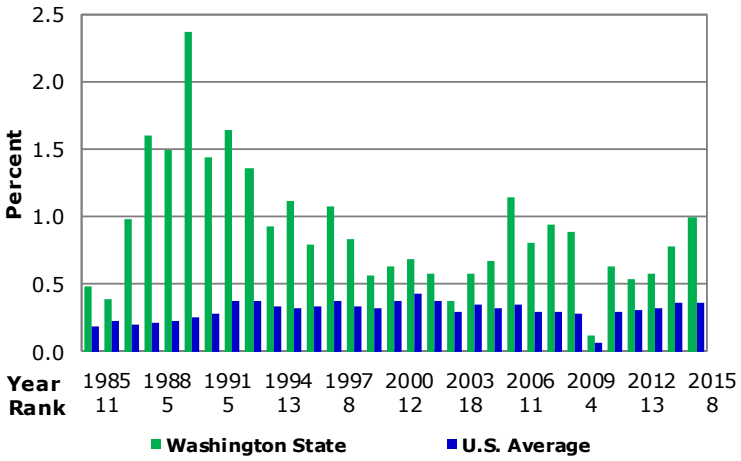
Washington ranks 8th overall for migration

Washington continues to be a relatively popular destination for international and domestic migration, ranking 8th in terms of total migration in 2015. Since 2012, the state's migration rate has been incrementally increasing from 0.5 to 0.6 in 2013 then to 0.8 percent in 2014. The state's migration rate increased to 1.0 percent in 2015. Washington's 2015 migration rate is more than double the U.S. average migration rate of 0.4 over the same period. Washington's five-year average growth in migration was 0.7 percent, ranking 8th highest among the states.

Over half of the state's population increase came from migration

Washington population growth in 2015 was 1.54 percent, while the U.S. as a whole was 1.01 percent. Natural increases accounted for 33 percent of the state's growth while 63 percent came from migration. Of the state's immigrants, 41 percent were international and 59 percent were domestic. In the U.S. as a whole, 42 percent of population growth came from natural increase while 36 percent from international migration.

Figure 1.10: Migration Rate



Source: Population Division, U.S. Census Bureau; data through 2015

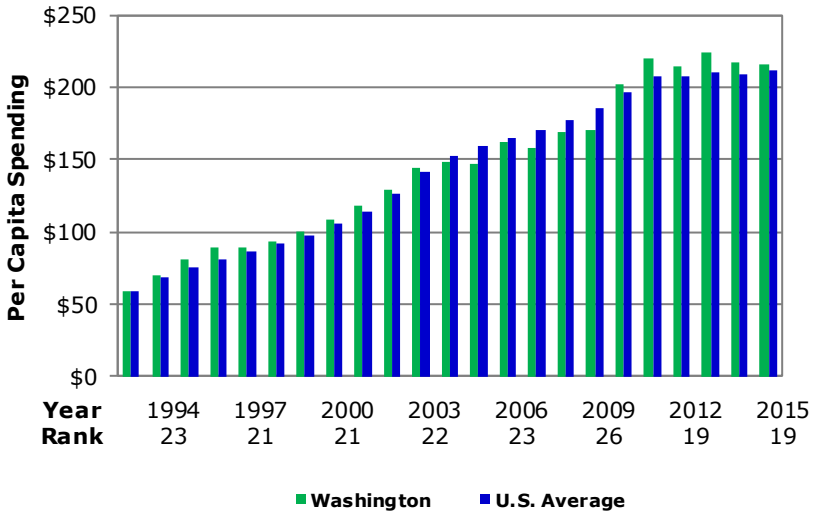
Entrepreneurship and Investment

Per Capita Spending in Research and Development, University, Industry, and Government

Research and development is a good indication of innovation

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.

Figure 1.11: Per Capita Spending in Research and Development, University

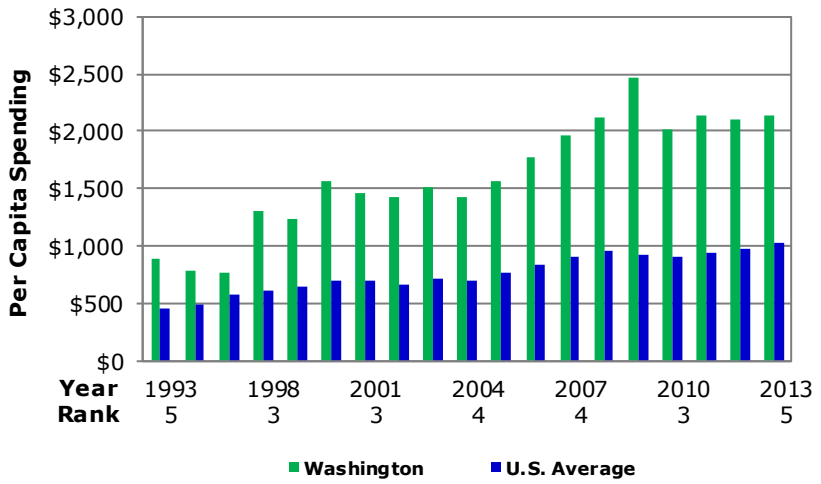


Source: The National Science Foundation; data through 2015

The data is presented on a per-capita basis

The Division of Science Resources Studies (SRS) of the National Science Foundation annually compiles surveys of industries, universities, state government, 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, state government, 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 2015 for university R&D, 2013 for industry, and 2013 for state government.

Figure 1.12: Per Capita Spending in Research and Development, Industry

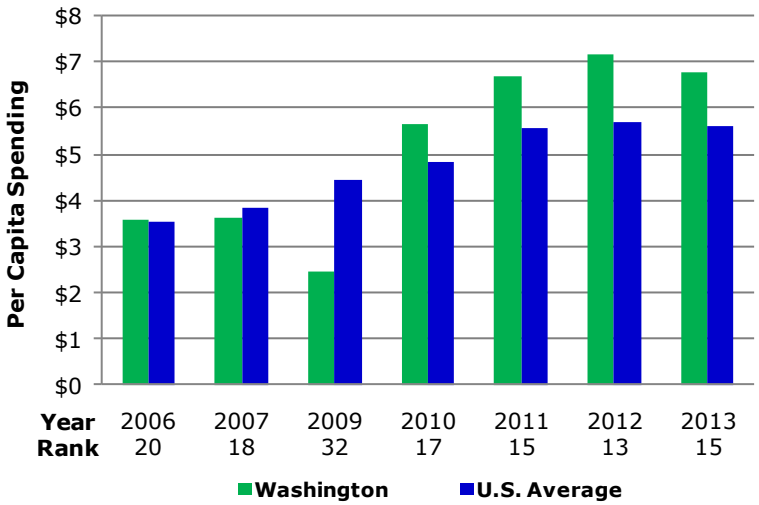


Source: The National Science Foundation; data through 2013

WA R&D spending typically exceeds the national average

In 2015, Washington's rank declined slightly at 19th in per capita university research and development with a spending level of $216 per capita, down from $218 the year before. Washington remained above the U.S. average of $212 per capita. This was the fifth consecutive year that Washington spent more on a per capita basis than the U.S. average. For the period of 2011-2015,

Figure 1.13: State Government Research and Development



Source: The National Science Foundation; data through 2013

the average spending was above the national average of $209, at $218 per capita and ranking 19th. In industry per capita research and development spending, the state again ranked high in 2013.

Washington's per capita industrial research and development spending of $2,131 was over twice as high as the national average of $1,021, ranking 5th among the states, and 4th for the period of 2009-2013. Washington's rank in state government research and development slipped from 13th to 15th as per capita spending declined from $7.18 to $6.76. For the period of 2009-2013, the average state government spending was $5.74 per capita, ranking the state at 18th.

Patents Issued Per 100,000 Population

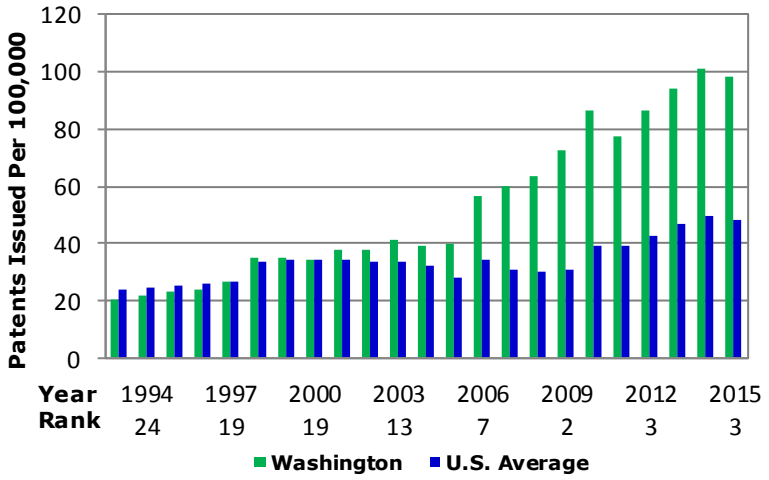
Patents are a good measure of actual innovation

A patent issued by the United States Patent and Trademark Office grants its holder the sole right to make, use, or sell an invention. The USPTO issues five different types of patents. Some larger states will have more patents issued by virtue of a larger population. Thus, patents issued per 100,000 individuals controls for population differences and measures actual innovation by private persons, universities, and companies.

Washington ranks 3rd in patents issued

In 2015, Washington had 98.2 patents issued per 100,000 residents. The state's patent issue rate is more than twice the national rate of 48.5, ranking the state 3rd in the nation. The two other states outperforming Washington are California (111.4) and Massachusetts (106.5). The state's 5-year average of 91.5 is also more than twice the national 5-year average of 45.3, helping Washington also rank 3rd in that category.

Figure 1.14: Patents Issued Per 100,000 Population



Source: U.S. Patent and Trademark Office, U.S. Census Bureau, data through 2015

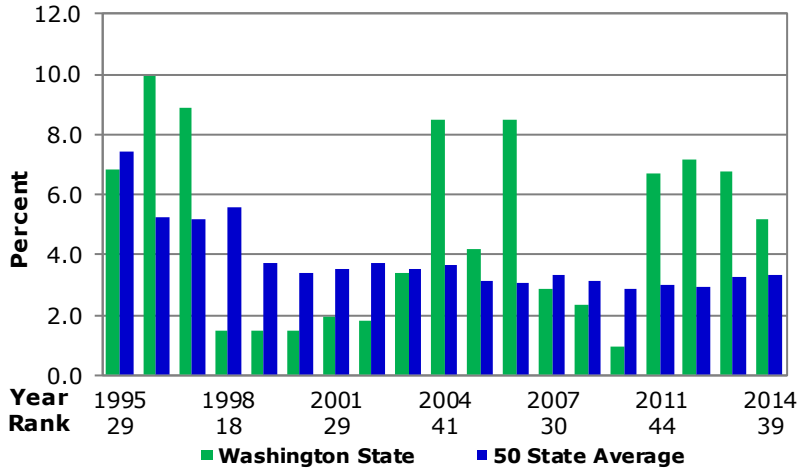
Infrastructure

Interstate Miles in Poor Condition

Since 1990 the FHWA has collected data on highway statistics

Since 1990, the Federal Highway Administration (FHWA) has required states to report road roughness according to the International Roughness Index (IRI), a set of standard codes dictated by the Highway Performance Monitoring System Field Manual for the Continuing Analytical and Statistical Database. This information is then collected and published in a consistent format in the FHWA's Highway Statistics. This indicator reports the percentage of interstate miles that have an IRI of 171 or greater.

Figure 1.15: Interstate Miles in Poor Condition



Source: Highway Statistics, Federal Highway Administration; data through 2014

Washington's highways improved in 2014 but remain worse than many other states

In 2013, Washington saw progress in the conditions of its interstate highways; however, the state still ranks poorly against other states. The percentage of interstate miles in poor condition decreased for the second year in a row, now standing at 5.1 percent in 2014, up from 7.1 in percent in 2012 and 6.7 percent in 2013. The decrease in poor condition roadways helped improve the state's annual ranking by 4 places, but at 39th in the nation, Washington is still behind most other states. Washington's five-year average value of 5.3 percent, compared to the national average of 3.1 percent, ranked 41st in the nation.

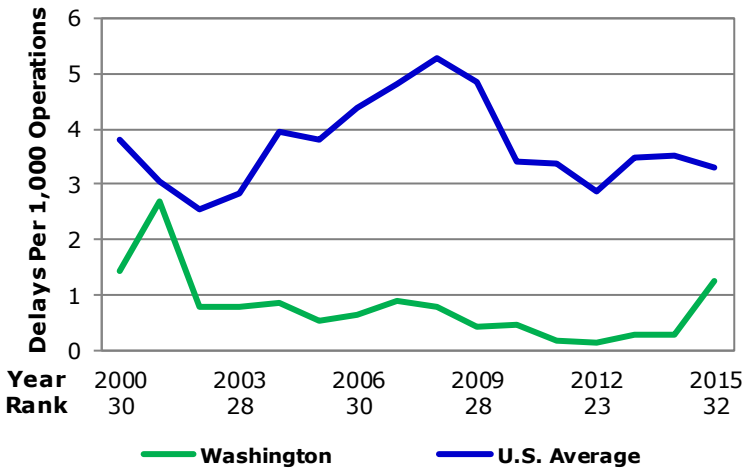
FAA Air Traffic Delays

The FAA provides air traffic information for all FAA contract airports

The Federal Aviation Administration's (FAA) annual Air Traffic Activity and Delay Report provides air traffic information for all airport facilities under contract with the FAA in each state. Air traffic delays can occur at any phase of the flight and are characterized as delays that exceed 15 minutes. For comparison

purposes, this indicator measures the number of delays per 1,000 operations in each state.

Figure 1.16: FAA Air Traffic Delays



Source: FAA Air Traffic System Management, Air Traffic Activity and Delay Report; data through 2015

The number of delays in Washington was 1.2 per 1,000 operations and ranked 32nd in the nation in 2015

The number of delays in Washington increased from 0.3 delays per 1,000 operations in 2014 to 1.2 delays in 2015, worsening its rank to 32nd in delays nationally. Previously, in 2014, Washington was ranked 27th. Despite performing worse in 2015, Washington was still below the national average of 3.3 delays per 1,000 operations. The state's five-year average is 0.4 delays per 1,000 operations, which is also below the national five-year average of 3.3 delays. Washington's five-year average ranks 31st nationally.

Unlinked Passenger Trips Per Capita

The FTA tracks public transit use

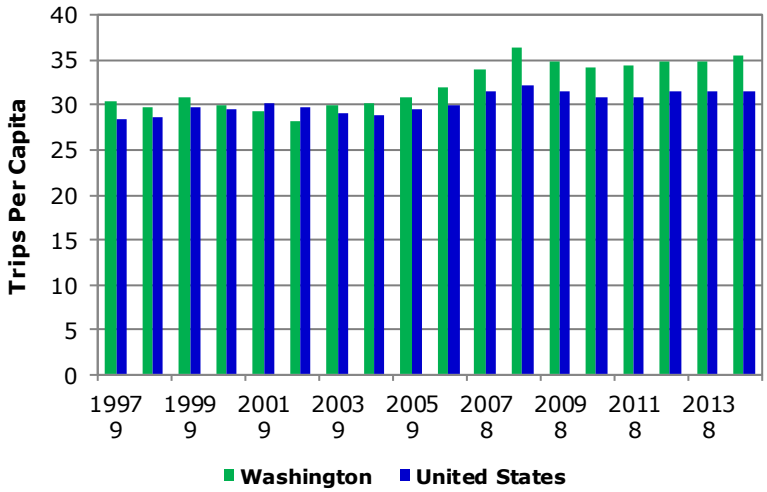
Public transportation systems are a key part of the infrastructure of economically competitive states. The Federal Transit Administration measures public transportation usage through unlinked passenger trips (UPTs), where each leg of passenger's journey counts as a use of the public transit system. For example, if a commuter uses the train and then bus to commute to work, their journey will be recorded as two unlinked passenger trips, as they used public transit twice on their way to work.

Washington ranks 7th in public transit use

Washington's rank improved to 7th in 2014, breaking its four-year streak of ranking 8th in the nation. Per capita, Washington residents used public transit 35.4 times, which is higher than the U.S. average of 31.5 during the same period. Washington's five-year average also outperformed the nation's average, ranking 8th overall. Washington residents used public transit 34.8 times per capita from 2010-14, whereas the U.S. per capita five-year

average was 31.2 times. Since UPTs were first measured in 1997, Washington has continuously ranked inside the top 10.

Figure 1.17: Unlinked Passenger Trips Per Capita



Source: Federal Transit Administration, National Transit Database, data through 2014

Table 1.1
Innovation Drivers
Total Public Two and Four Year College Combined Participation Rate
(Percent)*

	2010	2011	2012	2013	2014	2010-14
Alabama	7.3	7.1	6.8	6.7	6.6	6.9
Alaska	6.2	6.0	5.6	5.8	5.4	5.8
Arizona	7.7	7.5	7.3	7.1	6.9	7.3
Arkansas	7.1	7.1	7.0	6.8	6.7	7.0
California	8.0	7.7	7.4	7.4	7.3	7.5
Colorado	7.1	6.9	6.9	6.7	6.5	6.8
Connecticut	4.6	4.6	4.5	4.4	4.3	4.5
Delaware	5.8	5.8	5.8	5.7	5.6	5.7
Florida	5.3	5.3	5.3	5.1	5.0	5.2
Georgia	6.1	5.9	5.7	5.5	5.4	5.7
Hawaii	5.7	5.6	5.5	5.4	5.1	5.5
Idaho	5.6	5.7	6.7	6.4	6.4	6.2
Illinois	6.0	5.9	5.7	5.5	5.4	5.7
Indiana	6.9	6.9	6.7	6.7	6.5	6.8
Iowa	7.7	7.6	7.4	7.1	7.1	7.4
Kansas	8.7	8.7	8.5	8.5	8.4	8.6
Kentucky	6.9	7.0	6.6	6.5	6.3	6.7
Louisiana	6.6	6.5	6.3	6.1	6.0	6.3
Maine	4.8	4.7	4.8	4.6	4.6	4.7
Maryland	7.0	7.0	6.8	6.6	6.6	6.8
Massachusetts	4.4	4.4	4.4	4.3	4.2	4.3
Michigan	7.5	7.3	7.1	6.9	6.7	7.1
Minnesota	6.9	6.7	6.6	6.4	6.2	6.6
Mississippi	7.3	7.3	7.1	6.9	6.7	7.0
Missouri	5.6	5.7	5.6	5.5	5.4	5.5
Montana	6.3	6.3	6.2	6.0	5.9	6.1
Nebraska	7.9	7.7	7.5	7.3	7.1	7.5
Nevada	5.6	5.1	4.9	4.8	4.9	5.1
New Hampshire	4.3	4.2	4.1	4.1	4.1	4.1
New Jersey	5.3	5.3	5.2	5.1	5.1	5.2
New Mexico	9.8	9.5	9.3	9.2	8.7	9.3
New York	4.8	4.8	4.7	4.7	4.7	4.7
North Carolina	6.5	6.4	6.2	6.1	5.9	6.2
North Dakota	9.4	9.3	9.0	8.7	8.5	9.0
Ohio	6.2	6.1	5.9	5.8	5.7	6.0
Oklahoma	7.0	6.9	6.8	6.4	6.2	6.7
Oregon	7.0	7.2	7.0	6.8	6.5	6.9
Pennsylvania	4.4	4.3	4.2	4.2	4.1	4.2
Rhode Island	5.2	5.2	5.2	5.1	5.1	5.2
South Carolina	5.8	5.8	5.7	5.6	5.5	5.7
South Dakota	7.3	7.0	7.0	7.0	6.9	7.0
Tennessee	5.0	4.9	4.7	4.6	4.4	4.7
Texas	7.3	7.3	7.1	7.0	6.9	7.1
Utah	9.5	9.3	8.7	8.4	8.2	8.8
Vermont	5.5	5.4	5.3	5.1	5.1	5.3
Virginia	6.7	6.6	6.5	6.3	6.2	6.5
Washington	**6.4**	**6.0**	**5.9**	**5.8**	**5.7**	**6.0**
West Virginia	6.6	6.5	6.3	6.2	6.0	6.3
Wisconsin	6.9	6.8	6.7	6.5	6.4	6.7
Wyoming	8.5	8.4	8.1	8.0	7.7	8.1
50 State Average	6.5	6.4	6.2	6.1	6.0	6.2
Washington's Rank	**28**	**30**	**31**	**32**	**30**	**30**

*Percent participation: Fall enrollment compared to population aged 18 & above
Source: National Center for Education Statistics, U.S. Department of Education: Population Division, U.S. Census Bureau, 2014

Table 1.2
Innovation Drivers
Educational Attainment: Less than 9th Grade*
(Percent)*

	2011	2012	2013	2014	2015	2011-15
Alabama	5.6	5.3	4.9	5.1	4.8	5.1
Alaska	3.1	3.0	3.1	2.7	2.6	2.9
Arizona	6.2	6.4	6.4	6.4	6.0	6.3
Arkansas	6.2	5.4	5.6	5.6	5.3	5.6
California	10.3	10.1	10.1	10.0	9.9	10.1
Colorado	4.0	4.0	3.7	4.1	3.7	3.9
Connecticut	4.4	4.2	4.5	4.2	4.2	4.3
Delaware	4.7	4.1	3.9	3.4	3.8	4.0
Florida	5.6	5.3	5.3	5.2	5.2	5.3
Georgia	5.8	5.6	5.6	5.4	5.0	5.5
Hawaii	4.4	4.3	3.9	4.0	4.1	4.1
Idaho	4.5	4.1	4.3	3.9	3.7	4.1
Illinois	5.6	5.6	5.5	5.2	5.3	5.4
Indiana	4.2	4.0	4.1	3.9	3.8	4.0
Iowa	3.7	3.2	3.1	3.1	3.2	3.3
Kansas	4.1	3.7	4.0	3.9	3.8	3.9
Kentucky	7.0	7.0	6.6	6.6	6.2	6.7
Louisiana	6.1	6.0	5.8	5.7	5.2	5.8
Maine	3.4	3.0	2.9	3.1	2.8	3.0
Maryland	4.3	4.4	4.1	4.1	4.2	4.2
Massachusetts	5.0	4.7	4.9	5.0	4.5	4.8
Michigan	3.5	3.2	3.3	3.2	3.0	3.2
Minnesota	3.3	3.1	3.1	3.0	3.0	3.1
Mississippi	6.6	5.7	6.3	5.8	5.8	6.0
Missouri	3.9	3.9	3.7	3.6	3.6	3.7
Montana	2.0	2.0	2.2	2.2	2.0	2.1
Nebraska	3.9	4.0	4.4	4.3	3.9	4.1
Nevada	6.4	6.0	6.0	6.1	6.4	6.2
New Hampshire	2.8	2.4	2.9	2.6	1.9	2.5
New Jersey	5.6	5.3	5.5	5.2	5.2	5.4
New Mexico	7.3	6.9	7.4	6.6	6.7	7.0
New York	6.8	6.7	6.8	6.7	6.6	6.7
North Carolina	5.7	5.8	5.4	5.0	5.0	5.4
North Dakota	4.5	4.0	4.1	3.3	3.7	3.9
Ohio	3.3	3.1	3.2	3.0	3.0	3.1
Oklahoma	4.8	4.6	4.4	4.2	4.3	4.5
Oregon	4.2	3.7	4.1	4.2	3.7	4.0
Pennsylvania	3.6	3.6	3.6	3.5	3.3	3.5
Rhode Island	6.4	6.4	6.1	5.7	5.5	6.0
South Carolina	5.6	5.2	5.0	4.5	4.4	4.9
South Dakota	4.1	4.3	3.5	3.4	3.4	3.7
Tennessee	6.1	5.7	5.6	5.4	5.3	5.6
Texas	9.5	9.2	9.1	9.0	8.9	9.1
Utah	3.2	3.0	2.9	3.0	2.9	3.0
Vermont	2.8	2.9	3.2	2.8	2.8	2.9
Virginia	4.8	5.0	4.7	4.8	4.5	4.8
Washington	**4.2**	**4.0**	**4.0**	**4.0**	**3.9**	**4.0**
West Virginia	5.8	5.6	5.4	5.0	4.5	5.3
Wisconsin	3.4	3.3	3.1	3.0	3.0	3.2
Wyoming	1.8	2.3	1.5	2.2	2.0	2.0
U.S. Average	6.0	5.8	5.8	5.6	5.5	5.7
Washington's Rank	**19**	**17**	**19**	**21**	**23**	**22**

Source: U.S. Department of Commerce, Bureau of the Census: Educational Attainment, 2015
* Percent of persons 25 years old and over with less than a 9th grade education

Table 1.3
Innovation Drivers
Educational Attainment:
Completed Four Years of High School or More
(Percent)*

	2011	2012	2013	2014	2015	2011-15
Alabama	82.7	84.0	84.5	84.7	84.9	84.2
Alaska	91.8	92.0	91.6	92.9	92.6	92.2
Arizona	85.7	85.7	85.9	86.1	86.1	85.9
Arkansas	83.8	84.8	84.4	85.3	85.4	84.7
California	81.1	81.5	81.7	82.1	82.2	81.7
Colorado	90.2	90.6	90.5	90.5	91.2	90.6
Connecticut	89.1	89.9	89.7	90.1	90.2	89.8
Delaware	87.0	88.5	88.3	89.0	88.9	88.3
Florida	85.9	86.5	86.8	87.2	87.6	86.8
Georgia	84.3	85.0	85.5	85.6	86.1	85.3
Hawaii	90.6	90.4	91.0	91.7	90.9	90.9
Idaho	88.6	89.8	89.4	90.1	90.0	89.6
Illinois	87.2	87.6	87.8	88.2	88.6	87.9
Indiana	87.3	87.6	87.6	88.4	88.2	87.8
Iowa	90.6	91.6	91.6	92.1	91.7	91.5
Kansas	90.0	90.2	90.1	90.3	90.3	90.2
Kentucky	83.1	83.8	84.1	84.5	85.1	84.1
Louisiana	82.5	83.0	83.1	83.6	84.6	83.4
Maine	90.9	91.6	91.8	91.7	91.7	91.5
Maryland	88.9	89.1	89.1	89.6	89.6	89.3
Massachusetts	89.2	89.7	89.9	89.7	90.2	89.7
Michigan	88.8	89.2	89.4	89.9	90.1	89.5
Minnesota	92.0	92.5	92.4	92.6	92.8	92.5
Mississippi	81.1	82.3	82.4	82.8	83.5	82.4
Missouri	87.6	88.0	88.7	88.9	88.9	88.4
Montana	92.3	92.8	92.7	92.6	93.5	92.8
Nebraska	91.0	90.5	90.2	90.3	91.0	90.6
Nevada	84.0	84.9	85.2	85.1	85.6	85.0
New Hampshire	91.4	91.8	92.8	92.2	93.1	92.3
New Jersey	88.1	88.3	88.5	89.1	89.1	88.6
New Mexico	83.2	84.4	84.3	84.2	84.6	84.1
New York	85.0	85.3	85.6	85.7	86.0	85.5
North Carolina	84.7	85.2	85.7	86.4	86.6	85.7
North Dakota	90.7	91.7	91.5	92.2	92.5	91.7
Ohio	88.3	88.8	89.0	89.4	89.7	89.0
Oklahoma	86.3	86.7	86.7	87.3	87.3	86.9
Oregon	89.4	89.9	89.7	89.7	90.0	89.7
Pennsylvania	88.6	88.9	89.2	89.4	89.7	89.2
Rhode Island	84.8	86.1	85.9	85.8	87.7	86.1
South Carolina	84.2	84.9	85.6	86.1	86.3	85.4
South Dakota	90.6	90.5	91.6	91.7	91.1	91.1
Tennessee	84.2	85.1	85.6	85.8	86.1	85.4
Texas	81.1	81.4	81.9	82.2	82.4	81.8
Utah	90.3	91.0	91.5	91.4	91.5	91.1
Vermont	91.8	91.7	91.5	92.0	91.7	91.7
Virginia	87.8	87.9	88.4	88.5	88.9	88.3
Washington	**90.1**	**90.4**	**90.1**	**90.4**	**90.8**	**90.4**
West Virginia	84.2	84.5	84.6	85.2	86.0	84.9
Wisconsin	90.4	90.7	90.9	91.4	91.4	91.0
Wyoming	92.0	91.7	93.5	92.6	92.2	92.4
U.S. Average	85.9	86.4	86.6	86.9	87.1	86.6
Washington's Rank	**16**	**15**	**16**	**15**	**16**	**16**

Source: U.S. Department of Commerce, Bureau of the Census: Educational Attainment in the United States, 2015

Table 1.4
Innovation Drivers
Educational Attainment: Completed Associate's Degree
(Percent)*

	2010	2011	2012	2013	2014	2010-14
Alabama	7.1	7.4	7.4	8.0	7.9	7.6
Alaska	8.2	7.4	8.2	8.3	8.2	8.1
Arizona	8.1	8.3	8.4	8.6	8.5	8.4
Arkansas	6.3	5.8	6.1	6.1	6.3	6.1
California	7.6	7.7	7.9	7.9	7.8	7.8
Colorado	7.8	8.3	8.4	8.3	8.2	8.2
Connecticut	7.1	7.3	7.4	7.5	7.5	7.4
Delaware	7.2	7.0	7.2	7.7	7.9	7.4
Florida	8.6	8.9	9.2	9.5	9.7	9.2
Georgia	6.8	6.7	7.1	7.4	7.0	7.0
Hawaii	9.2	10.0	10.0	10.4	10.5	10.0
Idaho	8.3	8.9	9.0	9.1	9.3	8.9
Illinois	7.2	7.3	7.6	7.6	7.8	7.5
Indiana	7.5	7.9	8.1	8.2	8.5	8.0
Iowa	10.0	10.5	11.1	11.1	11.3	10.8
Kansas	7.4	7.4	8.0	7.8	8.1	7.7
Kentucky	6.8	7.0	7.2	7.6	7.7	7.3
Louisiana	5.1	5.2	5.3	5.4	5.4	5.3
Maine	9.0	8.9	9.1	9.6	9.7	9.3
Maryland	6.3	6.3	6.3	6.3	6.5	6.3
Massachusetts	7.6	7.8	7.6	7.7	7.9	7.7
Michigan	8.4	8.4	8.7	8.9	9.3	8.7
Minnesota	10.0	10.3	10.6	10.6	11.0	10.5
Mississippi	8.4	8.3	8.4	8.4	8.6	8.4
Missouri	6.8	7.1	7.1	7.6	7.5	7.2
Montana	7.9	8.4	8.4	8.5	8.2	8.3
Nebraska	9.0	9.6	9.8	9.8	10.4	9.7
Nevada	7.1	7.2	7.5	8.1	8.1	7.6
New Hampshire	10.0	9.5	9.5	9.5	9.8	9.7
New Jersey	6.2	6.1	6.2	6.4	6.4	6.3
New Mexico	7.0	7.5	8.2	7.8	8.0	7.7
New York	8.2	8.3	8.5	8.6	8.6	8.4
North Carolina	8.6	8.7	8.7	8.8	9.2	8.8
North Dakota	11.7	13.1	12.3	13.8	13.5	12.9
Ohio	7.8	7.8	8.1	8.2	8.4	8.1
Oklahoma	6.8	7.0	7.3	7.2	7.3	7.1
Oregon	7.8	8.2	8.2	8.4	8.4	8.2
Pennsylvania	7.4	7.6	7.9	7.9	7.9	7.7
Rhode Island	7.4	8.4	8.8	8.3	8.2	8.2
South Carolina	8.4	8.6	8.9	8.9	8.8	8.7
South Dakota	10.0	9.7	9.9	11.4	11.3	10.5
Tennessee	6.2	6.0	6.5	6.7	6.7	6.4
Texas	6.3	6.5	6.6	6.5	6.7	6.5
Utah	9.0	9.2	9.7	9.5	9.9	9.5
Vermont	8.3	8.4	9.0	8.2	7.8	8.3
Virginia	6.7	7.0	7.2	7.3	7.3	7.1
Washington	**9.4**	**9.7**	**9.6**	**9.5**	**10.0**	**9.6**
West Virginia	5.8	6.4	6.3	6.8	6.5	6.4
Wisconsin	9.3	9.6	10.0	10.0	10.3	9.8
Wyoming	10.7	9.9	10.0	10.7	10.7	10.4
United States	7.6	7.8	8.0	8.1	8.2	7.9
Washington's Rank	**7**	**6**	**10**	**10**	**9**	**10**

Source: U.S. Department of Commerce, Bureau of the Census, American FactFinder, 2016
* Percent of persons 25 years old and over who have attained an Associate's degree

Table 1.5
Innovation Drivers
Educational Attainment: Completed Bachelor's Degree or More*
(Percent)*

	2011	2012	2013	2014	2015	2011-15
Alabama	22.3	23.3	23.5	23.5	24.2	23.4
Alaska	26.4	28.0	28.0	28.0	29.7	28.0
Arizona	26.6	27.3	27.4	27.6	27.7	27.3
Arkansas	20.3	21.0	20.6	21.4	21.8	21.0
California	30.3	30.9	31.0	31.7	32.3	31.2
Colorado	36.7	37.5	37.8	38.3	39.2	37.9
Connecticut	36.2	37.1	37.2	38.0	38.3	37.4
Delaware	28.8	29.5	29.8	30.6	30.9	29.9
Florida	25.8	26.8	27.2	27.3	28.4	27.1
Georgia	27.6	28.2	28.3	29.1	29.9	28.6
Hawaii	29.1	30.1	31.2	31.0	31.4	30.6
Idaho	25.2	25.5	26.2	25.0	26.0	25.6
Illinois	31.0	31.6	32.1	32.8	32.9	32.1
Indiana	23.0	23.4	23.8	24.7	24.9	24.0
Iowa	25.8	26.3	26.4	27.7	26.8	26.6
Kansas	30.1	30.4	31.1	31.5	31.7	31.0
Kentucky	21.1	21.8	22.6	22.2	23.3	22.2
Louisiana	21.1	22.0	22.5	22.9	23.2	22.3
Maine	28.4	28.0	28.2	29.4	30.1	28.8
Maryland	36.9	36.9	37.4	38.2	38.8	37.6
Massachusetts	39.1	39.3	40.3	41.2	41.5	40.3
Michigan	25.6	26.0	26.9	27.4	27.8	26.7
Minnesota	32.4	33.2	33.5	34.3	34.7	33.6
Mississippi	19.8	20.7	20.4	21.1	20.8	20.6
Missouri	26.1	26.4	27.0	27.5	27.8	27.0
Montana	28.2	29.4	29.0	29.3	30.6	29.3
Nebraska	27.9	29.0	29.4	29.5	30.2	29.2
Nevada	22.5	22.4	22.5	23.1	23.6	22.8
New Hampshire	33.4	34.6	34.6	35.0	35.7	34.7
New Jersey	35.3	36.2	36.6	37.4	37.6	36.6
New Mexico	25.6	26.1	26.4	26.4	26.5	26.2
New York	32.9	33.4	34.1	34.5	35.0	34.0
North Carolina	26.9	27.4	28.4	28.7	29.4	28.2
North Dakota	26.3	27.9	27.1	27.4	29.1	27.6
Ohio	24.7	25.2	26.1	26.6	26.8	25.9
Oklahoma	23.8	23.8	23.8	24.2	24.6	24.0
Oregon	29.3	29.9	30.7	30.8	32.2	30.6
Pennsylvania	27.0	27.8	28.7	29.0	29.7	28.4
Rhode Island	31.1	31.4	32.4	30.4	32.7	31.6
South Carolina	24.1	25.1	26.1	26.3	26.8	25.7
South Dakota	26.3	26.3	26.6	27.8	27.5	26.9
Tennessee	23.6	24.3	24.8	25.3	25.7	24.7
Texas	26.4	26.7	27.5	27.8	28.4	27.4
Utah	29.7	30.7	31.3	31.1	31.8	30.9
Vermont	35.4	35.8	35.7	34.9	36.9	35.7
Virginia	35.1	35.5	36.1	36.7	37.0	36.1
Washington	**31.9**	**31.7**	**32.7**	**33.1**	**34.2**	**32.7**
West Virginia	18.5	18.6	18.9	19.2	19.6	19.0
Wisconsin	26.5	27.1	27.7	28.4	28.4	27.6
Wyoming	24.7	24.7	26.6	26.6	26.2	25.8
U.S. Average	28.5	29.1	29.6	30.1	30.6	29.6
Washington's Rank	**11**	**11**	**11**	**11**	**11**	**11**

Source: U.S. Department of Commerce, Bureau of the Census: Educational Attainment in the United States, 2015
* Percent of persons 25 years old and over who have obtained a Bachelor's degree or higher.

Table 1.6
Innovation Drivers
Research Doctorates Awarded
Per 100,000 population

	2010	2011	2012	2013	2014	2010-14
Alabama	12.0	12.0	13.5	13.4	13.8	12.9
Alaska	6.3	6.4	6.8	7.1	6.6	6.6
Arizona	14.0	13.2	13.6	13.6	13.2	13.5
Arkansas	6.1	6.0	6.6	7.5	7.1	6.7
California	15.5	15.5	15.9	16.4	16.0	15.8
Colorado	15.8	15.0	15.6	17.2	17.6	16.3
Connecticut	18.5	18.0	19.5	20.0	20.4	19.3
Delaware	22.8	24.2	23.3	20.1	20.8	22.3
Florida	11.3	11.2	11.1	11.1	11.4	11.2
Georgia	12.8	13.1	13.8	13.6	14.1	13.5
Hawaii	13.5	15.4	13.9	16.3	13.8	14.6
Idaho	6.4	5.9	6.2	8.7	8.1	7.1
Illinois	17.8	17.9	18.6	19.7	18.6	18.5
Indiana	19.3	19.4	19.7	21.2	21.4	20.2
Iowa	22.2	24.0	24.8	25.3	23.6	24.0
Kansas	14.6	16.6	16.1	17.7	16.7	16.3
Kentucky	4.8	4.3	4.8	4.0	4.6	4.5
Louisiana	13.1	10.8	14.3	14.2	13.2	13.1
Maine	4.0	4.0	4.4	3.7	5.7	4.4
Maryland	21.4	20.2	21.7	23.5	21.6	21.7
Massachusetts	38.1	38.2	39.9	41.1	41.7	39.8
Michigan	9.2	9.5	9.9	9.9	11.2	9.9
Minnesota	19.8	20.5	21.2	22.7	24.8	21.8
Mississippi	15.0	14.3	15.3	14.9	14.0	14.7
Missouri	12.4	13.0	14.0	14.3	14.7	13.7
Montana	10.1	9.8	9.2	9.8	10.5	9.9
Nebraska	17.4	17.0	15.1	19.4	19.4	17.7
Nevada	7.1	7.5	7.4	7.6	7.0	7.3
New Hampshire	11.1	11.1	10.3	12.2	13.3	11.6
New Jersey	11.0	11.9	11.3	11.6	12.9	11.7
New Mexico	13.4	13.1	14.6	15.6	16.2	14.6
New York	19.9	20.4	20.4	21.3	21.9	20.8
North Carolina	15.6	14.9	16.0	17.1	17.1	16.1
North Dakota	19.6	20.1	19.5	19.3	21.5	20.0
Ohio	16.1	16.1	15.6	15.8	16.7	16.1
Oklahoma	12.6	11.0	12.3	12.7	13.3	12.4
Oregon	10.7	10.9	12.1	11.7	11.1	11.3
Pennsylvania	18.4	19.8	19.7	19.7	20.3	19.6
Rhode Island	28.0	28.8	30.9	29.3	31.6	29.7
South Carolina	9.6	9.9	10.3	10.3	11.2	10.3
South Dakota	6.5	7.4	9.2	9.0	11.8	8.8
Tennessee	12.6	12.4	12.6	12.7	13.6	12.8
Texas	10.6	10.2	11.4	11.2	12.1	11.1
Utah	15.9	18.2	17.4	18.0	17.3	17.3
Vermont	9.9	7.0	9.9	11.6	11.6	10.0
Virginia	15.2	16.6	17.2	18.9	18.7	17.3
Washington	**12.3**	**12.7**	**11.6**	**13.4**	**13.2**	**12.6**
West Virginia	10.7	11.4	11.0	10.6	10.4	10.8
Wisconsin	16.4	16.9	18.9	17.8	19.3	17.9
Wyoming	9.2	10.0	10.7	11.3	17.6	11.8
U.S. Average	14.8	14.9	15.4	15.8	16.1	15.4
Washington Rank	**31**	**28**	**33**	**29**	**34**	**31**

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, Survey of Earned Doctorates, 2015.

Table 1.7
Innovation Drivers
Student to Teacher Ratios in Elementary and Secondary Public Schools

	2009-10	2010-11	2011-12	2012-13	2013-14	2009-2014
Alabama	15.8	15.3	15.6	14.4	15.8	15.4
Alaska	16.3	16.2	16.2	17.1	16.6	16.5
Arizona	20.7	21.4	21.3	22.3	22.8	21.7
Arkansas	12.9	14.1	14.2	14.2	14.0	13.9
California	19.8	24.1	23.4	23.7	24.3	23.1
Colorado	17.0	17.4	17.8	17.7	17.5	17.4
Connecticut	12.9	13.1	12.7	12.5	12.6	12.8
Delaware	14.7	14.5	15.0	13.9	14.0	14.4
Florida	14.3	15.1	15.2	15.2	15.3	15.0
Georgia	14.4	14.9	15.2	15.6	15.8	15.2
Hawaii	15.7	15.8	15.9	15.9	15.9	15.8
Idaho	18.2	17.6	17.5	19.6	19.8	18.5
Illinois	15.2	15.7	15.8	15.3	15.2	15.4
Indiana	16.8	18.0	16.7	17.4	17.5	17.3
Iowa	13.7	14.3	14.3	14.2	14.2	14.2
Kansas	13.7	14.0	13.0	11.9	13.0	13.1
Kentucky	16.2	16.0	16.3	16.0	16.2	16.1
Louisiana	13.9	14.3	14.5	15.3	15.3	14.7
Maine	11.6	12.3	12.7	12.2	11.9	12.1
Maryland	14.5	14.6	14.8	14.9	14.8	14.7
Massachusetts	13.7	13.9	13.7	13.5	13.6	13.7
Michigan	17.8	17.9	18.1	18.1	18.1	18.0
Minnesota	15.8	15.9	15.9	15.8	15.6	15.8
Mississippi	14.9	15.2	15.3	15.1	15.3	15.2
Missouri	13.5	13.8	13.8	13.9	13.8	13.8
Montana	13.5	13.7	14.0	14.0	14.0	13.8
Nebraska	13.3	13.4	13.6	13.7	13.7	13.5
Nevada	19.4	20.0	20.8	21.5	20.6	20.5
New Hampshire	12.7	12.7	12.8	12.7	12.6	12.7
New Jersey	12.1	12.7	12.4	12.4	12.0	12.3
New Mexico	14.7	15.1	15.4	15.2	15.3	15.1
New York	12.9	12.9	12.9	13.1	13.2	13.0
North Carolina	14.1	15.2	15.5	15.4	15.4	15.1
North Dakota	11.4	11.4	11.5	11.7	11.8	11.5
Ohio	15.8	16.1	16.1	16.3	16.3	16.1
Oklahoma	15.4	16.0	16.1	16.1	16.2	16.0
Oregon	20.3	20.3	21.2	22.2	22.2	21.2
Pennsylvania	13.6	13.8	14.2	14.3	14.5	14.1
Rhode Island	12.8	12.8	12.5	14.4	14.5	13.4
South Carolina	15.4	16.1	15.5	15.3	15.5	15.6
South Dakota	13.3	13.3	13.8	14.0	13.8	13.6
Tennessee	14.9	14.8	15.1	15.0	15.1	15.0
Texas	14.6	14.7	15.4	15.5	15.4	15.1
Utah	22.3	22.8	23.1	23.0	23.0	22.8
Vermont	10.5	11.6	10.7	10.7	10.6	10.8
Virginia	17.6	17.6	13.8	14.2	14.1	15.5
Washington	**19.4**	**19.4**	**19.7**	**19.6**	**19.3**	**19.5**
West Virginia	13.9	13.9	14.0	14.1	14.1	14.0
Wisconsin	14.9	15.1	15.5	15.2	15.1	15.2
Wyoming	12.3	12.5	11.5	12.5	12.3	12.2
U.S. Average	15.4	16.0	16.0	16.0	16.1	15.9
Washington's Rank	**45**	**45**	**45**	**45**	**44**	**45**

Source: U.S. Department of Education, National Center for Education Statistics. Digest of Educational Statistics, 2015

Table 1.8
Innovation Drivers
Grade 8 Public School Students:
Average Reading Scale Scores

	2007	2009	2011	2013	2015	2007-2015
Alabama	252	255	258	257	259	256
Alaska	259	259	261	261	260	260
Arizona	255	258	260	260	263	259
Arkansas	258	258	259	262	259	259
California	251	253	255	262	259	256
Colorado	266	266	271	271	268	268
Connecticut	267	272	275	274	273	272
Delaware	265	272	266	266	263	266
Florida	260	264	262	266	263	263
Georgia	259	260	262	265	262	262
Hawaii	251	255	257	260	257	256
Idaho	265	265	268	270	269	267
Illinois	263	265	266	267	267	265
Indiana	264	266	265	267	268	266
Iowa	267	265	265	269	268	267
Kansas	267	267	267	267	267	267
Kentucky	262	267	269	270	268	267
Louisiana	253	253	255	257	255	255
Maine	270	268	270	269	268	269
Maryland	265	267	271	274	268	269
Massachusetts	273	274	275	277	274	275
Michigan	260	262	265	266	264	264
Minnesota	268	270	270	271	270	270
Mississippi	250	251	254	253	252	252
Missouri	263	267	267	267	267	266
Montana	271	270	273	272	270	271
Nebraska	267	267	268	269	269	268
Nevada	252	254	258	262	259	257
New Hampshire	270	271	272	274	275	272
New Jersey	270	273	275	276	271	273
New Mexico	251	254	256	256	253	254
New York	264	264	266	266	263	265
North Carolina	259	260	263	265	261	261
North Dakota	268	269	269	268	267	268
Ohio	268	269	268	269	266	268
Oklahoma	260	259	260	262	263	261
Oregon	266	265	264	268	268	266
Pennsylvania	268	271	268	272	269	269
Rhode Island	258	260	265	267	265	263
South Carolina	257	257	260	261	260	259
South Dakota	270	270	269	268	267	269
Tennessee	259	261	259	265	265	262
Texas	261	260	261	264	261	261
Utah	262	266	267	270	269	267
Vermont	273	272	274	274	274	274
Virginia	267	266	267	268	267	267
Washington	**265**	**267**	**268**	**272**	**267**	**268**
West Virginia	255	255	256	257	260	257
Wisconsin	264	266	267	268	270	267
Wyoming	266	268	270	271	269	269
U.S. Average	261	262	264	266	264	263
Washington's Rank	**21**	**17**	**19**	**8**	**21**	**17**

Source: National Center for Education Statistics National Assessment of Educational Progress (NAEP), 2015

Table 1.9
Innovation Drivers
Grade 8 Public School Students:
Average Mathematics Scale Scores

	2007	2009	2011	2013	2015	2007-2015
Alabama	266	269	269	269	267	268
Alaska	283	283	283	282	280	282
Arizona	276	277	279	280	283	279
Arkansas	274	276	279	278	275	276
California	270	270	273	276	275	273
Colorado	286	287	292	290	286	288
Connecticut	282	289	287	285	284	285
Delaware	283	284	283	282	280	282
Florida	277	279	278	281	275	278
Georgia	275	278	278	279	279	278
Hawaii	269	274	278	281	279	276
Idaho	284	287	287	286	284	286
Illinois	280	282	283	285	282	283
Indiana	285	287	285	288	287	286
Iowa	285	284	285	285	286	285
Kansas	290	289	290	290	284	288
Kentucky	279	279	282	281	278	280
Louisiana	272	272	273	273	268	272
Maine	286	286	289	289	285	287
Maryland	286	288	288	287	283	286
Massachusetts	298	299	299	301	297	299
Michigan	277	278	280	280	278	279
Minnesota	292	294	295	295	294	294
Mississippi	265	265	269	271	271	268
Missouri	281	286	282	283	281	282
Montana	287	292	293	289	287	290
Nebraska	284	284	283	285	286	285
Nevada	271	274	278	278	275	275
New Hampshire	288	292	292	296	294	292
New Jersey	289	293	294	296	293	293
New Mexico	268	270	274	273	271	271
New York	280	283	280	282	280	281
North Carolina	284	284	286	286	281	284
North Dakota	292	293	292	291	288	291
Ohio	285	286	289	290	285	287
Oklahoma	275	276	279	276	275	276
Oregon	284	285	283	284	283	284
Pennsylvania	286	288	286	290	284	287
Rhode Island	275	278	283	284	281	280
South Carolina	282	280	281	280	276	280
South Dakota	288	291	291	287	285	288
Tennessee	274	275	274	278	278	276
Texas	286	287	290	288	284	287
Utah	281	284	283	284	286	284
Vermont	291	293	294	295	290	293
Virginia	288	286	289	288	288	288
Washington	**285**	**289**	**288**	**290**	**287**	**288**
West Virginia	270	270	273	274	271	272
Wisconsin	286	288	289	289	289	288
Wyoming	287	286	288	288	287	287
U.S. Average	280	282	283	284	281	282
Washington's Rank	**20**	**9**	**16**	**7**	**12**	**13**

Source: National Center for Education Statistics National Assessment of Educational Progress (NAEP), 2015

Table 1.10
Innovation Drivers

Migration Rate

(Percent)*

	2011	2012	2013	2014	2015	2011-15
Alabama	0.1	0.1	0.2	0.2	0.1	0.1
Alaska	0.1	0.2	-0.1	-1.0	-0.8	-0.3
Arizona	0.3	0.7	0.6	0.9	1.0	0.7
Arkansas	0.2	0.1	0.0	0.0	0.1	0.1
California	0.3	0.3	0.3	0.4	0.3	0.3
Colorado	0.7	0.8	0.9	1.0	1.3	0.9
Connecticut	0.0	-0.1	-0.1	-0.2	-0.3	-0.1
Delaware	0.5	0.6	0.6	0.8	0.8	0.7
Florida	1.1	1.1	1.1	1.4	1.7	1.3
Georgia	0.4	0.4	0.2	0.5	0.6	0.4
Hawaii	0.4	0.4	0.5	0.3	0.3	0.4
Idaho	0.1	0.1	0.4	0.7	0.6	0.4
Illinois	-0.3	-0.4	-0.3	-0.5	-0.6	-0.4
Indiana	0.0	0.0	0.1	0.1	-0.1	0.0
Iowa	0.2	0.0	0.2	0.2	0.1	0.1
Kansas	-0.1	0.1	-0.2	-0.2	-0.2	-0.1
Kentucky	0.2	0.1	0.1	0.0	0.0	0.1
Louisiana	0.2	0.1	0.1	0.0	0.0	0.1
Maine	0.1	0.0	0.0	0.2	0.0	0.1
Maryland	0.4	0.3	0.3	0.2	0.1	0.3
Massachusetts	0.4	0.4	0.5	0.4	0.3	0.4
Michigan	-0.3	-0.1	-0.1	-0.1	-0.2	-0.1
Minnesota	0.2	0.1	0.2	0.1	0.1	0.1
Mississippi	-0.1	-0.1	-0.1	-0.2	-0.3	-0.2
Missouri	-0.1	-0.1	0.0	0.0	0.0	0.0
Montana	0.4	0.4	0.6	0.5	0.6	0.5
Nebraska	0.1	0.2	0.2	0.1	0.1	0.1
Nevada	0.0	0.8	0.8	1.2	1.3	0.8
New Hampshire	0.0	0.1	0.0	0.3	0.1	0.1
New Jersey	0.0	0.0	0.0	0.0	-0.1	0.0
New Mexico	0.1	-0.2	-0.4	-0.5	-0.5	-0.3
New York	0.1	0.0	0.0	-0.1	-0.2	0.0
North Carolina	0.5	0.6	0.6	0.6	0.7	0.6
North Dakota	1.1	1.9	2.4	1.5	1.5	1.7
Ohio	-0.2	-0.2	0.0	0.0	-0.1	-0.1
Oklahoma	0.3	0.4	0.5	0.3	0.4	0.4
Oregon	0.5	0.5	0.4	0.8	1.1	0.7
Pennsylvania	0.1	0.1	0.0	0.0	0.0	0.0
Rhode Island	-0.2	-0.1	-0.1	0.1	0.0	-0.1
South Carolina	0.5	0.7	0.7	1.0	1.1	0.8
South Dakota	0.4	0.7	0.7	0.3	0.0	0.4
Tennessee	0.4	0.6	0.4	0.5	0.5	0.5
Texas	0.8	0.9	0.8	1.0	1.0	0.9
Utah	0.1	0.2	0.4	0.2	0.5	0.3
Vermont	0.0	-0.1	0.1	-0.1	-0.2	-0.1
Virginia	0.5	0.5	0.4	0.2	0.2	0.4
Washington	**0.6**	**0.5**	**0.6**	**0.8**	**1.0**	**0.7**
West Virginia	0.1	0.1	-0.1	-0.2	-0.2	-0.1
Wisconsin	0.0	-0.1	0.0	0.0	-0.1	0.0
Wyoming	0.0	1.1	0.5	-0.4	-0.2	0.2
U.S. Average*	0.3	0.3	0.3	0.4	0.4	0.3
Washington's Rank	**5**	**13**	**12**	**10**	**8**	**8**

Source: Population Division, U.S. Census Bureau, 2016
* The District of Columbia and Puerto Rico are included in the U.S. average.

Table 1.11
Innovation Drivers
University Research and Development
(Dollars Per Capita)

	2011	2012	2013	2014	2015	2011-15
Alabama	187	172	173	168	186	177
Alaska	257	249	250	237	221	243
Arizona	154	159	161	156	161	158
Arkansas	96	98	100	96	99	98
California	218	221	218	217	221	219
Colorado	252	258	238	230	233	242
Connecticut	263	263	295	296	304	284
Delaware	208	203	213	206	203	207
Florida	111	113	111	114	118	113
Georgia	184	190	196	193	200	193
Hawaii	240	241	244	236	232	239
Idaho	90	92	89	87	89	89
Illinois	183	183	194	181	186	185
Indiana	195	200	203	198	200	199
Iowa	236	233	231	249	243	239
Kansas	178	183	188	189	193	186
Kentucky	136	134	125	121	120	127
Louisiana	159	152	145	143	142	148
Maine	105	90	79	95	81	90
Maryland	585	570	578	598	623	591
Massachusetts	446	483	527	518	541	503
Michigan	219	224	229	226	235	227
Minnesota	168	161	166	168	169	167
Mississippi	155	159	139	137	136	145
Missouri	187	182	178	173	177	179
Montana	196	196	183	177	176	186
Nebraska	224	236	238	242	245	237
Nevada	61	56	55	54	54	56
New Hampshire	273	277	268	275	269	272
New Jersey	129	125	132	126	123	127
New Mexico	195	192	193	198	187	193
New York	271	273	280	286	288	280
North Carolina	277	275	278	283	280	279
North Dakota	308	307	303	300	288	301
Ohio	192	184	187	186	185	187
Oklahoma	117	115	109	108	107	111
Oregon	191	185	179	178	179	182
Pennsylvania	260	254	263	260	262	260
Rhode Island	437	471	455	424	429	443
South Carolina	133	135	136	136	136	135
South Dakota	165	155	139	123	120	140
Tennessee	159	159	159	173	163	163
Texas	182	178	182	182	185	182
Utah	223	218	237	236	245	232
Vermont	219	192	193	183	191	196
Virginia	171	168	172	166	168	169
Washington	**220**	**214**	**224**	**218**	**216**	**218**
West Virginia	114	109	106	106	108	108
Wisconsin	253	259	247	245	238	248
Wyoming	101	114	112	88	97	103
U.S. average	208	207	210	209	212	209
Washington's Rank	**17**	**19**	**18**	**18**	**19**	**19**

SOURCE: The National Science Foundation, 2015. (www.nsf.gov)

Table 1.12
Innovation Drivers
Industry Research and Development
(Dollars Per Capita)

	2009	2010	2011	2012	2013	2009-13
Alabama	328	303	391	267	324	323
Alaska	102	104	116	53	62	87
Arizona	738	633	762	757	785	735
Arkansas	245	94	117	103	97	131
California	1,757	1,739	1,990	2,147	2,327	1,992
Colorado	796	772	842	791	858	812
Connecticut	2,987	1,815	2,090	2,043	2,227	2,232
Delaware	2,294	2,383	2,310	2,633	2,496	2,423
Florida	232	272	313	269	296	277
Georgia	406	375	391	391	403	393
Hawaii	178	188	183	135	152	167
Idaho	653	713	739	676	768	710
Illinois	718	952	936	1,010	1,016	926
Indiana	808	768	945	924	986	886
Iowa	641	639	755	573	664	654
Kansas	570	522	526	718	671	601
Kentucky	228	204	293	245	291	252
Louisiana	93	94	100	79	76	88
Maine	399	189	222	207	275	258
Maryland	784	757	873	684	804	780
Massachusetts	2,213	2,136	2,378	2,627	2,593	2,389
Michigan	1,212	1,229	1,383	1,508	1,609	1,388
Minnesota	1,303	1,176	1,154	1,155	1,220	1,202
Mississippi	88	82	79	91	71	82
Missouri	0	1,352	NA	1,159	1,187	924
Montana	146	146	136	104	91	125
Nebraska	332	288	345	311	335	322
Nevada	231	262	235	230	188	229
New Hampshire	0	1,381	1,569	1,405	1,546	1,180
New Jersey	2,102	1,809	1,575	1,781	1,574	1,768
New Mexico	306	264	227	213	249	252
New York	566	565	618	598	611	592
North Carolina	585	601	642	642	821	658
North Dakota	347	350	381	316	316	342
Ohio	591	594	606	671	702	633
Oklahoma	137	127	160	121	131	135
Oregon	1,071	1,145	1,197	1,322	1,435	1,234
Pennsylvania	789	727	762	730	842	770
Rhode Island	437	504	515	428	542	485
South Carolina	273	284	299	342	213	282
South Dakota	177	147	165	134	194	163
Tennessee	236	196	224	223	219	219
Texas	617	570	597	581	587	590
Utah	765	744	866	747	1,014	827
Vermont	669	500	597	744	647	631
Virginia	777	580	686	580	538	632
Washington	**2,470**	**2,009**	**2,134**	**2,101**	**2,131**	**2,169**
West Virginia	189	129	133	164	165	156
Wisconsin	638	690	710	722	736	699
Wyoming	84	69	81	52	48	67
U.S. average	922	904	945	964	1021	951
Washington's Rank	**2**	**3**	**3**	**4**	**5**	**4**

SOURCE: The National Science Foundation, 2015. (www.nsf.gov)

Table 1.13
Innovation Drivers
State Government Research and Development
(Dollars Per Capita)

	2009	2010	2011	2012	2013	2009-13
Alabama	2.72	3.16	4.10	3.60	2.75	3.27
Alaska	11.08	12.99	15.70	7.48	9.07	11.26
Arizona	1.48	2.76	2.88	3.48	4.19	2.96
Arkansas	3.96	4.94	5.00	5.26	5.58	4.95
California	8.11	8.81	10.81	10.55	9.03	9.46
Colorado	2.99	4.13	3.54	2.88	2.75	3.26
Connecticut	8.02	11.19	10.92	11.14	11.40	10.53
Delaware	1.89	2.66	2.87	5.05	5.11	3.52
Florida	3.57	6.41	7.89	7.06	6.06	6.20
Georgia	0.69	0.92	1.19	1.29	1.27	1.07
Hawaii	10.38	10.44	9.51	8.00	9.30	9.52
Idaho	5.50	5.77	5.91	7.38	8.02	6.52
Illinois	0.75	1.29	1.34	1.39	1.40	1.23
Indiana	7.36	1.30	1.07	1.17	1.55	2.49
Iowa	12.52	4.24	12.07	5.25	6.26	8.07
Kansas	4.34	2.28	2.31	2.13	1.97	2.61
Kentucky	3.23	4.69	4.69	4.54	4.49	4.33
Louisiana	1.84	2.02	3.27	3.94	3.40	2.89
Maine	4.81	6.66	7.47	5.34	4.60	5.78
Maryland	3.68	3.94	3.44	3.72	4.96	3.95
Massachusetts	0.50	0.74	0.74	0.59	0.68	0.65
Michigan	0.87	0.96	0.99	1.27	1.30	1.08
Minnesota	3.15	2.30	2.18	2.14	2.74	2.50
Mississippi	1.22	2.41	2.49	2.10	1.63	1.97
Missouri	2.65	2.22	2.27	2.16	2.16	2.29
Montana	7.32	7.62	6.49	6.81	6.48	6.94
Nebraska	2.44	2.31	2.20	3.43	3.89	2.86
Nevada	0.56	0.40	0.53	0.42	0.59	0.50
New Hampshire	1.41	1.37	1.46	1.70	1.35	1.46
New Jersey	1.73	3.17	1.93	2.01	2.52	2.27
New Mexico	0.81	0.69	0.88	0.86	0.97	0.84
New York	8.46	9.24	9.91	8.76	8.99	9.07
North Carolina	4.38	2.86	3.07	3.34	3.11	3.35
North Dakota	24.69	9.42	11.78	8.59	10.18	12.93
Ohio	10.53	10.84	13.80	13.28	16.27	12.94
Oklahoma	4.29	5.65	5.36	6.06	7.32	5.74
Oregon	2.92	4.69	5.17	5.64	5.88	4.86
Pennsylvania	7.57	6.92	5.92	6.31	5.20	6.38
Rhode Island	1.78	1.39	1.85	1.93	1.56	1.70
South Carolina	6.23	15.38	18.12	15.35	10.01	13.02
South Dakota	5.49	4.61	4.40	4.13	4.33	4.59
Tennessee	0.60	0.17	0.57	0.67	0.53	0.50
Texas	1.99	1.39	1.85	5.63	6.99	3.57
Utah	9.71	11.10	12.22	16.59	18.47	13.62
Vermont	1.18	2.66	2.73	2.64	2.91	2.43
Virginia	2.20	2.18	2.13	2.98	3.13	2.52
Washington	**2.44**	**5.65**	**6.67**	**7.18**	**6.76**	**5.74**
West Virginia	5.61	12.87	19.12	18.09	10.27	13.19
Wisconsin	4.40	2.19	3.70	3.12	3.69	3.42
Wyoming	8.59	9.69	9.55	11.92	11.14	10.18
U.S. Average	4.44	4.83	5.54	5.67	5.59	5.21
Washington's Rank	**32**	**17**	**15**	**13**	**15**	**18**

SOURCE: The National Science Foundation, 2015. (www.nsf.gov)

Table 1.14
Innovation Drivers
Patents Issued
Per 100,000 Residents

	2011	2012	2013	2014	2015	2011-15
Alabama	8.7	9.9	11.9	11.5	10.7	10.5
Alaska	4.4	6.3	7.5	6.9	6.2	6.3
Arizona	34.8	36.2	36.6	39.7	40.1	37.5
Arkansas	6.4	8.1	7.7	8.7	10.3	8.2
California	81.6	91.1	101.9	112.6	111.4	99.7
Colorado	46.8	52.9	60.3	66.4	63.6	58.0
Connecticut	59.1	63.9	66.1	69.6	65.9	64.9
Delaware	50.3	52.9	51.5	49.8	39.7	48.9
Florida	20.1	23.0	24.3	25.2	24.2	23.4
Georgia	22.5	25.2	28.6	29.5	28.1	26.8
Hawaii	9.3	9.4	10.4	11.3	11.6	10.4
Idaho	68.7	61.3	63.8	63.9	54.9	62.5
Illinois	35.7	39.4	41.6	46.0	45.6	41.7
Indiana	25.1	30.0	33.0	34.3	34.4	31.4
Iowa	27.9	29.7	32.2	34.0	34.5	31.7
Kansas	28.0	38.1	37.6	35.7	34.4	34.8
Kentucky	12.6	14.1	14.2	16.2	16.2	14.7
Louisiana	8.0	9.7	9.5	10.5	9.5	9.4
Maine	15.2	16.7	18.3	16.7	17.0	16.8
Maryland	28.1	29.1	31.8	33.6	32.7	31.1
Massachusetts	83.6	91.9	100.9	104.8	106.5	97.5
Michigan	44.5	50.5	57.0	58.7	62.3	54.6
Minnesotta	79.0	79.5	88.3	93.1	88.4	85.7
Mississippi	5.8	5.4	6.0	5.9	5.8	5.8
Missouri	16.7	19.3	21.5	23.4	20.6	20.3
Montana	11.4	13.2	12.5	13.6	16.3	13.4
Nebraska	13.4	18.1	18.2	21.1	17.8	17.7
Nevada	24.8	32.0	35.9	34.1	27.3	30.8
New Hampshire	61.1	59.9	67.7	71.7	69.4	66.0
New Jersey	48.4	52.5	59.0	61.6	56.1	55.5
New Mexico	19.8	21.3	22.6	21.3	21.8	21.4
New York	40.2	43.6	47.5	49.5	47.4	45.7
North Carolina	29.9	33.4	35.1	37.3	36.4	34.4
North Dakota	13.9	14.0	18.1	16.2	16.8	15.8
Ohio	33.8	35.6	37.1	37.8	37.0	36.3
Oklahoma	14.0	13.6	15.7	16.2	15.3	14.9
Oregon	61.3	63.1	67.8	73.5	69.4	67.0
Pennsylvania	28.7	30.5	34.1	35.0	33.0	32.3
Rhode Island	33.4	39.4	38.9	42.4	37.2	38.3
South Carolina	17.0	20.7	20.4	20.7	21.6	20.1
South Dakota	12.9	15.5	16.1	15.0	14.9	14.9
Tennessee	16.9	16.5	17.1	18.0	17.1	17.1
Texas	31.4	34.2	37.1	39.6	38.4	36.1
Utah	43.1	46.5	48.7	51.8	53.2	48.7
Vermont	85.5	80.8	87.9	97.3	75.1	85.3
Virginia	21.5	22.2	24.6	26.2	26.5	24.2
Washington	**77.1**	**86.8**	**94.2**	**101.2**	**98.2**	**91.5**
West Virginia	5.9	7.6	8.3	7.4	7.4	7.3
Wisconsin	37.7	40.0	43.6	46.0	44.5	42.4
Wyoming	13.0	21.7	23.0	22.4	19.5	19.9
U.S. Average	38.9	42.7	46.7	49.8	48.5	45.3
Washington's Rank	**5**	**3**	**3**	**3**	**3**	**3**

Source: U.S. Patent and Trademark Office, U.S. Census Bureau, 2015

Table 1.15
Innovation Drivers
Interstate Miles in Poor Condition
(Percent)

	2009	2011	2012	2013	2014	2009-14*
Alabama	5.2	4.6	3.6	4.1	3.3	4.2
Alaska	5.5	10.5	9.6	10.5	9.6	9.1
Arizona	0.0	1.1	1.2	1.4	1.6	1.1
Arkansas	4.8	6.9	6.9	6.2	5.0	5.9
California	11.5	13.0	10.0	10.0	10.8	11.0
Colorado	6.4	3.0	4.0	6.4	5.6	5.1
Connecticut	3.7	2.6	4.3	3.5	3.8	3.6
Delaware	10.0	7.3	7.8	10.3	10.3	9.2
Florida	0.8	0.9	0.5	0.6	0.6	0.7
Georgia	0.1	0.3	0.0	2.5	2.4	1.1
Hawaii	24.1	29.6	29.8	31.5	22.2	27.4
Idaho	2.1	0.0	4.6	2.8	1.7	2.2
Illinois	2.2	0.7	0.0	0.0	0.4	0.7
Indiana	1.5	6.3	5.9	5.4	5.1	4.8
Iowa	2.9	0.8	1.4	4.4	3.5	2.6
Kansas	0.3	0.1	0.2	0.0	1.1	0.3
Kentucky	0.1	2.0	0.4	0.6	0.6	0.8
Louisiana	3.5	3.7	8.6	8.2	6.6	6.1
Maine	0.0	0.0	0.2	0.2	0.1	0.1
Maryland	3.4	6.3	6.1	5.8	5.5	5.4
Massachusetts	0.4	5.7	5.2	4.8	0.0	3.2
Michigan	3.5	5.1	5.0	5.8	6.4	5.2
Minnesota	8.2	4.6	4.4	4.4	3.8	5.1
Mississippi	1.4	1.6	1.3	2.3	2.8	1.9
Missouri	0.6	1.7	1.5	1.3	1.6	1.4
Montana	1.3	1.2	1.5	0.9	0.7	1.1
Nebraska	0.4	0.0	0.1	0.3	0.3	0.2
Nevada	0.2	0.0	2.0	2.0	13.2	3.5
New Hampshire	0.3	1.8	1.7	1.2	0.6	1.1
New Jersey	13.6	10.7	9.8	8.6	8.7	10.3
New Mexico	0.0	0.2	0.2	0.8	0.9	0.4
New York	8.6	6.6	6.7	7.1	7.5	7.3
North Carolina	1.9	1.8	2.5	1.6	1.2	1.8
North Dakota	0.0	0.0	0.0	0.2	0.2	0.1
Ohio	1.1	1.5	2.1	0.9	0.9	1.3
Oklahoma	5.5	3.2	2.2	2.1	2.3	3.1
Oregon	0.1	0.1	2.0	2.1	1.7	1.2
Pennsylvania	1.4	1.1	1.3	1.0	2.8	1.5
Rhode Island	0.0	0.0	1.1	0.3	1.2	0.5
South Carolina	1.8	0.7	0.4	0.3	0.3	0.7
South Dakota	0.7	0.3	0.2	0.2	0.2	0.3
Tennessee	1.4	1.2	1.1	1.1	1.2	1.2
Texas	1.4	1.8	1.9	3.3	2.5	2.2
Utah	0.1	0.7	0.1	0.1	0.0	0.2
Vermont	1.3	0.6	0.2	0.2	0.1	0.5
Virginia	1.2	1.0	1.0	4.1	2.6	2.0
Washington	**0.9**	**6.7**	**7.1**	**6.7**	**5.1**	**5.3**
West Virginia	2.9	2.0	2.7	1.0	1.0	1.9
Wisconsin	4.7	2.4	1.4	5.0	4.9	3.7
Wyoming	0.9	0.4	0.5	1.9	2.1	1.2
U.S. Average	2.8	3.0	2.9	3.3	3.3	3.1
Washington's Rank	**19**	**44**	**44**	**43**	**39**	**41**

Source: Federal Highway Administration, Highway Statistics, Table HM-64, October 2015
*2010 Data Unavailable

Table 1.16
Innovation Drivers
FAA Air Traffic Delays
Delays Per 1000 Operations

	2011	2012	2013	2014	2015	2011-15
Alabama	0.0	0.0	0.0	0.0	0.0	0.0
Alaska	0.2	0.2	0.2	0.2	0.2	0.2
Arizona	1.1	1.9	1.0	1.0	1.4	1.3
Arkansas	0.0	0.0	0.0	0.0	0.0	0.0
California	2.2	2.8	2.4	2.9	3.2	2.7
Colorado	1.3	0.9	2.2	2.1	2.1	1.7
Connecticut	0.0	0.0	0.0	0.0	0.1	0.0
Delaware	0.0	0.0	0.0	0.0	0.0	0.0
Florida	1.1	1.3	1.9	3.1	1.8	1.8
Georgia	3.9	3.0	3.8	2.7	2.8	3.2
Hawaii	0.0	0.0	0.1	0.1	0.1	0.1
Idaho	0.0	0.0	0.0	0.0	0.0	0.0
Illinois	8.0	5.4	8.2	10.7	6.5	7.8
Indiana	0.4	0.4	0.3	0.3	0.4	0.4
Iowa	0.0	0.0	0.0	0.0	0.0	0.0
Kansas	0.3	0.2	0.3	0.3	0.3	0.3
Kentucky	0.4	0.3	0.4	0.2	0.3	0.3
Louisiana	0.0	0.0	0.1	0.0	0.0	0.0
Maine	0.0	0.0	0.0	0.0	0.0	0.0
Maryland	3.5	5.3	1.6	2.4	3.5	3.3
Massachusetts	11.7	4.4	6.5	8.8	10.4	8.4
Michigan	2.0	1.6	2.9	1.7	1.4	1.9
Minnesota	1.0	0.6	0.8	1.1	2.2	1.1
Mississippi	0.0	0.0	0.0	0.0	0.0	0.0
Missouri	0.0	0.0	0.0	0.0	0.0	0.0
Montana	0.0	0.1	0.0	0.0	0.0	0.0
Nebraska	0.0	0.1	0.0	0.0	0.0	0.0
Nevada	1.2	1.5	4.2	3.1	3.6	2.7
New Hampshire	1.9	1.4	1.4	1.3	1.1	1.4
New Jersey	42.4	46.8	40.8	38.8	28.0	39.4
New Mexico	0.2	0.4	0.2	0.4	0.5	0.3
New York	13.2	10.3	13.3	12.1	13.3	12.4
North Carolina	4.9	3.4	5.7	3.7	4.7	4.5
North Dakota	0.0	0.0	0.0	0.0	0.0	0.0
Ohio	2.5	2.4	2.7	2.4	2.1	2.4
Oklahoma	0.0	0.0	0.0	0.0	0.0	0.0
Oregon	0.2	0.1	0.1	0.1	0.2	0.1
Pennsylvania	17.6	14.0	20.8	16.3	14.4	16.6
Rhode Island	0.0	0.1	0.1	0.1	0.1	0.1
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	0.5	0.4	0.3	0.2	0.2	0.3
Texas	1.7	1.6	1.5	2.0	2.5	1.9
Utah	0.3	0.3	0.7	0.4	0.4	0.4
Vermont	0.0	0.0	0.0	0.0	0.1	0.0
Virginia	4.6	3.0	4.0	3.3	3.2	3.6
Washington	**0.2**	**0.1**	**0.3**	**0.3**	**1.2**	**0.4**
West Virginia	0.0	0.0	0.0	0.0	0.0	0.0
Wisconsin	0.1	0.0	0.0	0.0	0.0	0.0
Wyoming	0.0	0.0	0.0	0.0	0.0	0.0
U.S. Average	3.4	2.9	3.5	3.5	3.3	3.3
Washington Rank	**25**	**23**	**27**	**27**	**32**	**31**

SOURCE: FAA Air Traffic System Management, Air Traffic Activity and Delay Report, 2015

Table 1.17
Innovation Drivers
Unlinked Passenger Trips
(Per Capita)

	2010	2011	2012	2013	2014	2010-14
Alabama	1.4	1.4	1.4	1.6	1.6	1.5
Alaska	7.1	7.1	7.0	6.9	6.8	7.0
Arizona	14.2	14.0	14.5	15.1	14.6	14.5
Arkansas	1.6	1.8	2.0	2.0	2.0	1.9
California	37.4	36.6	37.1	37.3	37.4	37.2
Colorado	20.9	20.7	20.6	20.8	21.1	20.8
Connecticut	11.6	11.9	12.5	12.5	12.7	12.2
Delaware	11.3	12.0	12.6	12.1	11.7	11.9
Florida	13.4	14.0	14.3	14.6	14.3	14.1
Georgia	18.2	17.3	16.8	16.1	15.8	16.8
Hawaii	54.8	54.5	55.5	51.9	49.5	53.2
Idaho	1.4	1.4	1.9	1.7	1.5	1.6
Illinois	50.5	52.0	53.5	52.3	51.3	51.9
Indiana	4.9	5.1	5.2	5.3	5.3	5.2
Iowa	7.0	7.0	7.3	7.3	7.7	7.3
Kansas	2.7	2.6	2.5	2.6	2.6	2.6
Kentucky	6.0	5.8	6.2	6.2	5.6	6.0
Louisiana	6.7	7.8	8.8	8.3	7.5	7.8
Maine	3.3	3.5	4.2	4.1	4.0	3.8
Maryland	24.4	24.8	25.4	24.2	25.1	24.8
Massachusetts	58.3	61.8	64.7	63.3	65.1	62.6
Michigan	10.1	10.2	10.2	10.0	9.3	9.9
Minnesota	18.7	19.0	19.0	19.1	19.4	19.0
Mississippi	0.5	0.5	0.6	0.7	0.6	0.6
Missouri	16.6	16.8	16.8	11.3	11.6	14.6
Montana	2.3	2.4	2.5	2.4	2.4	2.4
Nebraska	3.3	3.2	3.5	3.5	3.6	3.4
Nevada	24.1	23.8	26.7	26.7	26.2	25.5
New Hampshire	1.9	2.4	2.4	2.9	3.0	2.5
New Jersey	46.2	45.4	45.4	44.0	45.7	45.3
New Mexico	6.9	7.2	7.8	7.9	7.9	7.5
New York	194.0	194.1	197.8	201.4	204.6	198.4
North Carolina	6.2	6.8	7.3	7.4	7.4	7.0
North Dakota	3.4	3.7	3.4	3.5	3.5	3.5
Ohio	8.9	9.6	9.8	9.7	9.8	9.6
Oklahoma	1.9	1.8	2.0	2.0	2.1	2.0
Oregon	32.1	32.0	32.5	31.7	31.6	32.0
Pennsylvania	35.4	36.3	36.8	36.1	35.3	36.0
Rhode Island	19.1	19.1	19.5	19.5	19.4	19.3
South Carolina	1.9	2.0	2.5	2.4	2.3	2.2
South Dakota	1.7	1.8	1.9	1.8	1.7	1.8
Tennessee	4.6	4.5	4.7	4.8	4.4	4.6
Texas	10.5	10.8	11.2	11.0	10.6	10.8
Utah	14.5	15.3	15.7	16.1	16.5	15.6
Vermont	4.0	4.1	4.4	4.4	4.1	4.2
Virginia	9.1	9.1	9.2	8.9	8.8	9.0
Washington	**34.2**	**34.5**	**34.8**	**34.9**	**35.4**	**34.8**
West Virginia	2.6	2.9	4.5	4.6	4.5	3.8
Wisconsin	12.3	12.9	12.9	12.3	12.1	12.5
Wyoming	0.8	0.8	0.8	0.8	0.9	0.8
U.S. Average	30.8	30.9	31.5	31.4	31.5	31.2
Washington's Rank	**8**	**8**	**8**	**8**	**7**	**8**

Source: Federal Transit Administration, National Transit Database, data through 2014

Chapter 2: Business Performance – Summary

- **The state's rank in *Business Performance* fell one place in this year's study to 16th best in the nation. Of the ten indicators in this category, three improved, four worsened and three were unchanged. Annual Performance improved in six indicators and worsened in four.**
- **Business Performance has been broken out into two subcategories: *Business Prosperity* and *Cost of Doing Business*.**
- **In the subcategory *Business Prosperity*, the state's rank remained at 8th highest. Washington's rank improved in three indicators, worsened in one, and was unchanged in two.**
- **In the subcategory *Cost of Doing Business*, Washington's rank fell two places to 24th best. Of the four indicators, none showed an improvement in rank, three indicators declined, and one remained unchanged.**

Business Prosperity

Foreign Exports Inclusive and Exclusive of Transportation Equipment

Washington ranked 2nd in exports as a percent of personal income in 2015 for the third consecutive year

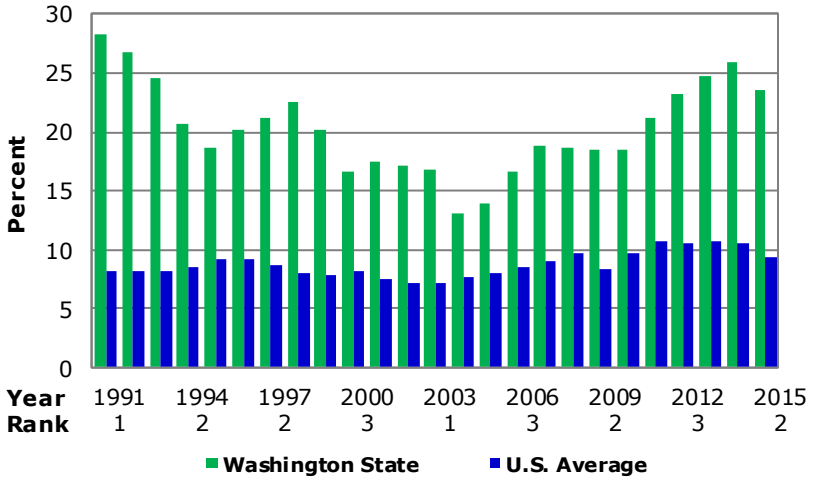
Washington ranked 2nd in exports as a percent of personal income in 2015 for the third consecutive year; however, the state's export value decreased from 25.86 percent of personal income in 2014 to 23.55 percent in 2015. Despite the decrease, Washington's rate remains well above the national average of 9.36 percent. Washington was one of only two states to have exports as a percent of personal income above twenty percent this past year. Number-one-ranked Louisiana was the other state, with exports constituting 24.09 percent of personal income. The state is 2nd in its five-year ranking with 23.69 percent, falling only to Louisiana again (31.12 percent). Louisiana's high ranks in this category are due largely to its exports of refined petroleum products.

Washington exports are led by transportation equipment

Washington's perennially strong performance in this category is due mainly to the presence of Boeing and PACCAR, two of the world's leading manufacturers of commercial aircraft and trucks, respectively. Exports of transportation equipment from these and other Washington manufacturers account for over half of

Washington's exports. Excluding the exports of these products, Washington's exports were equivalent to 8.78 percent of personal income in 2015, and this figure represents a relatively large decrease from the previous year's 11.05 percent. The drop may be partly explained by the strength of the U.S. dollar in foreign markets over the past year. Washington's rate still remains above the national average of 7.56 percent, but the state's rank fell to 13th in the nation. Over the past five years, Washington ranks 9th in exports excluding transportation equipment as a percent of personal income of 10.93 percent compared to the national average of 8.61 percent.

Figure 2.1: Total Foreign Exports

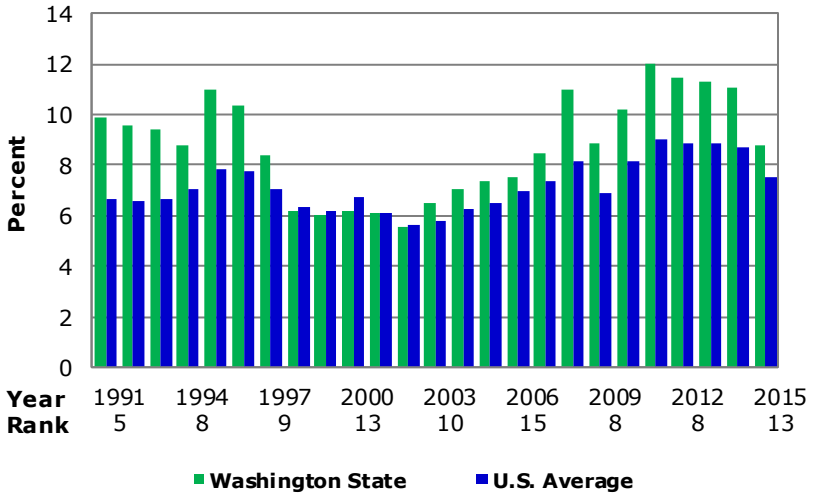


Source: U.S. Department of Commerce, Bureau of the Census, Foreign Trade Division, Bureau of Economic Analysis; data through 2015

Trade in services, which Washington does well in, are not included in this measure

It must be noted that the trade data used for this indicator, obtained from the U.S. Bureau of the Census, only include trade in goods, ignoring trade in service exports, which are difficult to track and credit to specific states. Software, one of Washington's main exports, is classified as a service when it is not exported on physical media and is therefore not included in the Census measure. As software giant Microsoft contributes greatly to state personal income while the majority of 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 begins to decline in 1997, as this year coincides with the period where Microsoft's contribution to personal income began its greatest growth.

Figure 2.2: Foreign Exports Excluding Transportation Equipment



Source: U.S. Department of Commerce, Bureau of the Census, Foreign Trade Division, Bureau of Economic Analysis; data through 2015

High Wage Industries' Share of Total Employment

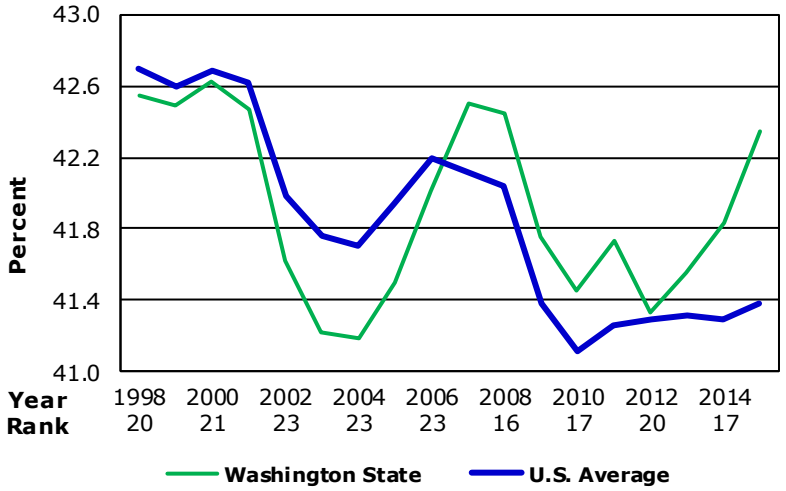
Average wages and salaries are derived from data published by the BEA

As part of its annual release of personal income data, the U.S. Bureau of Economic Analysis (BEA) publishes wages and salaries by industry and full-time and part-time employment by industry for each state and the nation as a whole. The BEA publishes state level data for 93 industry categories corresponding to various combinations of two- to four-digit North American Industry Classification System (NAICS) categories. By dividing wages and salaries by full-time and part-time employment, average wages and salaries can be computed for each industry.

This measure defines high wage jobs as jobs in industries whose average wages and salaries are above the national average

In 2015, overall average wages and salaries in the United States was $53,162 per full-time and part-time job. This measure defines "high wage jobs" as those in industries whose average wages and salaries are higher than the overall average for all industries. The high wage industries are selected based on the data for the United States as a whole. The number of jobs in each state that are in the industries categorized as high wage is divided by the total number of jobs to determine the high wage industries' share of total employment. Annual growth in high wage industries' share of total employment is calculated as the percent share of jobs that are high wage in a given year minus the percent share of the previous year. It should be noted that the BEA employment statistics used in computing this measure are slightly different from the U.S. Bureau of Labor Statistics (BLS) employment statistics reported elsewhere in this publication.

Figure 2.3: High Wage Industries' Share of Total Employment



Source: BEA, Washington State Office of the Economic and Revenue Forecast Council; data through 2015

A noneconomic reclassification reduced reported growth in the ratio in 2012

The ratio of high wage jobs to total jobs in Washington State has been increasing since 2011. The apparent decline in 2012 was entirely due to a noneconomic reclassification of employees of certain state-funded programs that provide services for the elderly and disabled. This reclassification increased the count of employees in the social assistance sector, which is a below average wage industry, from 2012 on, thus reducing the reported high wage share. The number of affected employees in 2012 averaged 46,360. Without the noneconomic reclassification, the high wage share would have increased in 2012 as well.

The currently defined ratio is much more cyclical than the previously defined ratio

In our 2015 report we noted that the ratio of high wage jobs to total jobs in Washington State has been increasing since 2004. The current tabulation, however, shows an increasing trend only since 2011. The reason is that in the data for 2015, specialty trade contractors, which accounts for about 60% of construction employment, is a higher-than-average-wage sector. Previously it was not. The other 40% of construction employment has always been considered high wage. As construction in general waxes and wanes, the two groups of construction employment used to offset each other. Now they do not. The result is a much more cyclical ratio of high wage to total employment.

WA's above average growth can be attributed to IT, construction, and aerospace

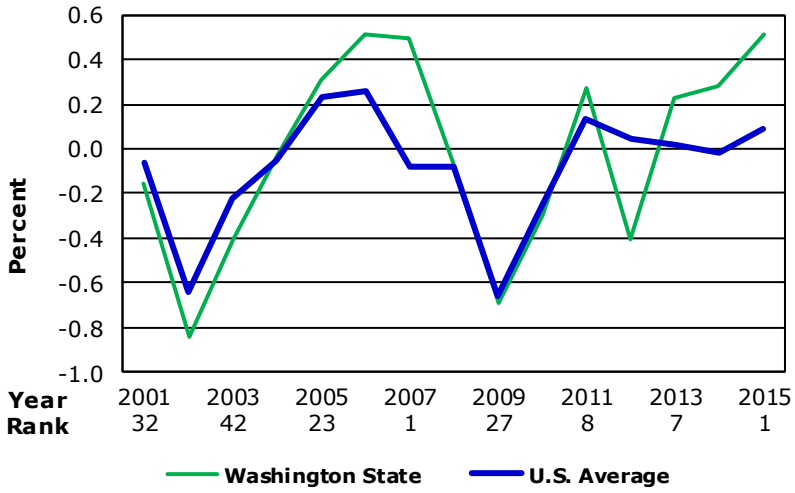
Washington's above average growth in the high wage share can be attributed to information technology, construction, and aerospace. Washington high wage share has risen a total of 0.89 percentage points in the last five years compared to 0.27 for the nation, a difference of 0.62 percentage points. This disparity doubles to 1.24 percentage points when adjusted for the social assistance reclassification. Nonstore retailing was the single

largest contributor to Washington's above average performance. In Washington State, electronic shopping (e.g. Amazon) accounts for 88% of nonstore retail employment. Washington nonstore retail employment increased 156% from 2010 to 2015 compared to 23% for the nation. Publishing industries employment (90% software in Washington), data processing, hosting, and related services employment and "other" information services employment (91% web search portals in Washington), also all grew much faster in Washington than in the U.S. as a whole. Through it is declining now, transportation equipment (89% aerospace in Washington) grew enough in the earlier years to have a positive impact over the five-year span. Finally, Washington has been leading the nation in construction employment growth in the last five years. Together, these industries account for about three-quarters of the difference between the growth of the high wage share in Washington and the high wage share in the nation.

Washington's high wage ratio exceeds the national average

Washington's ratio of high wage jobs to total jobs has exceeded the national average since 2007 (see Figure 2.3). However, it should be noted that, because of the aforementioned social assistance classification issue, the two series are not exactly comparable prior to 2012. If the affected employees had always been classified in social assistance, the Washington ratio would have been lower than shown prior to 2012. In the years that are strictly comparable, the difference between the Washington ratio and the U.S. ratio grew from essentially zero (both were 41.3%) to 1.0% (Washington was 42.3% and the U.S. was 41.4%). Over this period, Washington's rank improved from 20th highest in the nation to 16th.

Figure 2.4: Growth in High Wage Industries' Share of Total Employment



Source: BEA, Washington State Office of the Forecast Council; data through 2015

Washington growth in its share of high-wage jobs ranked 1st in 2015

Washington's rank in the growth of its share of jobs in high wage industries has been improving in recent years (see Table 2.4). The only exception is 2012 when the rank retreated to 49th best from 8th best in 2011. The apparent retreat in 2012 was due to the noneconomic reclassification discussed earlier. In 2015, Washington ranked 1st among the states in terms of the change in the share of jobs in high wage industries, up from 6th in 2014.

Value Added Per Hour of Labor in Manufacturing

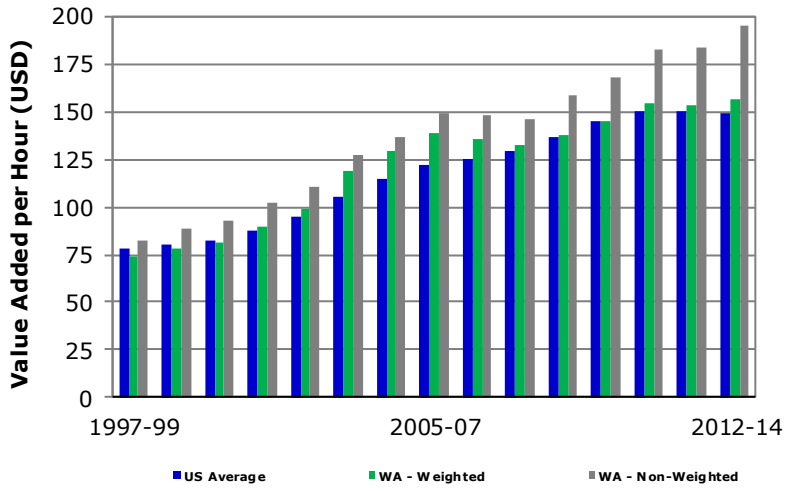
Value added is the difference between raw and final goods value

Value added is a measure of manufacturing activity derived by subtracting the value of raw materials from the value of finished, final goods. An industry's total value added represents the amount of revenue the industry has available to pay wages, rent, taxes, interest, profit, and all other business costs aside from raw materials.

Data is presented in 3 year moving averages

The data used to estimate Value Added Per Hour of Labor of Manufacturing is from the Annual Survey of Manufactures (ASM), published by the Census Bureau. The ASM provides estimates of worker hours and value added for all manufacturing establishments with one or more paid employees. However, because the ASM is a sample survey, its estimates possess varying margins of error. To minimize the effects of these errors, the Table 2.5 figures are presented as three-year moving averages.

Figure 2.5: Value Added Per Hour of Labor in Manufacturing



Source: U.S. Department of Commerce, Census Bureau, Annual Survey of Manufactures; data through 2014

The amount of value added differs greatly across industries

The amount of value added per hour of labor varies greatly among different industries in manufacturing. 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, interstate differences in value added per worker hour may be interpreted as differences in worker productivity between states.

Non-weighted values are unadjusted for industry mix

The differences in value-added across industries makes a state's average value added per worker-hour highly dependent upon its particular industry mix. The "Non-Weighted" values presented in Table 2.5 do not account for different industry concentrations among states. Thus, states with a large percentage of high value added industries, such as semiconductors in New Mexico, perform very well in this measure. Washington also performs well, indicating an industry mix of higher-than-average labor productivity, ranking 5th in the most recent period.

Weighted value added figures assume each state has an identical mix of industries

To minimize the effects of industry mix on estimates of state productivity, the "Weighted" values in Table 2.5 represent value added per worker hour as if each state had an identical mix of industries. In this case, each state's worker hours in all of the 21 major NAICS manufacturing groups were adjusted to be identical in proportion to the national average.

The weighting system is problematic for two reason

This weighting method, however, is still susceptible to error for two main reasons. The first reason is that most states are either completely 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 are 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. 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, New Mexico still performs 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.

Washington ranks well in both the weighted and non-weighted categories

Looking at the weighted measure, Washington's average value added per worker hour is lower due to the neutralization of its industry-mix advantage, but the state still ranked highly (12th) in the most recent period. Washington's weighted value added was slightly greater than the U.S. average. In the "Non-Weighted" category, Washington greatly outperforms the national average. The state's three-year average value added per hour of labor is $194.88, whereas the national value is $149.61. Washington's unweighted value ranks 5th in the nation.

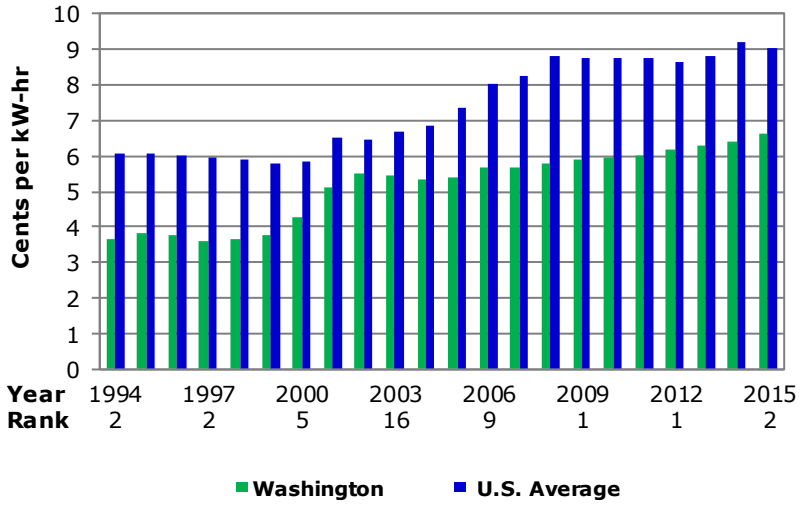
Cost of Doing Business

Electricity Prices

Electrical power represents the main energy cost for most businesses

Electrical power represents the main energy cost for most businesses, except for large industrial facilities relying extensively on fuel oil or natural gas. This indicator presents the average price of the commercial and industrial electricity purchases made annually in each state, expressed in cents per kilowatt-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. in each year.

Figure 2.6: Electricity Prices



Source: U.S. Energy Information Administration (http://www.eia.doe.gov), data through 2015

Washington again ranked 1st in the nation in 2014 with a rate of 6.42 cents per kilowatt hour

Due to the state's abundant hydrological resources, Washington has long enjoyed some of the lowest electricity prices in the country, ranking either 1st or 2nd in lowest electricity prices among the states in the years 1990 through 1999. Drought and problems related to California's energy market, however, caused

electricity prices to soar from late 2000 through 2002. As the effects of the disruptions diminished around 2003, however, Washington's costs began to moderate compared to the rest of the nation. The state again ranked 1st in the nation in 2009 and 2010. Though the state's rank fell slightly to 2nd in 2011 with a rate of 6.04 cents per kilowatt hour, Washington returned to being 1st in the nation from 2012 through 2014 with rates of 6.17, 6.27, and 6.42 cents per kilowatt-hour, respectively. Most recently, in 2015, the cost of electricity rose to 6.61 cents per kilowatt-hour and, subsequently, the state's ranking fell to 2nd. The only state with less expensive electricity costs is Oklahoma, with a rate of 6.58 cents per kilo-watt hour. Washington's 5-year average price of 6.30 cents per kilowatt-hour remains well below the national average of 8.90 cents, ranking 1st overall.

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

Taxes relative to personal income provides a good measure of tax burdens

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 $1,000 of personal income. This measure is computed by dividing total state and local taxes by total state personal income.

WA's tax burden has been below the national average for 13 straight years

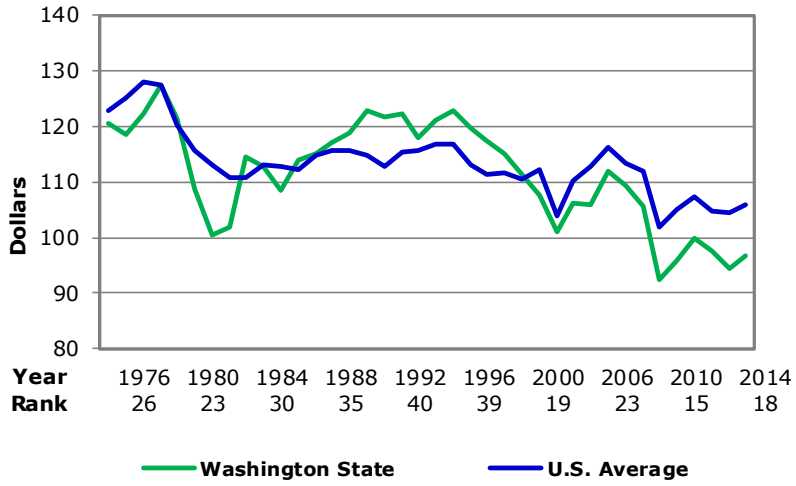
For fiscal year 2014, Washington collected $32.2 billion in state and local tax revenues, which corresponds to a state and local tax burden of $96.61 for each $1,000 of personal income. This was an increase of $2.08 from FY 2013. The state's rank dropped from 15th best to 18th in FY 2014. During this time, the national average increased $1.62 to $106.00 in tax collections per $1,000 of personal income. Washington has now had thirteen straight years where its tax burden is less than the national average. The state's five-year average for this figure was $96.91, ranking 15th in the nation and $8.63 below the national average.

Initial Incidence of State and local Taxes

The WA DOR estimates that households pay 50.4 percent of the tax burden

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 businesses directly pay 45.6 percent of major state and local taxes, government pay 4.0 percent and households pay 50.4 percent.

Figure 2.7: State and Local Tax Collections Per $1,000 Personal Income



Source: U.S. Census; data through 2014

Unemployment Insurance Costs

UI benefits provide security to the iobless

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

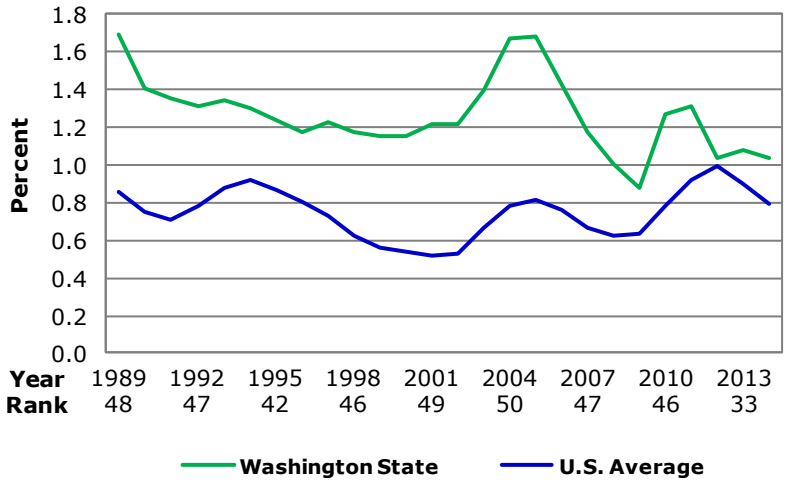
UI is a combined state federal system

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. This measure indicates the amount that each state collects for unemployment insurance benefits as a percent of the total wages of employees covered by the plans.

WA has some of the most generous UI benefits in the country

In 2015, Washington's average unemployment insurance cost as a percent of the total wages of covered employees was 0.97 percent, down from 1.04 percent in 2014. The national average rate for 2014 was lower at 0.72 percent, down from 0.79 the year before. The state's rank in 2015 remained unchanged at 39th lowest in the nation. Washington's five-year average of 1.09 percent ranked 16th highest in the nation due to the state having one of the most generous unemployment insurance programs in the country in terms of benefits, eligibility and duration.

Figure 2.8: Unemployment Insurance Costs



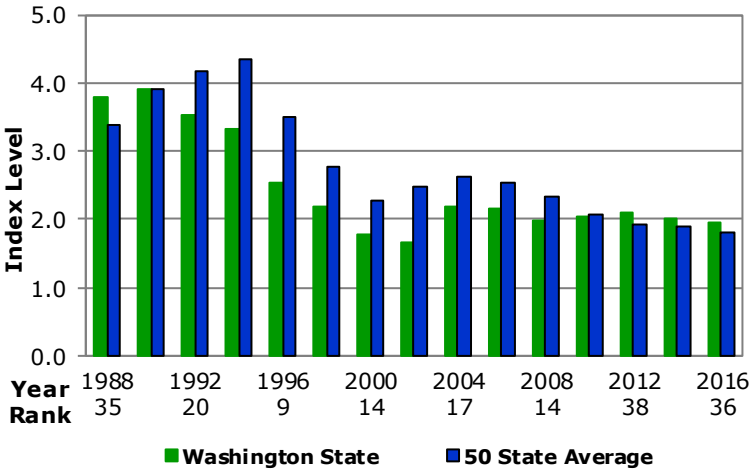
Source: U.S. Department of Labor, Employment, and Training Administration; data through 2015

Workers' Compensation Premium Costs

Index is updated every two years

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.

Figure 2.9: Workers' Compensation Premium Costs



Source: Oregon Workers' Compensation Premium Rate Ranking; data through 2016

Premium costs are determined for every $100 of payroll

In 2016, Washington's premium costs for the industries examined by the study were $1.97 per $100 of payroll, a decrease from $2.00 per $100 of payroll in 2014. The state's rank fell from 34th in 2014 to 36th this past year. Washington's average rate of $2.02 per $100 of payroll for the period from 2008 through 2016 ranked 27th among the states and was slightly above the national average of $2.00.

WA system is atypical of other states'

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.

Table 2.1
Business Performance
Foreign Exports
(Percent of State Personal Income)

	2011	2012	2013	2014	2015	2011-15
Alabama	10.61	11.28	11.04	10.69	10.21	10.76
Alaska	14.40	11.89	11.98	12.84	11.18	12.46
Arizona	7.74	7.63	7.99	8.33	8.49	8.04
Arkansas	5.62	7.11	6.63	6.14	5.04	6.11
California	9.43	8.93	9.09	8.97	8.02	8.89
Colorado	3.23	3.39	3.47	3.20	2.89	3.24
Connecticut	7.55	7.04	7.35	6.84	6.34	7.02
Delaware	13.95	12.46	12.85	12.14	11.98	12.68
Florida	8.39	8.29	7.47	6.87	6.03	7.41
Georgia	9.71	9.75	10.00	10.01	9.30	9.75
Hawaii	1.49	1.18	0.96	2.22	2.77	1.72
Idaho	11.13	11.01	10.07	8.56	6.92	9.54
Illinois	11.39	11.49	11.05	11.15	9.97	11.01
Indiana	13.65	13.85	13.60	13.63	12.46	13.44
Iowa	10.33	10.94	10.28	10.82	9.41	10.36
Kansas	9.55	9.26	9.71	9.22	8.02	9.15
Kentucky	13.31	14.10	16.06	16.82	16.02	15.26
Louisiana	31.20	33.69	33.47	33.15	24.09	31.12
Maine	6.68	5.79	5.11	5.01	4.88	5.49
Maryland	3.59	3.76	3.76	3.78	2.98	3.57
Massachusetts	7.76	6.78	7.07	6.91	6.10	6.92
Michigan	13.85	14.93	15.31	14.24	12.81	14.23
Minnesota	8.57	8.18	8.08	8.00	7.22	8.01
Mississippi	11.49	11.92	12.34	11.14	10.23	11.42
Missouri	6.19	5.78	5.32	5.62	5.24	5.63
Montana	4.32	4.01	3.82	3.78	3.29	3.84
Nebraska	9.40	8.82	8.55	8.79	7.21	8.55
Nevada	7.79	9.44	7.95	6.65	7.10	7.79
New Hampshire	6.81	5.22	5.25	6.04	5.48	5.76
New Jersey	8.06	7.62	7.44	7.10	5.99	7.24
New Mexico	2.92	3.99	3.71	4.91	4.71	4.05
New York	8.44	7.74	8.18	8.09	7.28	7.95
North Carolina	7.66	7.65	7.89	8.06	7.35	7.72
North Dakota	10.34	11.09	11.18	13.36	9.42	11.08
Ohio	10.37	10.48	10.83	10.75	10.13	10.51
Oklahoma	4.21	4.15	4.28	3.73	3.03	3.88
Oregon	12.63	12.07	12.03	12.76	11.60	12.22
Pennsylvania	7.33	6.65	7.00	6.63	6.26	6.77
Rhode Island	4.91	4.88	4.45	4.68	4.02	4.59
South Carolina	15.47	15.00	15.56	16.79	16.61	15.89
South Dakota	4.01	4.17	4.18	4.07	3.61	4.01
Tennessee	12.57	12.33	12.71	12.55	11.74	12.38
Texas	23.73	23.31	23.92	23.15	19.32	22.69
Utah	19.58	18.74	15.19	11.03	11.37	15.18
Vermont	15.97	14.93	14.33	12.61	10.62	13.69
Virginia	4.69	4.52	4.42	4.64	4.15	4.49
Washington	**21.20**	**23.17**	**24.66**	**25.85**	**23.55**	**23.69**
West Virginia	14.24	17.37	13.40	11.36	8.51	12.98
Wisconsin	9.47	9.51	9.42	9.21	8.52	9.22
Wyoming	4.37	4.78	4.47	5.51	3.63	4.55
U.S. Average	10.70	10.62	10.72	10.55	9.36	10.39
Washington's Rank	**3**	**3**	**2**	**2**	**2**	**2**

Source: U.S. Department of Commerce, Bureau of the Census, Foreign Trade Division, Bureau of Economic Analysis
Trade data prepared by World Institute for Strategic Economic Research, 2015

Table 2.2
Business Performance
Foreign Exports (Excluding Transportation Equipment)
(Percent of State Personal Income)

	2011	2012	2013	2014	2015	2011-15
Alabama	7.02	6.72	6.20	5.91	5.28	6.22
Alaska	14.24	11.67	11.84	12.30	11.05	12.22
Arizona	6.55	6.35	6.44	6.87	6.84	6.61
Arkansas	4.85	4.99	4.55	4.43	4.08	4.58
California	8.54	8.16	8.22	8.00	7.15	8.01
Colorado	3.08	3.26	3.28	3.01	2.74	3.07
Connecticut	4.35	3.86	3.77	3.70	3.42	3.82
Delaware	13.05	11.51	11.35	10.94	9.06	11.18
Florida	7.19	7.17	6.46	5.84	5.05	6.34
Georgia	7.29	7.57	7.55	7.44	6.77	7.32
Hawaii	0.85	0.66	0.70	1.48	0.96	0.93
Idaho	10.90	9.80	9.83	8.17	6.70	9.08
Illinois	10.22	10.24	9.74	9.82	8.70	9.74
Indiana	9.64	9.95	9.70	9.57	9.02	9.58
Iowa	9.67	10.23	9.51	10.14	8.83	9.68
Kansas	7.46	7.33	8.06	7.31	6.08	7.25
Kentucky	8.68	8.81	8.89	8.40	7.80	8.52
Louisiana	30.91	33.44	32.79	32.69	23.82	30.73
Maine	5.97	5.13	4.66	4.64	4.32	4.94
Maryland	2.78	2.81	2.73	2.68	2.34	2.67
Massachusetts	7.45	6.50	6.78	6.58	5.80	6.62
Michigan	7.07	7.33	7.72	7.56	6.71	7.28
Minnesota	7.65	7.29	7.09	7.04	6.39	7.09
Mississippi	10.67	10.92	11.23	10.20	9.09	10.42
Missouri	4.73	4.44	4.16	4.29	4.04	4.33
Montana	3.91	3.84	3.64	3.62	3.15	3.63
Nebraska	8.76	8.30	8.09	8.33	6.85	8.07
Nevada	7.60	9.25	7.69	6.49	6.97	7.60
New Hampshire	6.53	5.01	5.05	5.81	5.22	5.53
New Jersey	7.39	7.23	6.99	6.61	5.55	6.75
New Mexico	2.69	3.75	3.43	4.65	4.53	3.81
New York	7.83	7.32	7.75	7.70	6.96	7.51
North Carolina	6.93	6.83	7.07	7.02	6.39	6.85
North Dakota	9.72	10.69	10.82	12.99	9.14	10.67
Ohio	7.27	7.28	7.42	7.48	7.00	7.29
Oklahoma	3.76	3.58	3.68	3.33	2.59	3.39
Oregon	11.99	11.31	11.34	11.78	10.90	11.47
Pennsylvania	6.73	6.10	6.37	5.96	5.58	6.15
Rhode Island	4.63	4.76	4.34	4.50	3.86	4.42
South Carolina	10.25	9.88	9.71	9.99	8.28	9.62
South Dakota	3.69	3.76	3.73	3.64	3.19	3.60
Tennessee	10.28	9.96	10.04	9.65	8.98	9.78
Texas	21.66	21.15	21.97	21.44	17.60	20.76
Utah	18.90	17.96	14.43	10.21	10.68	14.44
Vermont	15.60	14.51	14.01	12.25	10.36	13.35
Virginia	4.17	3.93	4.00	4.18	3.70	4.00
Washington	**12.00**	**11.49**	**11.35**	**11.05**	**8.78**	**10.93**
West Virginia	12.70	15.59	11.50	11.00	8.12	11.78
Wisconsin	8.81	8.77	8.55	8.36	7.69	8.44
Wyoming	4.34	4.75	4.42	5.47	3.60	4.52
U.S. Average	9.05	8.88	8.88	8.69	7.56	8.61
Washington's Rank	**8**	**8**	**8**	**7**	**13**	**9**

Source: U.S. Department of Commerce, Bureau of the Census, Foreign Trade Division, Bureau of Economic Ana
Trade data prepared by World Institute for Strategic Economic Research, 2015

Table 2.3
Business Performance
High Wage Industries' Share of Total Employment
(Percent)

	2011	2012	2013	2014	2015	2011-15
Alabama	39.3	39.3	39.4	39.1	39.0	39.2
Alaska	37.6	37.7	37.8	37.9	38.2	37.8
Arizona	41.1	41.1	41.2	41.0	41.0	41.1
Arkansas	36.7	37.0	36.5	36.3	36.2	36.5
California	41.1	40.5	40.3	40.1	40.2	40.4
Colorado	42.0	42.1	42.2	42.5	42.6	42.3
Connecticut	43.6	43.3	43.1	42.8	42.8	43.1
Delaware	41.9	41.6	41.3	40.9	40.9	41.3
Florida	39.4	39.5	39.7	39.8	40.0	39.7
Georgia	39.8	40.0	40.1	40.3	40.5	40.1
Hawaii	31.2	31.1	31.1	30.9	31.2	31.1
Idaho	36.9	36.9	37.0	37.1	37.4	37.1
Illinois	42.7	42.9	42.8	42.7	42.8	42.8
Indiana	41.2	41.6	41.7	41.5	41.7	41.5
Iowa	37.3	37.7	37.7	38.2	38.1	37.8
Kansas	39.1	39.2	39.4	39.4	39.6	39.3
Kentucky	39.1	39.4	39.3	39.3	39.4	39.3
Louisiana	40.6	41.1	41.5	42.0	41.6	41.3
Maine	38.2	38.3	38.1	38.0	38.2	38.2
Maryland	44.5	44.3	44.2	43.9	43.9	44.2
Massachusetts	44.4	44.0	44.0	43.9	44.2	44.1
Michigan	42.9	43.5	43.8	44.1	44.3	43.7
Minnesota	42.3	42.6	42.8	42.9	43.1	42.8
Mississippi	32.8	32.8	32.9	32.5	32.1	32.6
Missouri	41.0	41.1	41.1	41.2	41.2	41.1
Montana	37.2	37.3	37.6	37.5	37.6	37.5
Nebraska	39.4	39.4	39.5	39.5	39.5	39.5
Nevada	31.7	31.8	32.0	32.0	32.3	32.0
New Hampshire	41.2	41.0	41.0	40.8	41.0	41.0
New Jersey	42.7	42.5	42.6	42.4	42.7	42.6
New Mexico	38.4	38.3	38.2	38.2	38.0	38.2
New York	42.3	42.3	42.3	42.4	42.6	42.4
North Carolina	37.4	37.5	37.4	37.5	37.8	37.5
North Dakota	41.7	43.1	43.6	44.2	43.7	43.3
Ohio	43.2	43.4	43.5	43.6	43.6	43.5
Oklahoma	40.4	40.9	40.8	40.9	40.4	40.7
Oregon	38.6	38.8	38.9	38.9	39.1	38.8
Pennsylvania	42.4	42.6	42.5	42.5	42.4	42.5
Rhode Island	41.5	41.7	41.6	41.5	41.6	41.6
South Carolina	35.7	35.7	35.7	35.6	35.7	35.7
South Dakota	39.7	40.0	40.4	40.5	40.7	40.3
Tennessee	39.5	39.6	39.5	39.6	39.9	39.6
Texas	43.8	44.2	44.4	44.5	44.3	44.2
Utah	42.7	42.9	43.1	43.2	43.4	43.1
Vermont	38.0	37.7	37.5	37.3	37.3	37.6
Virginia	43.1	43.1	43.0	42.7	42.6	42.9
Washington	**41.7**	**41.3**	**41.6**	**41.8**	**42.3**	**41.8**
West Virginia	41.5	41.7	41.3	41.0	40.5	41.2
Wisconsin	41.1	41.3	41.1	41.1	41.4	41.2
Wyoming	40.1	40.0	39.6	40.2	39.2	39.8
U.S. Average	41.3	41.3	41.3	41.3	41.4	41.3
Washington's Rank	**16**	**20**	**18**	**17**	**16**	**16**

Source: Washington State Office of the Forecast Council based on employment and personal income data provided by the U.S. Department of Commerce, Bureau of Economic Analysis, 2015.

Table 2.4
Business Performance
Change in High Wage Industries' Share of Total Employment
(Percent)

	2011	2012	2013	2014	2015	2011-15
Alabama	-0.2	0.1	0.0	-0.3	-0.1	-0.1
Alaska	-0.2	0.2	0.1	0.1	0.3	0.1
Arizona	0.0	0.0	0.1	-0.2	0.0	0.0
Arkansas	-0.1	0.2	-0.4	-0.2	-0.1	-0.1
California	0.2	-0.6	-0.2	-0.2	0.2	-0.1
Colorado	0.0	0.1	0.1	0.3	0.1	0.1
Connecticut	0.0	-0.3	-0.2	-0.3	0.0	-0.2
Delaware	0.0	-0.3	-0.3	-0.4	-0.1	-0.2
Florida	-0.1	0.1	0.2	0.1	0.3	0.1
Georgia	0.1	0.2	0.1	0.2	0.2	0.2
Hawaii	-0.5	-0.1	0.0	-0.1	0.3	-0.1
Idaho	-0.1	0.0	0.1	0.1	0.3	0.1
Illinois	0.0	0.2	0.0	-0.1	0.1	0.0
Indiana	0.2	0.4	0.1	-0.1	0.2	0.1
Iowa	0.2	0.3	0.0	0.5	-0.1	0.2
Kansas	-0.2	0.1	0.2	0.0	0.2	0.1
Kentucky	0.0	0.2	-0.1	0.0	0.1	0.0
Louisiana	0.2	0.4	0.4	0.6	-0.5	0.2
Maine	-0.1	0.1	-0.1	-0.2	0.3	0.0
Maryland	0.1	-0.2	-0.2	-0.3	0.1	-0.1
Massachusetts	0.0	-0.4	0.0	-0.1	0.3	0.0
Michigan	0.5	0.6	0.4	0.3	0.2	0.4
Minnesota	0.3	0.2	0.2	0.1	0.2	0.2
Mississippi	0.1	0.0	0.1	-0.4	-0.3	-0.1
Missouri	0.1	0.1	0.1	0.1	0.0	0.1
Montana	0.0	0.0	0.3	-0.1	0.1	0.1
Nebraska	0.1	0.0	0.0	0.0	0.0	0.0
Nevada	-0.7	0.1	0.2	0.0	0.3	0.0
New Hampshire	0.2	-0.1	0.0	-0.2	0.2	0.0
New Jersey	0.0	-0.2	0.1	-0.2	0.3	0.0
New Mexico	-0.1	0.0	-0.1	-0.1	-0.1	-0.1
New York	0.2	0.0	0.0	0.0	0.2	0.1
North Carolina	0.0	0.1	-0.1	0.1	0.3	0.1
North Dakota	1.2	1.4	0.5	0.6	-0.5	0.6
Ohio	0.4	0.2	0.1	0.1	0.0	0.2
Oklahoma	0.8	0.5	-0.1	0.1	-0.5	0.1
Oregon	0.2	0.2	0.1	0.0	0.2	0.1
Pennsylvania	0.2	0.2	-0.1	-0.1	0.0	0.0
Rhode Island	-0.1	0.2	-0.1	-0.1	0.1	0.0
South Carolina	0.2	0.0	0.0	-0.1	0.1	0.0
South Dakota	0.2	0.3	0.4	0.1	0.3	0.2
Tennessee	0.0	0.1	-0.1	0.0	0.3	0.1
Texas	0.3	0.5	0.1	0.1	-0.1	0.2
Utah	0.0	0.3	0.2	0.0	0.2	0.2
Vermont	-0.2	-0.3	-0.2	-0.2	0.0	-0.2
Virginia	0.0	-0.1	-0.1	-0.3	-0.1	-0.1
Washington	**0.3**	**-0.4**	**0.2**	**0.3**	**0.5**	**0.2**
West Virginia	0.5	0.1	-0.4	-0.3	-0.5	-0.1
Wisconsin	0.2	0.2	-0.2	0.0	0.3	0.1
Wyoming	0.0	-0.1	-0.3	0.5	-0.9	-0.2
U.S. Average	0.1	0.0	0.0	0.0	0.1	0.1
Washington's Rank	**8**	**49**	**7**	**6**	**1**	**7**

Source: Washington State Office of the Forecast Council based on employment and personal income data provided by the U.S. Department of Commerce, Bureau of Economic Analysis, 2015.

Table 2.5
Business Performance
Value Added per Hour of Labor in Manufacturing
(Three Year Average, Dollars)

	Weighted 2010-12	Weighted 2011-13	Weighted 2012-14	Non-Weighted 2010-12	Non-Weighted 2011-13	Non-Weighted 2012-14
Alabama	126.64	129.65	127.11	127.10	130.77	129.54
Alaska	192.29	121.17	86.42	95.24	80.78	80.91
Arizona	185.14	178.22	172.38	185.82	179.48	174.22
Arkansas	103.75	105.92	107.48	97.62	100.53	101.97
California	159.46	159.60	160.57	165.69	166.61	167.18
Colorado	143.74	142.40	138.48	154.68	157.50	161.94
Connecticut	155.34	160.86	166.37	162.16	166.51	168.79
Delaware	148.84	148.67	149.02	179.22	174.47	167.46
Florida	126.31	128.59	129.12	135.38	138.07	138.77
Georgia	136.09	134.26	130.93	126.40	126.92	125.75
Hawaii	98.60	82.86	60.50	100.19	92.89	80.37
Idaho	159.80	135.75	108.14	148.16	130.82	114.09
Illinois	144.89	145.18	141.92	147.46	147.47	143.95
Indiana	161.11	160.61	160.17	150.07	145.98	145.16
Iowa	144.60	147.29	151.44	144.44	144.84	149.93
Kansas	133.88	131.91	128.77	141.56	139.15	137.71
Kentucky	124.73	125.13	126.46	126.83	127.56	130.95
Louisiana	174.46	172.07	162.64	327.98	318.34	293.14
Maine	113.24	110.56	109.13	115.70	113.73	112.19
Maryland	161.00	161.79	165.13	178.17	180.21	179.54
Massachusetts	141.64	140.84	141.81	164.38	166.05	166.46
Michigan	128.93	129.36	130.31	125.63	122.55	122.72
Minnesota	142.34	144.32	143.29	136.47	139.78	140.86
Mississippi	122.71	119.58	117.33	108.94	107.94	108.78
Missouri	137.83	138.55	140.61	137.50	139.04	142.95
Montana	155.16	141.41	124.84	155.70	157.01	143.25
Nebraska	133.53	140.18	141.16	131.07	136.92	139.69
Nevada	136.31	136.00	137.31	150.62	156.94	160.08
New Hampshire	125.76	129.26	132.24	123.70	128.22	129.22
New Jersey	128.05	127.43	132.95	155.57	153.84	159.17
New Mexico	518.86	434.54	269.21	464.82	398.11	261.39
New York	133.88	130.08	131.97	142.65	137.08	136.48
North Carolina	162.62	164.92	165.09	169.93	173.29	172.40
North Dakota	133.46	157.58	180.76	132.99	143.92	148.88
Ohio	138.15	141.66	144.95	132.53	134.78	136.95
Oklahoma	128.82	129.63	130.72	122.68	125.09	126.25
Oregon	156.91	135.74	116.05	174.00	147.75	122.25
Pennsylvania	136.78	138.10	141.09	134.15	134.88	136.33
Rhode Island	107.16	109.87	113.05	115.79	118.30	119.97
South Carolina	122.15	123.55	127.13	125.81	125.88	127.61
South Dakota	103.92	104.59	106.49	104.54	105.25	109.30
Tennessee	132.30	136.80	140.55	133.41	138.40	142.47
Texas	175.16	180.12	179.78	206.72	213.40	206.84
Utah	178.06	161.85	147.88	188.69	172.37	154.20
Vermont	114.41	111.70	99.41	127.31	117.35	105.21
Virginia	150.05	151.75	153.46	173.26	174.85	176.32
Washington	**154.10**	**153.88**	**156.85**	**183.07**	**183.23**	**194.88**
West Virginia	116.53	121.69	122.85	137.63	146.17	151.72
Wisconsin	148.93	167.46	181.21	122.70	128.62	133.07
Wyoming	151.39	126.94	105.13	261.81	242.97	198.83
U.S.	149.98	150.31	149.61	149.98	150.31	149.61
WA Rank	**15**	**13**	**12**	**7**	**5**	**5**

Source: U.S. Department of Commerce, Census Bureau, Annual Survey of Manufactures (data), Economic and Revenue Forecast Council (calculations), 2016

Table 2.6
Business Performance
Electricity Prices
(Weighted Average of Industrial and Commercial Rates, Cents per Kilowatt Hour)

	2011	2012	2013	2014	2015	2011-15
Alabama	8.67	8.75	8.58	8.82	8.92	8.75
Alaska	15.36	15.74	15.69	16.48	16.59	15.97
Arizona	8.24	8.25	8.50	8.57	8.73	8.46
Arkansas	6.70	6.88	7.20	7.19	7.38	7.07
California	11.79	12.17	13.03	14.23	14.36	13.11
Colorado	8.42	8.35	8.79	8.97	8.69	8.64
Connecticut	14.57	13.81	13.77	14.43	14.72	14.26
Delaware	9.90	9.38	9.45	9.68	9.45	9.57
Florida	9.29	8.97	8.63	9.03	9.09	9.00
Georgia	8.47	8.05	8.41	8.78	8.09	8.36
Hawaii	30.67	33.15	32.28	32.52	25.32	30.79
Idaho	5.85	6.27	6.83	7.19	7.32	6.69
Illinois	7.69	7.06	7.21	8.24	7.85	7.61
Indiana	7.66	7.95	8.37	8.69	8.36	8.21
Iowa	6.72	6.86	7.24	7.41	7.77	7.20
Kansas*	7.90	8.32	8.71	9.14	8.91	8.59
Kentucky	7.14	7.29	7.33	7.84	7.70	7.46
Louisiana	7.26	6.48	7.67	7.81	7.26	7.30
Maine	10.83	10.02	10.30	11.11	11.46	10.74
Maryland	10.20	9.43	9.70	10.25	10.05	9.93
Massachusetts	13.92	13.30	13.78	13.86	14.70	13.91
Michigan	9.04	9.52	9.64	9.52	9.17	9.38
Minnesota	7.71	7.86	8.38	8.52	8.53	8.20
Mississippi	8.22	8.01	8.50	8.99	8.96	8.54
Missouri	7.10	7.22	7.74	7.82	7.86	7.55
Montana	7.47	7.41	7.80	7.88	8.14	7.74
Nebraska	7.32	7.80	8.11	8.20	8.34	7.95
Nevada	8.02	7.83	7.95	8.47	8.21	8.10
New Hampshire	13.28	12.71	12.62	13.32	14.05	13.20
New Jersey	12.60	11.82	11.93	12.40	12.12	12.17
New Mexico	7.78	7.83	8.31	8.72	8.68	8.26
New York	12.40	11.50	11.63	12.07	11.55	11.83
North Carolina	7.22	7.71	7.78	7.79	7.75	7.65
North Dakota	7.02	7.39	7.86	8.29	8.57	7.83
Ohio	8.13	8.09	8.02	8.53	8.69	8.29
Oklahoma	6.69	6.37	6.80	7.14	6.58	6.72
Oregon	7.00	7.15	7.46	7.57	7.67	7.37
Pennsylvania	9.05	8.50	8.28	8.75	8.63	8.64
Rhode Island	11.90	11.36	12.45	13.84	15.03	12.92
South Carolina	7.86	8.09	8.24	8.59	8.41	8.24
South Dakota	7.09	7.45	7.86	8.08	8.23	7.74
Tennessee	8.97	8.93	8.43	8.69	8.59	8.72
Texas	7.72	7.06	7.08	7.31	6.88	7.21
Utah	6.39	7.02	7.28	7.49	7.69	7.17
Vermont	12.22	12.47	13.04	12.72	12.70	12.63
Virginia	7.33	7.50	7.42	7.62	7.71	7.51
Washington	**6.04**	**6.17**	**6.27**	**6.42**	**6.61**	**6.30**
West Virginia	7.30	7.53	7.33	7.09	7.58	7.37
Wisconsin	9.10	9.16	9.32	9.39	9.68	9.33
Wyoming	6.73	7.30	7.66	7.92	8.13	7.55
U.S. Average	8.78	8.63	8.83	9.19	9.06	8.90
Washington's Rank	**2**	**1**	**1**	**1**	**2**	**1**

Source: U.S. Energy Information Administration (http://www.eia.gov/electricity/data/browser/), 2016

Table 2.7
Business Performance
State and Local Tax Collections Per $1,000 Personal Income
(Dollars)

(Fiscal Years)	2010	2011	2012	2013	2014	2010-2014
Alabama	85.43	86.06	85.71	85.20	84.19	85.32
Alaska	188.43	210.08	233.72	176.63	146.86	191.15
Arizona	91.72	100.70	98.03	97.49	92.95	96.18
Arkansas	104.46	107.09	104.70	100.94	104.66	104.37
California	110.61	114.53	106.33	110.80	113.52	111.16
Colorado	103.48	108.11	96.03	96.19	94.79	99.72
Connecticut	99.49	102.35	108.92	111.24	112.99	107.00
Delaware	97.17	110.14	104.04	106.42	101.68	103.89
Florida	95.23	89.63	84.68	82.10	82.78	86.89
Georgia	91.09	92.52	89.81	90.80	91.86	91.22
Hawaii	118.16	115.50	126.08	130.07	129.06	123.77
Idaho	88.82	94.53	92.00	92.37	91.84	91.91
Illinois	102.37	111.22	118.23	118.00	117.88	113.54
Indiana	105.99	101.68	101.01	97.92	96.15	100.55
Iowa	105.44	109.27	108.30	104.89	103.01	106.18
Kansas	102.79	104.89	102.51	99.24	95.76	101.04
Kentucky	98.73	101.36	99.75	98.57	101.65	100.01
Louisiana	99.11	98.19	97.13	94.35	97.44	97.24
Maine	118.83	121.50	118.69	119.07	121.28	119.87
Maryland	100.27	100.57	102.20	102.79	107.15	102.60
Massachusetts	99.90	102.90	101.49	101.98	105.92	102.44
Michigan	106.17	103.82	98.09	97.30	96.41	100.36
Minnesota	113.23	119.90	117.81	121.45	120.22	118.52
Mississippi	101.75	102.08	102.69	104.09	105.18	103.16
Missouri	87.37	89.18	88.95	86.42	87.45	87.87
Montana	95.32	97.78	96.07	96.27	98.04	96.70
Nebraska	103.64	105.20	98.60	101.72	107.15	103.26
Nevada	104.06	102.62	102.55	100.03	101.36	102.12
New Hampshire	83.38	85.54	80.84	80.44	84.19	82.88
New Jersey	115.41	117.62	113.76	114.68	116.67	115.63
New Mexico	98.85	106.05	105.23	102.71	114.18	105.40
New York	150.41	154.92	153.06	150.32	154.91	152.72
North Carolina	96.58	99.82	97.87	94.08	96.76	97.02
North Dakota	130.34	159.91	154.24	161.57	178.98	157.01
Ohio	105.73	107.55	104.51	105.12	103.64	105.31
Oklahoma	87.81	88.96	91.10	85.35	84.12	87.47
Oregon	97.32	103.01	102.37	100.62	104.94	101.65
Pennsylvania	102.25	104.45	101.66	100.56	102.15	102.22
Rhode Island	111.54	112.84	112.98	111.03	111.83	112.05
South Carolina	90.63	92.18	90.52	90.66	92.41	91.28
South Dakota	81.00	80.52	78.71	78.82	83.35	80.48
Tennessee	83.53	84.18	80.96	80.51	80.30	81.89
Texas	95.05	94.90	93.35	91.45	94.98	93.95
Utah	96.64	103.00	101.18	100.83	98.55	100.04
Vermont	117.54	122.60	117.97	117.99	121.47	119.52
Virginia	88.93	88.36	86.31	86.01	87.38	87.40
Washington	**95.96**	**99.85**	**97.60**	**94.53**	**96.61**	**96.91**
West Virginia	111.49	117.26	111.97	111.65	113.92	113.26
Wisconsin	113.18	116.59	109.56	108.52	107.58	111.09
Wyoming	142.72	143.17	128.32	112.00	113.05	127.85
U.S. Average	105.11	107.42	104.81	104.38	106.00	105.54
Washington's Rank	**15**	**16**	**16**	**15**	**18**	**15**

Source: Washington State Department of Revenue, Comparative State and Local Taxes (www.dor.wa.gov), 2014

Table 2.8
Business Performance
Unemployment Insurance Costs
(Contributions collected as percent of total wages of covered employees)

	2011	2012	2013	2014	2015	2011-15
Alabama	0.92	0.75	0.67	0.54	0.48	0.67
Alaska	1.32	1.64	1.86	1.49	1.20	1.50
Arizona	0.44	0.46	0.47	0.46	0.45	0.46
Arkansas	1.14	1.11	1.01	0.95	0.89	1.02
California	0.86	0.87	0.85	0.78	0.73	0.82
Colorado	0.83	0.87	0.71	0.68	0.60	0.74
Connecticut	0.97	1.01	1.00	0.93	0.90	0.96
Delaware	0.63	0.72	0.78	0.77	0.70	0.72
Florida	0.70	0.88	0.78	0.63	0.42	0.68
Georgia	0.53	0.57	0.58	0.54	0.48	0.54
Hawaii	1.67	1.77	2.16	1.40	1.00	1.60
Idaho	1.63	1.86	1.59	0.96	0.72	1.35
Illinois	1.17	1.37	1.21	0.99	0.88	1.12
Indiana	0.80	0.80	0.77	0.72	0.64	0.75
Iowa	1.45	1.31	1.15	0.89	0.70	1.10
Kansas	0.84	0.83	0.81	0.73	0.85	0.81
Kentucky	0.86	0.91	0.90	0.88	0.86	0.88
Louisiana	0.37	0.35	0.36	0.32	0.31	0.34
Maine	1.03	1.04	1.04	0.87	0.84	0.96
Maryland	1.05	1.11	0.83	0.59	0.60	0.84
Massachusetts	1.19	1.15	1.10	1.02	0.73	1.04
Michigan	1.21	1.25	1.17	0.95	0.83	1.08
Minnesota	1.24	1.32	1.35	0.94	0.73	1.12
Mississippi	0.90	0.92	0.72	0.57	0.49	0.72
Missouri	0.76	0.74	0.71	0.67	0.61	0.70
Montana	1.22	1.23	1.19	1.10	0.91	1.13
Nebraska	0.69	0.65	0.46	0.38	0.32	0.50
Nevada	0.73	1.26	2.63	1.11	1.13	1.37
New Hampshire	0.85	0.93	0.69	0.47	0.26	0.64
New Jersey	1.01	1.56	1.57	1.46	1.34	1.39
New Mexico	0.90	0.86	0.87	0.82	1.30	0.95
New York	1.49	0.70	0.69	0.76	0.72	0.87
North Carolina	0.83	0.91	0.86	0.88	0.98	0.89
North Dakota	0.71	0.69	0.66	0.67	0.63	0.67
Ohio	0.88	0.80	0.65	0.62	0.58	0.71
Oklahoma	0.89	1.08	1.01	0.65	0.39	0.80
Oregon	1.77	1.75	1.78	1.62	1.46	1.68
Pennsylvania	1.46	2.92	1.49	1.33	1.30	1.70
Rhode Island	1.57	1.69	1.58	1.52	1.48	1.57
South Carolina	0.95	0.72	0.78	0.79	0.68	0.78
South Dakota	0.48	0.43	0.39	0.37	0.30	0.39
Tennessee	0.82	0.77	0.62	0.36	0.32	0.58
Texas	0.58	0.58	0.53	0.44	0.41	0.51
Utah	0.82	0.87	0.86	0.73	0.55	0.77
Vermont	1.35	1.58	1.60	1.54	1.51	1.52
Virginia	0.48	0.53	0.53	0.49	0.42	0.49
Washington	**1.31**	**1.04**	**1.08**	**1.04**	**0.97**	**1.09**
West Virginia	1.09	1.08	1.02	0.99	0.96	1.03
Wisconsin	1.36	1.38	1.32	1.19	1.07	1.26
Wyoming	1.34	1.47	1.42	1.15	0.73	1.22
U.S. Average	0.92	1.00	0.90	0.79	0.72	0.87
Washington's Rank	**39**	**28**	**33**	**39**	**39**	**35**

Source: U.S. Department of Labor, Employment, and Training Administration, 2015

Table 2.9
Business Performance
Workers' Compensation Premium Costs
(Dollar amount per $100 of payroll)

	2008	2010	2012	2014	2016	2008-2016
Alabama	2.90	2.45	1.97	1.81	1.85	2.20
Alaska	3.97	3.10	3.01	2.68	2.74	3.10
Arizona	1.67	1.71	1.61	1.60	1.50	1.62
Arkansas	1.61	1.18	1.19	1.08	1.06	1.22
California	2.72	2.68	2.92	3.48	3.24	3.01
Colorado	1.76	1.39	1.42	1.50	1.56	1.53
Connecticut	2.46	2.55	2.99	2.87	2.74	2.72
Delaware	2.96	1.85	1.77	2.31	2.32	2.24
Florida	2.20	1.70	1.82	1.82	1.66	1.84
Georgia	2.29	2.08	1.88	1.75	1.80	1.96
Hawaii	2.08	1.70	1.66	1.85	1.96	1.85
Idaho	2.12	1.98	2.02	2.01	1.79	1.98
Illinois	2.79	3.05	2.83	2.35	2.23	2.65
Indiana	1.23	1.16	1.16	1.06	1.05	1.13
Iowa	1.86	1.82	1.90	1.88	1.86	1.86
Kansas	1.77	1.55	1.54	1.55	1.41	1.56
Kentucky	2.96	2.29	1.96	1.51	1.52	2.05
Louisiana	2.76	2.06	2.06	2.23	2.11	2.24
Maine	3.04	2.52	2.24	2.15	2.02	2.39
Maryland	1.72	1.63	1.68	1.64	1.50	1.63
Massachusetts	1.39	1.54	1.37	1.17	1.29	1.35
Michigan	2.15	2.12	1.73	1.68	1.57	1.85
Minnesota	2.33	2.27	2.03	1.99	1.91	2.11
Mississippi	2.33	1.96	1.49	1.59	1.70	1.81
Missouri	2.20	1.90	1.62	1.98	1.92	1.92
Montana	3.50	3.33	2.50	2.21	2.10	2.73
Nebraska	2.15	1.97	1.71	1.78	1.67	1.86
Nevada	2.58	2.13	1.33	1.26	1.31	1.72
New Hampshire	2.70	2.45	2.40	2.18	1.96	2.34
New Jersey	2.66	2.53	2.74	2.82	2.92	2.73
New Mexico	2.15	1.91	1.88	1.99	1.92	1.97
New York	2.55	2.34	2.82	2.75	2.83	2.66
North Carolina	2.43	2.12	1.90	1.85	1.91	2.04
North Dakota	1.08	1.02	1.01	0.88	0.89	0.98
Ohio	3.32	2.24	1.84	1.74	1.45	2.12
Oklahoma	2.89	2.87	2.77	2.55	2.23	2.66
Oregon	1.88	1.69	1.58	1.37	1.28	1.56
Pennsylvania	2.68	2.32	2.15	2.00	1.84	2.20
Rhode Island	2.26	2.02	1.99	1.99	2.20	2.09
South Carolina	2.74	2.38	2.04	2.00	1.94	2.22
South Dakota	2.08	2.02	1.91	1.86	1.67	1.91
Tennessee	2.44	2.19	2.02	1.95	1.68	2.06
Texas	2.61	2.38	1.60	1.61	1.45	1.93
Utah	1.63	1.46	1.35	1.31	1.27	1.40
Vermont	3.14	2.22	2.07	2.33	2.02	2.36
Virginia	1.43	1.39	1.20	1.17	1.24	1.29
Washington	**1.98**	**2.04**	**2.11**	**2.00**	**1.97**	**2.02**
West Virginia	1.86	1.84	1.55	1.37	1.22	1.57
Wisconsin	2.12	2.21	2.15	1.92	2.06	2.09
Wyoming	2.06	1.79	1.74	1.76	1.87	1.84
50 State Average*	2.32	2.06	1.92	1.88	1.82	2.00
Washington's Rank	**14**	**25**	**38**	**34**	**36**	**27**

Source: Oregon Workers' Compensation Premium Rate Rankings, 2016
Research and Analysis Section of the Oregon Department of Consumer and Business Services.
*Unweighted average of state values

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Chapter 3: Economic Growth and Competitiveness – Summary

- ***Economic Growth and Competitiveness*** **fell the most of any category relative to other states in this year's study.**
- **Washington's rank declined from 19th to 22nd best in the nation.**
- **One new indicator was added in this category, Income Spent on Rent. In addition, one indicator was changed: the Housing Opportunity Index is now the Housing Affordability Index**
- **The state's rank improved in four indicators, worsened in four, and was unchanged in three. Washington's performance compared to last year improved in seven indicators and worsened in three.**

Per Capita Personal Income

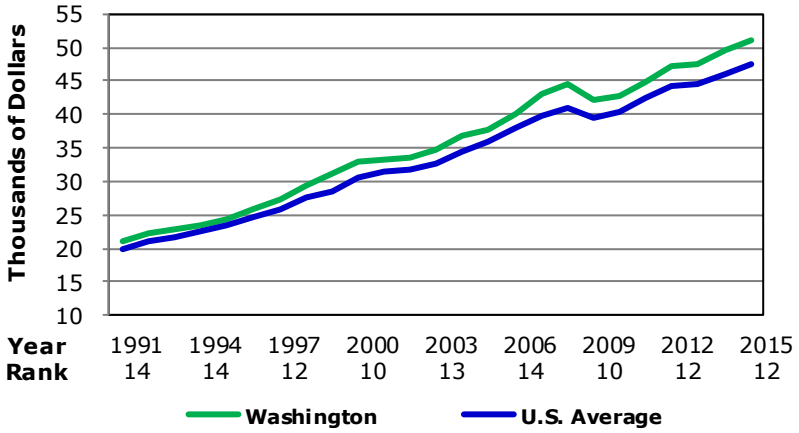
Washington's rank remained at 12th in per capita income

Personal income, as defined by the Bureau of Economic Analysis, is the sum of earnings, dividends, interest, rent, and transfer payments. The per capita personal income indicator is calculated by dividing the total personal income of a state by its population. Washington's per capita personal income in 2015 was $51,146, which represents a 3.1 percent increase from the state's per capita personal income of $49,610 in 2014. The state's 2015 figure is also higher than the national average of $47,669. The state's ranking remained at 12th for the fourth consecutive year. Washington's five-year average per capita personal income of $48,074 was $3,099 higher than the national average of $44,975, ranking 12th among the states.

Most of Washington's personal income derives from earnings

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 2015, net earnings by place of residence for Washington residents totaled $234.1 billion, which accounted for 63.8 percent of total personal income. Income from transfer payments was $57.6 billion, and income from dividends, interest, and rent was $75.2 billion, representing 15.7 and 20.5 percent of total personal income, respectively.

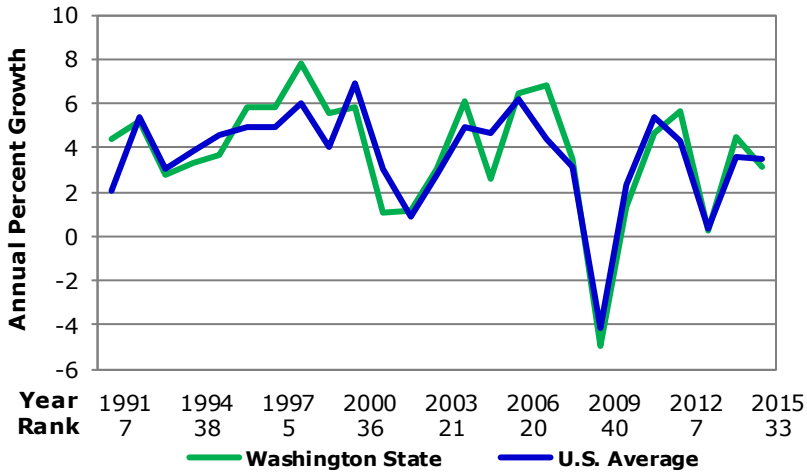
Figure 3.1: Per Capita Personal Income



Source: Bureau of Economic Analysis, U.S. Department of Commerce; data through 2015

Per Capita Personal Income Growth Rate

Figure 3.2: Per Capita Personal Income Growth Rate



Source: Bureau of Economic Analysis, U.S. Department of Commerce; data through 2015

WA per capita personal income grew by 3.1 percent in 2015

The per capita personal income growth rate describes how quickly personal income is growing for a given population, and this growth rate is affected by the growth rate of the components of total personal income and the growth rate of the population. Washington's per capita personal income growth rate fell to 3.1 percent in 2015, down from 4.5 in 2014. The decrease had a large impact on Washington's ranking. In 2015, the state ranked 33rd – far below the state's 2014 ranking of 7th in the nation.

However, Washington's five-year average per capita personal income growth rate of 3.6 percent is above the national average of 3.4 percent and the state ranks 15th overall.

Regional Price Parities – Relative Value of $100

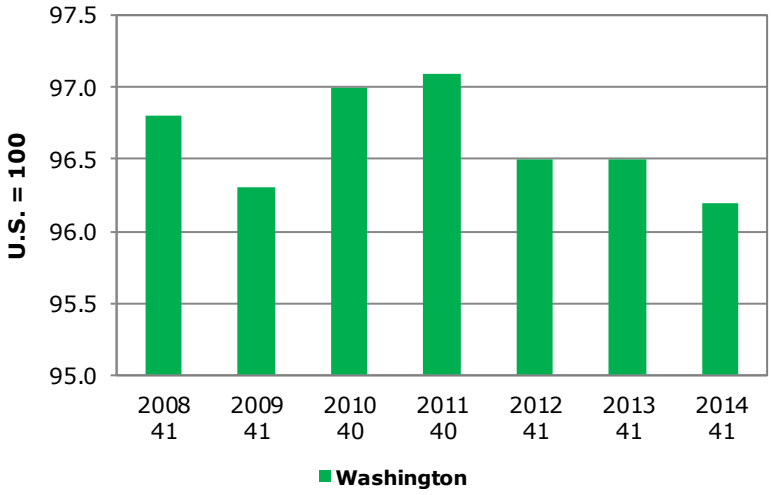
RPPs measure geographic differences in price levels

Regional Price Parities (RPPs), published by the Bureau of Economic Analysis, measure geographic differences in the price levels of goods and services. RPPs are weighted averages. To simplify comparisons, this indicator uses the United States as a base of 100. We then compare states in terms of relative value of $100. For example, if a state's value is 95, $100 only buys $95 worth of goods and services in that state compared to the nation. In other words, prices in that state are on average about 5% higher than the U.S. average (5.3% to be more exact). States with a lower relative RPP value have higher price levels.

Washington has never been ranked higher than 40th

In 2015, Washington ranked 41st for the third consecutive year. The state's relative value of $100 for 2015 was $96.30. This meant that prices in Washington are 3.8% higher than the nation's average prices. The state's five-year average also ranked 41st, with a relative value of 96.8. In the short time that Regional Price Parities have been calculated, Washington has never been ranked better than 40th.

Figure 3.3: Washington Regional Price Parity



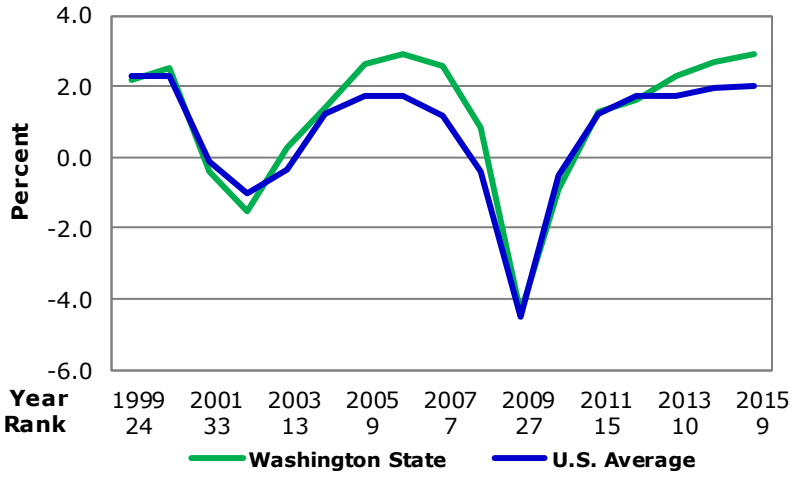
Source: Bureau of Economic Analysis, U.S. Department of Commerce, data through 2014

Total Employment Growth Rate

In 2015 Washington's job growth was 2.9%, ranking 9th in the nation

With the onset of the 2007-09 recession, employment dropped across the United States and the U.S. average annual employment growth rate fell to -0.4 percent in 2008. Despite the nation-wide recession, Washington still had positive employment growth for the year at 0.9 percent, ranking the state 8th in the nation. In 2009, as the recession continued, U.S. average annual employment growth fell to -4.5 percent, the lowest since the Great Depression. Washington suffered along with the nation as annual employment declined 4.3 percent. When the national labor market started to turn a corner, Washington lagged in job growth. In 2010, the state's employment decline was twice that of the national average pushing Washington's ranking to 12th worst in the nation. Since 2010, Washington has rebounded, with an annual employment growth of 1.3 percent in 2011 and 1.6 percent in 2012. In 2013, Washington's job growth was 2.3 percent, causing Washington's rank to jump to 10th in the nation. Job growth increased to 2.7 percent in 2014 and the state's rank held steady at 10th in the nation. The total employment growth rate continued to climb in 2015, reaching 2.9 percent and helping Washington rank 9th among states – the best Washington has done since 2008. Washington's five-year average employment growth rate is a positive 2.1 percent, suggesting the state is making a recovery from the steep drop experienced during the recession. Washington's rate is 0.4 points above the national average of 1.7 percent, ranking the state 9th over the period from 2011-2015.

Figure 3.4: Total Employment Growth Rate



Source: U.S. Bureau of Labor Statistics; data through 2015

Median Household Income

Median income measures avoid bias due to extremely high or low incomes

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. Unlike average income, median income measures are not biased by the income levels of the highest-income or lowest-income households. Typically, the average or per capita household income of a state is higher than the median.

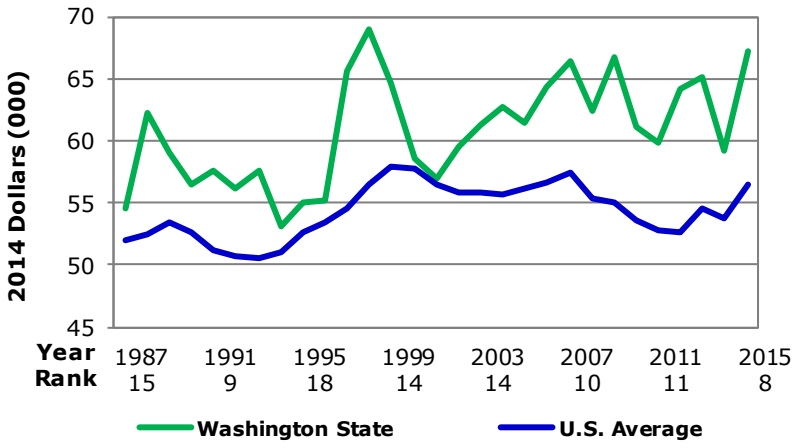
The standard error for Washington's 2015 median household income estimate is $3,235

Annual median household income estimates for states are produced by the U.S. Census Bureau. The data presented here are in 2015 dollars. These estimates are derived from the Annual Social and Economic Supplements to the annual Current Population Survey. As this survey's primary purpose is to arrive at national income and demographic numbers, estimates for individual states have substantial margins of error. The standard error for Washington's 2015 median household income estimate is plus or minus $3,253 compared to $321 for the United States.

The state's median income declined $5,900 in 2014

Washington's median household income rose $8,107 in 2015 to $67,243. During this time the national average increased $2,798 to $56,516. Washington's rank increased seven places to 8th. The state's 5-year average of $63,106 remains well above the national average of $54,035, ranking 11th among the states. 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.

Figure 3.5: Median Household Income



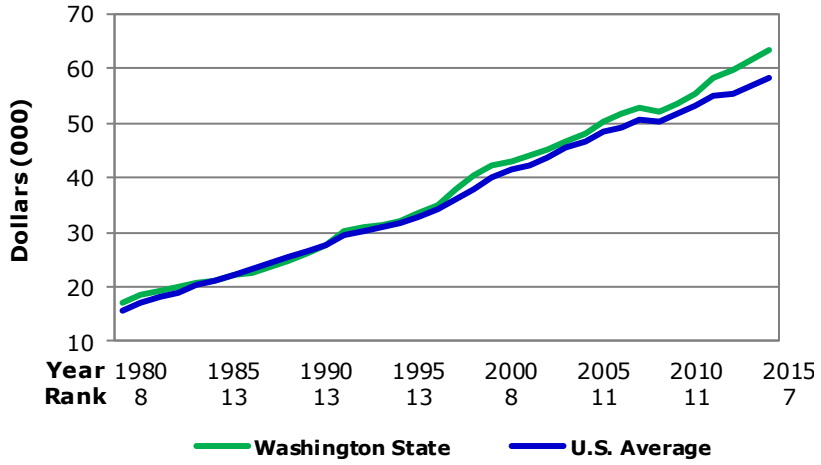
Source: U.S. Department of Commerce, Bureau of the Census; data through 2016

Annual Earnings Per Job

The state's annual earnings per job ranked 7th in the nation in 2015

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 the presence in its economy of large firms in both manufacturing and technology sectors. Washington's national rank in this measure has been 11th or higher in each of the past 19 years. Washington's average annual earnings per job increased to $63,364 in 2015, up $1,874 from 2014 and is $5,136 above the national average of $59,740. The state's rank for 2015 improved 7th highest in the nation. The state's five-year average of $59,740 ranked 8th in the nation.

Figure 3.6: Annual Earnings Per Job



Source: U.S. Department of Commerce, Bureau of Economic Analysis; data through 2015

Annual Earnings Per Job Growth Rate

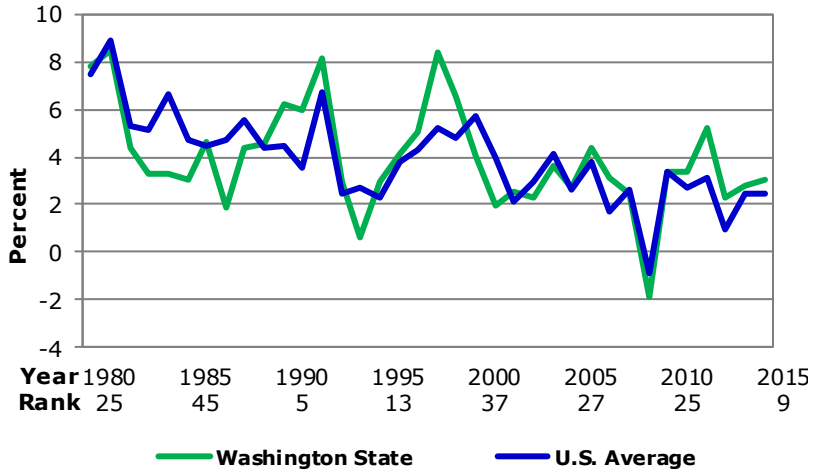
Washington's rank improved in 2015

The growth rate of Washington earnings per job increased to 3.0% in 2015 from 2.8% in 2014. Washington's rank improved from 12th highest to 9th highest among the states. The growth rate per job remains higher than the national average of 2.4%. Washington has now had higher growth in earnings per job than the national average for five consecutive years.

Washington's five-year-average growth rate was higher than the national average

Washington typically experiences more pronounced swings in the growth rate than the nation. The pronounced swings are reflected in the state's ranking in this category throughout the years, especially in the past few business cycles where the rank has fluctuated from 2nd highest to 3rd lowest. Washington's five-year-average growth rate of 3.4 percent was higher than the national average of 2.3 percent and ranks 5th among the states.

Figure 3.7: Annual Earnings Per Job Growth Rate



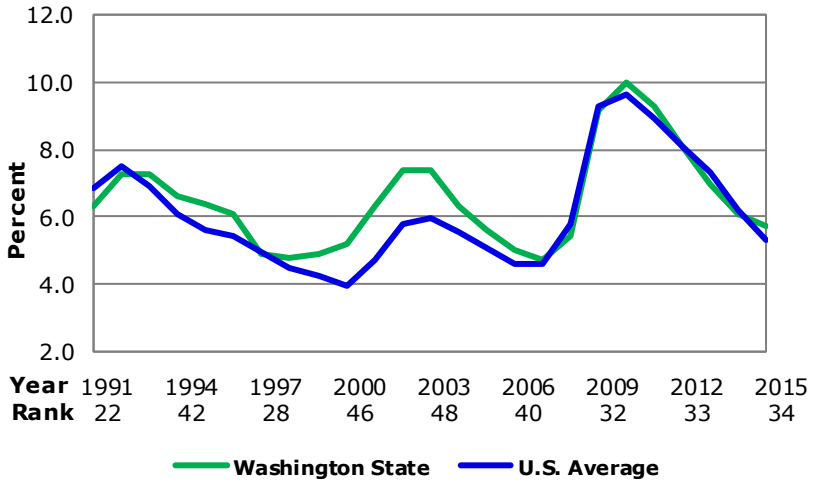
Source: U.S. Department of Commerce, Bureau of Economic Analysis; data through 2015

Unemployment Rate

Washington ranked 34th in the nation with a 5.7% unemployment rate in 2015

From 2014 to 2015, the unemployment rate in Washington fell from 6.1 percent to 5.7 percent. The U.S. average rate similarly declined from 6.2 percent to 5.3 percent over the same period. Despite the decrease in the unemployment rate, Washington's rank among the states jumped from 26th to 34th in 2015. For the last five years, the state's rate has been tracking very closely to the national rate and their five-year averages are equal in 2015, at 7.2 percent. However, Washington ranks poorly – 33rd among states.

Figure 3.8: Unemployment Rate



Source: U.S. Department of Labor, Bureau of Labor Statistics; data through 2015

Housing Affordability Index

The HAI measures housing affordability based on median income and home value

The Housing Affordability Index (HAI) is a measure of how affordable median priced homes are to families earning median incomes. For this indicator, HAI scores are calculated using annual, 1-year estimates for median household income and median home value from the U.S. Census Bureau's American Community Survey. HAI scores are also based on the annual percentage rates for mortgage loans given by Freddie Mac and assume a 20 percent down payment.

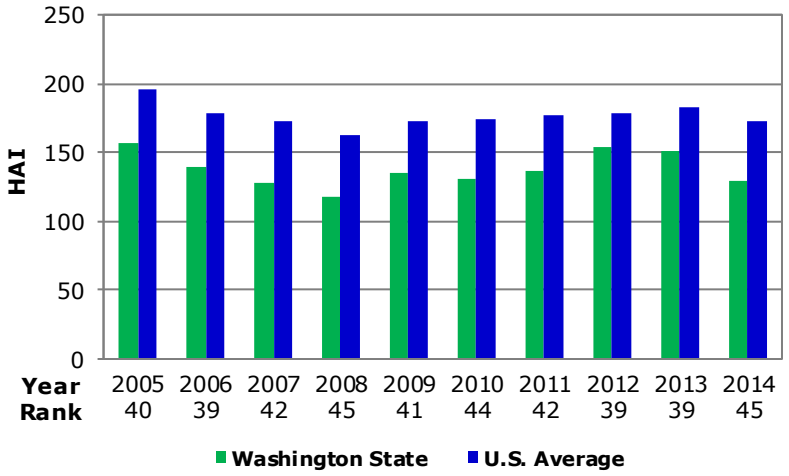
The baseline HAI value is 100

At an HAI of 100, a family earning the median income has exactly enough income to qualify for a mortgage on a median-priced house. Higher index values – above 100 – indicate homes are more affordable; lower index values mean homes are less affordable. For example, an HAI value of 125 means that a median income household has 125% of the income necessary to qualify for a median priced house.

Washington ranks 5th worst in the nation

In 2014, Washington state ranked 45th in the nation with an HAI score of 129. The United States' HAI value for the same period was 173. The HAI value for both Washington and the United States fell in 2014, down from 151 and 183, respectively. Decreasing HAI values indicate housing became less affordable in 2014. The five-year average HAI value for Washington is 140, while the United States' five-year average HAI score is 177. The state ranks 43rd in the nation over the last five years.

Figure 3.9: Housing Affordability Index



Source: U.S. Census Bureau, American Factfinder, data through 2014

Income Spent on Rent

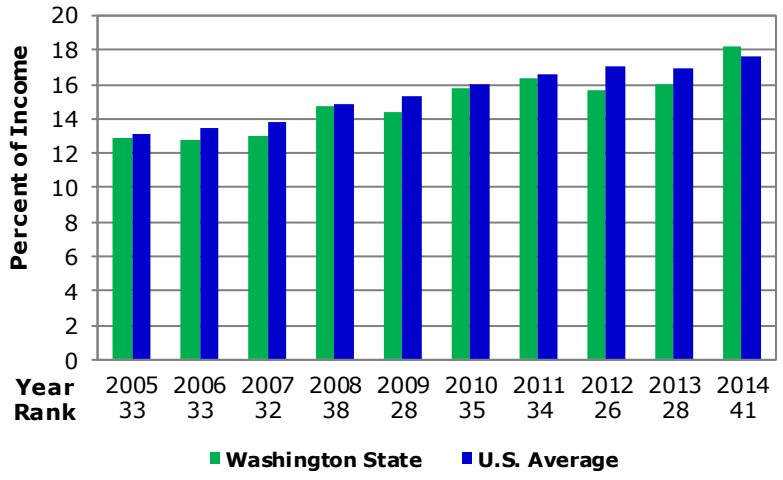
Income spent on rent helps measure housing affordability

The U.S. Census Bureau's American Community Survey tracks both median contract rent and median household income. Median contract rent is the median amount of monthly rent that is agreed to or contracted for, not including utility payments, fees, meals, or other services. For vacant units, contract rent is the monthly price asked for the unit at the time of interview. Combining contract rent and income data into one indicator – income spent on rent – helps measure shelter costs as well as housing affordability. Renters are typically advised to spend no more than 30 percent of their incomes on rent.

In 2014, Washington ranked 9th worst in the nation for income spent on rent

Although the median renter in Washington spent far less than 30 percent of their income on rent in 2014, the state performed poorly when compared to the rest of the country. Washington ranked 41st in the nation. The state's median renter spent roughly 18.2 percent of their income on rent in 2014, compared to the national average of 17.6 percent. Some of the more expensive states, or states with larger portions of incomes being spent on rent, include: California, New York, Florida, Hawaii, and New Jersey. The 5-year average for Washington is 16.4 percent, while the national 5-year average is slightly higher at 16.8 percent. Washington ranked 33rd in the nation over the period.

Figure 3.10: Income Spent on Rent



Source: U.S. Census Bureau, American Factfinder, data through 2014

Total Average Wage and Average Wage by Occupation

The OES program produces estimates for over 800 occupations

The **Occupational Employment Statistics** (OES) program, produced by the U.S. Department of Labor's Bureau of Labor Statistics, conducts a yearly mail survey to gather 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 estimates for over 800 occupations. Because of the survey technique, data about self-employed workers are not collected and not represented in these estimates. 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 840 individual occupations. Total average state wages are shown in Table 3.11 and state wages for major groups are presented in Table 3.12. Wages for the 840 specific occupations can be found at the BLS web site (www.bls.gov).

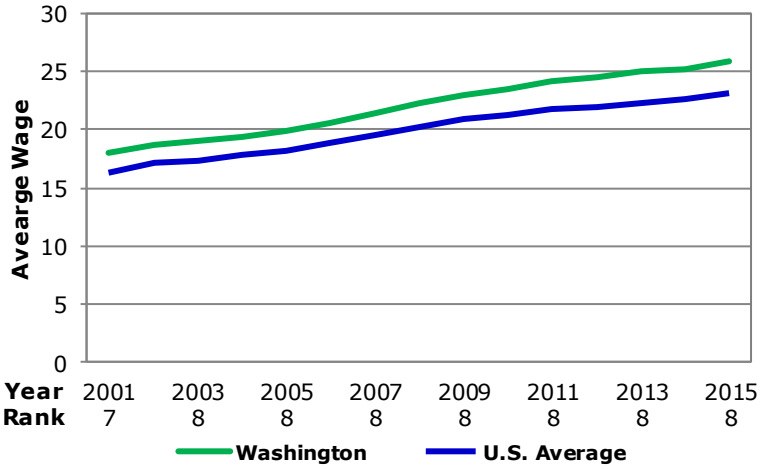
Washington ranks within the top ten in 16 categories and 8th overall.

In 2015, Washington ranked in the top ten nationally in fifteen out of twenty-two categories. The state reaches a ranking of 2nd in Computer and Mathematical (beat only by California) and ranks 3rd in Healthcare Support as well as Food Preparation and Serving. Washington ranked lowest in the category of Education, Training, and Library services, with a ranking of 17th. The state's wages in the Life, Physical, and Social Science and Legal categories were also below national averages. Washington is ranked 8th nationally for total average wage with an average wage of $25.26, which is more than two dollars above the U.S. average of $22.71. From 2011 to 2015, the state's total average wage is estimated to be $25.01. The U.S. total average wage was $22.40 over the same period, ranking Washington 8th in the nation for high wages.

Wages alone cannot be used to analyze costs since productivity must also be taken into account

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 relatively high average wage in Healthcare Support may be due to a higher-than-average number of higher-paid workers in biotechnology labs rather than having higher paid doctors and nurses. Additionally, there are 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.

Figure 3.11: Total Average Wages



Source: U.S. Department of Commerce, Bureau of Labor Statistics, March 2015

Table 3.1
Economic Growth and Competitiveness
Per Capita Personal Income
(Dollars)

	2011	2012	2013	2014	2015	2011-15
Alabama	35,202	36,036	36,176	37,512	38,965	36,778
Alaska	50,552	52,269	51,259	54,012	55,940	52,806
Arizona	35,675	36,788	36,723	37,895	39,060	37,228
Arkansas	33,961	36,291	36,529	37,782	39,107	36,734
California	44,852	47,614	48,125	49,985	52,651	48,645
Colorado	44,349	46,402	46,746	48,869	50,410	47,355
Connecticut	59,884	62,738	62,112	64,864	66,972	63,314
Delaware	43,555	44,747	44,819	46,378	47,662	45,432
Florida	40,538	41,249	41,309	42,737	44,101	41,987
Georgia	36,588	37,254	37,596	38,980	40,551	38,194
Hawaii	42,938	44,504	44,314	46,034	47,753	45,109
Idaho	33,544	34,846	35,641	36,734	37,509	35,655
Illinois	44,303	46,067	46,477	47,643	49,471	46,792
Indiana	36,357	37,987	38,291	39,578	40,998	38,642
Iowa	42,058	43,458	43,735	44,937	44,971	43,832
Kansas	42,403	43,725	44,311	44,891	45,876	44,241
Kentucky	34,578	35,814	35,967	37,396	38,989	36,549
Louisiana	38,506	40,527	40,819	42,030	43,252	41,027
Maine	38,597	39,589	39,562	40,745	42,077	40,114
Maryland	51,800	53,078	52,545	54,176	56,127	53,545
Massachusetts	54,327	56,752	56,549	58,737	61,032	57,479
Michigan	37,343	38,652	39,197	40,740	42,427	39,672
Minnesota	45,214	47,293	47,410	48,998	50,541	47,891
Mississippi	31,976	33,127	33,629	34,431	35,444	33,721
Missouri	38,042	39,905	40,297	41,639	42,752	40,527
Montana	36,959	39,102	38,884	39,903	41,280	39,226
Nebraska	43,820	45,578	46,254	47,557	48,006	46,243
Nevada	37,745	39,436	39,223	40,742	42,185	39,866
New Hampshire	48,005	50,546	50,535	52,773	54,817	51,335
New Jersey	53,556	55,142	55,194	57,620	59,782	56,259
New Mexico	34,556	35,585	35,254	37,091	38,457	36,189
New York	51,598	53,571	53,606	55,611	57,705	54,418
North Carolina	36,622	38,655	37,774	39,171	40,656	38,576
North Dakota	47,861	55,388	54,373	55,802	54,376	53,560
Ohio	38,807	40,329	40,749	42,236	43,478	41,120
Oklahoma	39,037	41,549	41,962	43,637	44,272	42,091
Oregon	37,512	39,083	39,426	41,220	42,974	40,043
Pennsylvania	44,018	45,781	46,028	47,679	49,180	46,537
Rhode Island	44,292	46,084	46,145	48,359	50,080	46,992
South Carolina	34,220	35,461	35,472	36,677	38,041	35,974
South Dakota	44,241	44,792	44,772	45,279	45,002	44,817
Tennessee	37,323	39,137	39,312	40,457	42,069	39,660
Texas	41,235	43,505	43,807	45,669	46,745	44,192
Utah	34,415	35,995	36,542	37,664	39,045	36,732
Vermont	42,735	44,287	44,839	46,428	47,864	45,231
Virginia	47,689	49,320	48,956	50,345	52,136	49,689
Washington	**44,800**	**47,344**	**47,468**	**49,610**	**51,146**	**48,074**
West Virginia	34,211	35,374	35,163	36,132	37,047	35,585
Wisconsin	40,837	42,463	42,737	44,186	45,617	43,168
Wyoming	49,140	52,154	51,791	54,584	55,303	52,594
U.S. Average*	42,453	44,266	44,438	46,049	47,669	44,975
Washington's Rank	**13**	**12**	**12**	**12**	**12**	**12**

Source: Bureau of Economic Analysis, 2016
*The U.S. Average includes Washington D.C., which makes it higher than the 50 State Average

Table 3.2
Economic Growth and Competitiveness
Per Capita Personal Income Growth Rate
(Percent)

	2011	2012	2013	2014	2015	2011-15
Alabama	3.3	2.4	0.4	3.7	3.9	2.7
Alaska	5.8	3.4	-1.9	5.4	3.6	3.2
Arizona	4.4	3.1	-0.2	3.2	3.1	2.7
Arkansas	6.2	6.9	0.7	3.4	3.5	4.1
California	5.8	6.2	1.1	3.9	5.3	4.4
Colorado	5.9	4.6	0.7	4.5	3.2	3.8
Connecticut	4.4	4.8	-1.0	4.4	3.2	3.2
Delaware	4.2	2.7	0.2	3.5	2.8	2.7
Florida	4.7	1.8	0.1	3.5	3.2	2.6
Georgia	6.1	1.8	0.9	3.7	4.0	3.3
Hawaii	3.2	3.6	-0.4	3.9	3.7	2.8
Idaho	4.7	3.9	2.3	3.1	2.1	3.2
Illinois	5.1	4.0	0.9	2.5	3.8	3.3
Indiana	5.7	4.5	0.8	3.4	3.6	3.6
Iowa	8.7	3.3	0.6	2.7	0.1	3.1
Kansas	8.1	3.1	1.3	1.3	2.2	3.2
Kentucky	4.9	3.6	0.4	4.0	4.3	3.4
Louisiana	3.4	5.2	0.7	3.0	2.9	3.1
Maine	4.0	2.6	-0.1	3.0	3.3	2.6
Maryland	4.3	2.5	-1.0	3.1	3.6	2.5
Massachusetts	5.2	4.5	-0.4	3.9	3.9	3.4
Michigan	6.1	3.5	1.4	3.9	4.1	3.8
Minnesota	6.2	4.6	0.2	3.3	3.1	3.5
Mississippi	3.9	3.6	1.5	2.4	2.9	2.9
Missouri	3.8	4.9	1.0	3.3	2.7	3.1
Montana	6.4	5.8	-0.6	2.6	3.5	3.5
Nebraska	9.5	4.0	1.5	2.8	0.9	3.7
Nevada	2.2	4.5	-0.5	3.9	3.5	2.7
New Hampshire	6.0	5.3	0.0	4.4	3.9	3.9
New Jersey	4.6	3.0	0.1	4.4	3.8	3.2
New Mexico	4.7	3.0	-0.9	5.2	3.7	3.1
New York	4.7	3.8	0.1	3.7	3.8	3.2
North Carolina	3.0	5.6	-2.3	3.7	3.8	2.7
North Dakota	11.4	15.7	-1.8	2.6	-2.6	5.1
Ohio	6.7	3.9	1.0	3.6	2.9	3.6
Oklahoma	8.6	6.4	1.0	4.0	1.5	4.3
Oregon	4.8	4.2	0.9	4.6	4.3	3.7
Pennsylvania	5.0	4.0	0.5	3.6	3.1	3.3
Rhode Island	3.6	4.0	0.1	4.8	3.6	3.2
South Carolina	4.2	3.6	0.0	3.4	3.7	3.0
South Dakota	10.0	1.2	0.0	1.1	-0.6	2.4
Tennessee	4.8	4.9	0.4	2.9	4.0	3.4
Texas	7.7	5.5	0.7	4.3	2.4	4.1
Utah	5.5	4.6	1.5	3.1	3.7	3.7
Vermont	6.7	3.6	1.2	3.5	3.1	3.6
Virginia	5.0	3.4	-0.7	2.8	3.6	2.8
Washington	**4.6**	**5.7**	**0.3**	**4.5**	**3.1**	**3.6**
West Virginia	6.6	3.4	-0.6	2.8	2.5	2.9
Wisconsin	5.2	4.0	0.6	3.4	3.2	3.3
Wyoming	9.6	6.1	-0.7	5.4	1.3	4.3
U.S. Average*	5.4	4.3	0.4	3.6	3.5	3.4
Washington's Rank	**35**	**7**	**26**	**7**	**33**	**15**

Source: Bureau of Economic Analysis, U.S. Department of Commerce, 2016

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

Table 3.3
Economic Growth and Competitiveness
Regional Price Parities
Relative Value of $100

	2010	2011	2012	2013	2014	2010-14
Alabama	113.8	114.0	113.5	113.9	113.9	113.8
Alaska	94.8	95.1	94.9	95.2	94.6	94.9
Arizona	101.4	102.1	103.0	103.5	103.7	102.8
Arkansas	114.0	114.2	113.9	114.0	114.3	114.1
California	88.0	88.2	88.6	88.7	89.0	88.5
Colorado	99.1	98.6	98.9	98.2	98.0	98.6
Connecticut	91.4	91.7	91.6	92.0	91.9	91.7
Delaware	97.3	98.2	98.8	99.0	98.1	98.3
Florida	100.9	100.8	100.9	101.0	100.9	100.9
Georgia	108.3	108.8	108.5	108.7	108.7	108.6
Hawaii	85.3	85.5	84.9	85.0	85.6	85.3
Idaho	107.0	107.2	107.1	107.9	107.1	107.2
Illinois	99.1	98.9	99.3	99.3	99.3	99.2
Indiana	109.4	109.1	109.4	109.3	109.4	109.3
Iowa	112.1	111.1	110.9	110.5	110.7	111.1
Kansas	111.2	110.3	110.4	109.9	110.3	110.4
Kentucky	112.9	112.9	112.6	112.1	112.7	112.6
Louisiana	109.6	109.9	109.4	109.6	109.4	109.6
Maine	103.3	102.7	101.6	101.9	103.0	102.5
Maryland	90.1	90.2	90.8	90.7	90.7	90.5
Massachussetts	92.6	92.8	93.8	93.5	93.4	93.2
Michigan	105.6	105.7	105.8	105.9	106.3	105.9
Minnesota	103.0	102.9	102.5	102.5	102.5	102.6
Mississippi	115.3	115.2	115.6	114.9	115.3	115.3
Missouri	113.3	112.2	112.0	111.5	111.9	112.2
Montana	106.5	106.6	107.0	106.2	106.2	106.5
Nebraska	110.7	110.7	110.4	110.4	110.4	110.5
Nevada	100.1	100.2	101.3	101.7	102.4	101.1
New Hampshire	93.9	95.0	94.7	94.8	95.1	94.7
New Jersey	87.6	87.3	87.4	87.6	87.3	87.4
New Mexico	105.7	104.9	105.3	105.3	105.3	105.3
New York	86.8	86.8	86.7	86.7	86.4	86.7
North Carolina	109.5	109.3	109.1	108.9	109.1	109.2
North Dakota	112.1	111.5	109.9	109.2	109.3	110.4
Ohio	111.4	111.5	111.9	111.9	112.0	111.7
Oklahoma	111.6	111.6	111.2	111.1	111.0	111.3
Oregon	101.5	101.5	101.3	101.2	101.0	101.3
Pennsylvania	101.5	101.6	101.6	101.3	101.8	101.6
Rhode Island	100.9	100.6	101.2	101.6	101.3	101.1
South Carolina	110.6	110.1	110.1	110.5	110.5	110.4
South Dakota	115.1	114.5	112.5	113.9	113.6	113.9
Tennessee	110.9	110.7	110.1	110.3	110.9	110.6
Texas	103.8	104.0	104.0	103.7	103.5	103.8
Utah	103.2	102.9	103.0	102.8	103.1	103.0
Vermont	100.5	100.1	99.2	99.6	98.8	99.6
Virginia	97.0	97.1	97.1	97.2	97.5	97.2
Washington	**97.1**	**97.2**	**96.6**	**96.6**	**96.3**	**96.8**
West Virgina	113.1	113.0	112.9	113.0	112.5	112.9
Wisconsin	107.8	107.2	107.0	107.2	107.1	107.2
Wyoming	104.3	103.4	104.4	104.6	104.0	104.1
U.S. Average*	100.0	100.0	100.0	100.0	100.0	100.0
Washington Rank	**40**	**40**	**41**	**41**	**41**	**41**

Source U.S. Department of Commerce, Bureau of Economic Analysis (www.bea.gov), 2016
*U.S. set to 100 by default

Table 3.4
Economic Growth and Competitiveness
Total Employment Growth Rate
(Percent)

	2011	2012	2013	2014	2015	2011-15
Alabama	0.0	0.8	0.9	1.1	1.3	0.8
Alaska	1.7	1.5	0.4	0.5	0.5	0.9
Arizona	1.1	2.1	2.3	2.0	2.6	2.0
Arkansas	0.6	0.5	0.0	1.0	1.8	0.8
California	1.1	2.3	2.7	2.8	3.0	2.4
Colorado	1.6	2.4	3.0	3.5	3.1	2.7
Connecticut	1.0	0.8	0.8	0.7	0.8	0.8
Delaware	0.8	0.6	2.2	2.3	2.3	1.6
Florida	1.1	2.0	2.5	3.2	3.4	2.4
Georgia	1.0	1.4	2.0	2.8	2.9	2.0
Hawaii	1.1	2.2	2.0	1.4	1.5	1.6
Idaho	1.2	1.9	2.5	2.6	3.0	2.2
Illinois	1.2	1.3	0.9	1.3	1.4	1.2
Indiana	1.6	2.0	1.2	1.4	1.8	1.6
Iowa	1.2	1.5	1.3	1.2	1.0	1.2
Kansas	0.7	1.3	1.1	1.4	0.6	1.0
Kentucky	1.3	1.6	1.1	1.5	1.5	1.4
Louisiana	0.9	1.3	1.4	1.6	0.2	1.1
Maine	0.3	0.6	0.6	0.6	0.8	0.6
Maryland	1.0	1.2	0.9	0.9	1.5	1.1
Massachusetts	1.2	1.6	1.7	2.0	1.7	1.6
Michigan	2.3	2.1	1.9	1.8	1.5	1.9
Minnesota	1.8	1.6	1.7	1.4	1.5	1.6
Mississippi	0.0	0.9	0.8	0.9	1.2	0.8
Missouri	0.3	0.7	1.0	1.0	1.7	0.9
Montana	0.7	2.1	1.9	1.0	1.7	1.5
Nebraska	0.8	1.7	1.2	1.3	1.3	1.3
Nevada	0.7	1.7	2.6	3.6	3.3	2.4
New Hampshire	0.5	1.0	0.8	1.1	1.5	1.0
New Jersey	0.0	1.1	1.1	0.8	1.4	0.9
New Mexico	-0.2	0.3	0.8	1.0	0.8	0.5
New York	1.5	1.5	1.5	1.8	1.7	1.6
North Carolina	1.2	1.8	1.8	2.0	2.4	1.8
North Dakota	5.5	8.2	3.6	3.8	-1.6	3.9
Ohio	1.4	1.8	1.2	1.5	1.4	1.5
Oklahoma	1.4	2.3	1.3	1.3	0.7	1.4
Oregon	1.1	1.2	2.1	2.8	3.3	2.1
Pennsylvania	1.1	0.7	0.3	0.8	0.8	0.8
Rhode Island	0.5	1.1	1.3	1.5	1.2	1.1
South Carolina	1.2	1.7	2.0	2.6	2.7	2.0
South Dakota	1.1	1.6	0.9	1.4	1.0	1.2
Tennessee	1.8	2.0	1.7	2.3	2.5	2.0
Texas	2.2	2.9	3.0	3.2	2.4	2.7
Utah	2.1	3.5	3.2	2.9	3.8	3.1
Vermont	0.9	1.3	0.7	1.0	0.9	1.0
Virginia	1.3	1.2	0.7	0.6	1.8	1.1
Washington	**1.3**	**1.6**	**2.3**	**2.7**	**2.9**	**2.1**
West Virginia	1.0	1.4	-0.2	-0.3	-0.7	0.2
Wisconsin	1.0	1.0	1.0	1.5	1.3	1.2
Wyoming	1.5	1.0	0.1	1.3	-0.9	0.6
U.S. Average	1.2	1.7	1.7	2.0	2.0	1.7
Washington's Rank	**15**	**20**	**10**	**10**	**9**	**9**

Source: U.S. Bureau of Labor Statistics (www.bls.gov), 2016

Table 3.5
Economic Growth and Competitiveness
Real Median Household Income
(2015 dollars)

	2011	2012	2013	2014	2015	2011-15
Alabama	44,884	44,869	48,150	42,327	44,509	44,948
Alaska	60,525	65,705	73,743	67,707	75,112	68,558
Arizona	51,240	48,564	53,533	49,311	52,248	50,979
Arkansas	43,527	40,279	40,066	44,974	42,798	42,329
California	56,242	58,863	61,860	60,557	63,636	60,232
Colorado	61,788	59,105	69,103	61,010	66,596	63,520
Connecticut	68,939	66,323	70,506	70,242	72,889	69,780
Delaware	57,605	50,555	55,039	57,588	57,756	55,709
Florida	47,535	47,560	49,383	46,193	48,825	47,899
Georgia	48,450	49,676	47,816	49,612	50,768	49,264
Hawaii	62,228	58,081	65,361	71,305	64,514	64,298
Idaho	50,016	49,471	49,317	53,499	51,624	50,785
Illinois	53,365	53,410	54,883	54,979	60,413	55,410
Indiana	46,839	47,650	50,322	48,115	51,983	48,982
Iowa	52,925	55,169	61,211	57,876	60,855	57,607
Kansas	48,633	51,619	48,658	53,505	54,865	51,456
Kentucky	42,003	42,414	45,666	42,835	42,387	43,061
Louisiana	42,848	40,348	47,239	42,455	45,922	43,762
Maine	52,370	50,747	55,921	51,769	50,756	52,313
Maryland	72,587	74,157	70,569	76,253	73,594	73,432
Massachusetts	66,724	65,713	63,625	63,224	67,861	65,429
Michigan	51,512	51,631	57,559	52,065	54,203	53,394
Minnesota	60,935	63,792	65,452	67,321	68,730	65,246
Mississippi	43,304	37,825	32,905	35,562	40,037	37,927
Missouri	48,240	51,372	47,115	56,695	59,196	52,524
Montana	42,447	46,545	43,958	51,161	51,395	47,101
Nebraska	58,612	53,883	58,633	56,935	60,474	57,707
Nevada	49,577	48,863	52,755	49,932	52,008	50,627
New Hampshire	69,429	70,011	70,311	73,481	75,675	71,781
New Jersey	65,696	68,847	64,872	65,318	68,357	66,618
New Mexico	44,244	44,827	40,870	46,740	45,119	44,360
New York	53,364	49,221	50,842	54,372	58,005	53,161
North Carolina	47,641	42,896	47,149	46,838	50,797	47,064
North Dakota	59,397	57,568	60,189	60,800	57,415	59,074
Ohio	47,053	45,809	51,638	49,701	53,301	49,500
Oklahoma	51,065	49,971	46,971	47,253	47,077	48,467
Oregon	54,302	53,448	49,858	58,943	60,834	55,477
Pennsylvania	52,599	53,581	56,123	55,236	60,389	55,586
Rhode Island	51,675	57,877	57,311	58,700	55,701	56,253
South Carolina	42,243	45,836	44,327	44,981	46,360	44,749
South Dakota	49,767	51,012	54,350	53,114	55,065	52,662
Tennessee	44,557	44,384	44,121	43,766	47,330	44,832
Texas	51,689	53,604	52,307	53,937	56,473	53,602
Utah	58,483	60,226	62,117	63,456	66,258	62,108
Vermont	54,656	57,378	66,662	60,778	59,494	59,794
Virginia	65,989	66,721	67,063	66,231	61,486	65,498
Washington	**59,913**	**64,197**	**65,043**	**59,136**	**67,243**	**63,106**
West Virginia	44,074	44,960	43,824	39,597	42,824	43,056
Wisconsin	54,863	54,794	52,633	58,147	55,425	55,172
Wyoming	57,446	59,371	68,623	55,754	60,925	60,424
U.S. Median*	52,751	52,666	54,525	53,718	56,516	54,035
Washington's Rank	**11**	**8**	**11**	**15**	**8**	**11**

Source: U.S. Department of Commerce, Bureau of the Census, 2016
*U.S. median includes Washington, D.C.

Table 3.6
Economic Growth and Competitiveness
Annual Earnings Per Job
(Dollars)

	2011	2012	2013	2014	2015	2011-15
Alabama	43,887	44,826	45,636	46,471	47,085	45,581
Alaska	62,761	64,081	64,089	66,022	67,285	64,848
Arizona	46,794	48,170	49,070	50,083	51,002	49,024
Arkansas	40,575	42,713	44,223	44,991	44,978	43,496
California	62,245	63,722	63,459	64,877	67,260	64,313
Colorado	49,495	51,637	54,230	56,848	57,430	53,928
Connecticut	71,683	70,216	69,121	70,950	72,074	70,809
Delaware	57,343	56,627	56,493	58,136	60,207	57,761
Florida	44,557	45,375	45,475	46,480	48,270	46,031
Georgia	48,507	49,253	49,840	50,935	52,300	50,167
Hawaii	50,493	52,029	52,302	53,529	55,135	52,698
Idaho	40,139	41,168	42,973	44,070	45,062	42,682
Illinois	55,900	57,709	59,385	60,583	61,645	59,044
Indiana	47,987	49,379	50,325	51,069	51,820	50,116
Iowa	45,084	46,711	48,015	48,971	50,113	47,779
Kansas	47,971	50,142	52,367	51,690	51,881	50,810
Kentucky	44,424	45,422	45,830	46,490	47,701	45,973
Louisiana	47,842	49,047	49,869	51,766	51,939	50,093
Maine	42,734	43,456	43,552	44,583	45,677	44,000
Maryland	60,375	61,303	60,631	61,531	63,187	61,405
Massachusetts	65,843	66,785	66,454	67,747	70,535	67,473
Michigan	48,854	50,161	50,583	51,479	52,926	50,801
Minnesota	51,071	53,745	54,306	55,545	57,050	54,343
Mississippi	39,336	41,113	42,164	42,219	42,024	41,371
Missouri	47,067	48,285	49,330	50,187	50,824	49,139
Montana	40,086	41,465	41,836	42,584	43,416	41,877
Nebraska	50,976	50,923	51,917	54,477	53,754	52,409
Nevada	47,850	48,127	47,887	48,566	49,768	48,440
New Hampshire	53,914	54,669	54,516	56,032	57,032	55,233
New Jersey	62,083	64,059	64,604	66,037	67,493	64,855
New Mexico	45,802	46,141	45,470	46,884	47,290	46,317
New York	66,537	69,356	69,836	71,336	72,682	69,949
North Carolina	46,670	49,775	48,750	50,215	51,400	49,362
North Dakota	48,730	55,227	54,469	55,904	54,760	53,818
Ohio	49,433	50,765	51,719	52,515	53,404	51,567
Oklahoma	46,874	49,668	52,829	55,814	55,983	52,234
Oregon	46,277	48,718	49,329	50,653	52,930	49,581
Pennsylvania	53,929	55,387	56,591	57,897	59,591	56,679
Rhode Island	52,650	54,586	54,735	55,818	56,867	54,931
South Carolina	42,615	44,787	44,967	46,273	47,429	45,214
South Dakota	45,980	45,544	46,603	47,470	49,511	47,022
Tennessee	47,958	49,641	49,997	51,281	53,025	50,380
Texas	53,331	55,795	56,568	59,004	60,207	56,981
Utah	42,759	44,753	45,570	46,817	48,361	45,652
Vermont	44,022	44,691	45,280	45,633	46,250	45,175
Virginia	56,545	58,044	57,920	58,842	60,341	58,338
Washington	**55,578**	**58,457**	**59,812**	**61,490**	**63,364**	**59,740**
West Virginia	44,119	44,735	44,915	45,905	46,549	45,245
Wisconsin	47,607	49,220	49,847	50,914	52,038	49,925
Wyoming	49,768	51,204	52,348	54,595	53,875	52,358
U.S. Average	53,275	54,948	55,490	56,844	58,228	55,757
Washington's Rank	**11**	**8**	**8**	**8**	**7**	**8**

Source: US Department of Commerce, Bureau of Economic Analysis (www.bea.gov), 2015

Table 3.7
Economic Growth and Competitiveness
Annual Earnings Per Job Growth Rate
(Dollars)

	2011	2012	2013	2014	2015	2011-15
Alabama	0.8	2.1	1.8	1.8	1.3	1.6
Alaska	4.1	2.1	0.0	3.0	1.9	2.2
Arizona	2.3	2.9	1.9	2.1	1.8	2.2
Arkansas	2.4	5.3	3.5	1.7	0.0	2.6
California	3.5	2.4	-0.4	2.2	3.7	2.3
Colorado	4.0	4.3	5.0	4.8	1.0	3.8
Connecticut	-0.3	-2.0	-1.6	2.6	1.6	0.1
Delaware	5.3	-1.2	-0.2	2.9	3.6	2.1
Florida	0.0	1.8	0.2	2.2	3.9	1.6
Georgia	1.3	1.5	1.2	2.2	2.7	1.8
Hawaii	2.3	3.0	0.5	2.3	3.0	2.3
Idaho	1.9	2.6	4.4	2.6	2.3	2.7
Illinois	3.0	3.2	2.9	2.0	1.8	2.6
Indiana	4.3	2.9	1.9	1.5	1.5	2.4
Iowa	5.7	3.6	2.8	2.0	2.3	3.3
Kansas	6.5	4.5	4.4	-1.3	0.4	2.9
Kentucky	2.1	2.2	0.9	1.4	2.6	1.9
Louisiana	0.6	2.5	1.7	3.8	0.3	1.8
Maine	0.8	1.7	0.2	2.4	2.5	1.5
Maryland	3.0	1.5	-1.1	1.5	2.7	1.5
Massachusetts	1.7	1.4	-0.5	1.9	4.1	1.7
Michigan	2.4	2.7	0.8	1.8	2.8	2.1
Minnesota	3.7	5.2	1.0	2.3	2.7	3.0
Mississippi	0.9	4.5	2.6	0.1	-0.5	1.5
Missouri	1.4	2.6	2.2	1.7	1.3	1.8
Montana	4.9	3.4	0.9	1.8	2.0	2.6
Nebraska	10.4	-0.1	2.0	4.9	-1.3	3.2
Nevada	0.2	0.6	-0.5	1.4	2.5	0.8
New Hampshire	1.1	1.4	-0.3	2.8	1.8	1.4
New Jersey	0.9	3.2	0.9	2.2	2.2	1.9
New Mexico	3.7	0.7	-1.5	3.1	0.9	1.4
New York	1.8	4.2	0.7	2.1	1.9	2.2
North Carolina	-0.4	6.7	-2.1	3.0	2.4	1.9
North Dakota	7.3	13.3	-1.4	2.6	-2.0	4.0
Ohio	3.9	2.7	1.9	1.5	1.7	2.4
Oklahoma	5.8	6.0	6.4	5.7	0.3	4.8
Oregon	2.6	5.3	1.3	2.7	4.5	3.3
Pennsylvania	2.6	2.7	2.2	2.3	2.9	2.5
Rhode Island	1.1	3.7	0.3	2.0	1.9	1.8
South Carolina	2.0	5.1	0.4	2.9	2.5	2.6
South Dakota	8.8	-0.9	2.3	1.9	4.3	3.3
Tennessee	3.0	3.5	0.7	2.6	3.4	2.6
Texas	4.9	4.6	1.4	4.3	2.0	3.5
Utah	3.4	4.7	1.8	2.7	3.3	3.2
Vermont	3.7	1.5	1.3	0.8	1.4	1.7
Virginia	1.7	2.7	-0.2	1.6	2.5	1.7
Washington	**3.4**	**5.2**	**2.3**	**2.8**	**3.0**	**3.4**
West Virginia	4.6	1.4	0.4	2.2	1.4	2.0
Wisconsin	4.1	3.4	1.3	2.1	2.2	2.6
Wyoming	4.6	2.9	2.2	4.3	-1.3	2.5
U.S. Average	2.7	3.1	1.0	2.4	2.4	2.3
Washington's rank	**22**	**7**	**10**	**12**	**9**	**5**

Source: US Department of Commerce, Bureau of Economic Analysis (www.bea.gov), 2015

Table 3.8
Economic Growth and Competitiveness
Unemployment Rate

	2011	2012	2013	2014	2015	2011-15
Alabama	9.6	8.0	7.2	6.8	6.1	7.5
Alaska	7.6	7.1	6.9	6.9	6.5	7.0
Arizona	9.5	8.3	7.7	6.8	6.1	7.7
Arkansas	8.3	7.6	7.3	6.1	5.2	6.9
California	11.7	10.4	8.9	7.5	6.2	8.9
Colorado	8.4	7.9	6.8	5.0	3.9	6.4
Connecticut	8.8	8.3	7.8	6.6	5.6	7.4
Delaware	7.5	7.2	6.7	5.7	4.9	6.4
Florida	10.0	8.5	7.3	6.3	5.4	7.5
Georgia	10.2	9.2	8.2	7.1	5.9	8.1
Hawaii	6.8	6.0	4.9	4.4	3.6	5.1
Idaho	8.3	7.2	6.2	4.8	4.1	6.1
Illinois	9.7	9.0	9.1	7.1	5.9	8.2
Indiana	9.1	8.3	7.7	5.9	4.8	7.2
Iowa	5.5	5.1	4.7	4.2	3.7	4.6
Kansas	6.5	5.7	5.3	4.6	4.2	5.3
Kentucky	9.4	8.2	8.1	6.5	5.4	7.5
Louisiana	7.8	7.1	6.7	6.4	6.3	6.9
Maine	7.9	7.5	6.6	5.6	4.4	6.4
Maryland	7.2	7.0	6.6	5.8	5.2	6.4
Massachusetts	7.3	6.7	6.7	5.7	5.0	6.3
Michigan	10.4	9.1	8.8	7.3	5.4	8.2
Minnesota	6.5	5.6	4.9	4.2	3.7	5.0
Mississippi	10.0	9.0	8.6	7.6	6.5	8.3
Missouri	8.5	7.0	6.7	6.2	5.0	6.7
Montana	6.9	6.0	5.4	4.7	4.1	5.4
Nebraska	4.4	4.0	3.8	3.3	3.0	3.7
Nevada	13.0	11.2	9.6	7.9	6.7	9.7
New Hampshire	5.4	5.5	5.1	4.3	3.4	4.7
New Jersey	9.3	9.3	8.2	6.7	5.6	7.8
New Mexico	7.5	7.1	7.0	6.7	6.6	7.0
New York	8.3	8.5	7.7	6.3	5.3	7.2
North Carolina	10.3	9.3	7.9	6.3	5.7	7.9
North Dakota	3.5	3.1	2.9	2.7	2.7	3.0
Ohio	8.8	7.4	7.5	5.8	4.9	6.9
Oklahoma	5.9	5.3	5.3	4.5	4.2	5.0
Oregon	9.5	8.8	7.9	6.8	5.7	7.7
Pennsylvania	7.9	7.8	7.4	5.9	5.1	6.8
Rhode Island	11.0	10.4	9.3	7.7	6.0	8.9
South Carolina	10.6	9.2	7.6	6.4	6.0	8.0
South Dakota	4.7	4.3	3.8	3.4	3.1	3.9
Tennessee	9.0	7.8	7.8	6.5	5.8	7.4
Texas	7.8	6.7	6.2	5.1	4.5	6.1
Utah	6.7	5.4	4.6	3.8	3.5	4.8
Vermont	5.5	5.0	4.4	4.0	3.7	4.5
Virginia	6.6	6.0	5.7	5.2	4.4	5.6
Washington	**9.3**	**8.1**	**7.0**	**6.1**	**5.7**	**7.2**
West Virginia	8.1	7.5	6.7	6.6	6.7	7.1
Wisconsin	7.8	7.0	6.7	5.4	4.6	6.3
Wyoming	5.8	5.3	4.7	4.1	4.2	4.8
U.S. Average *	8.9	8.1	7.4	6.2	5.3	7.2
Washington's Rank	**35**	**33**	**27**	**26**	**34**	**33**

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, 2016

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

Table 3.9
Economic Growth and Competitiveness
Housing Affordability Index
(Baseline: 100)

	2010	2011	2012	2013	2014	2010-14
Alabama	209	213	212	228	196	212
Alaska	152	148	156	169	155	156
Arizona	176	194	187	188	162	181
Arkansas	230	238	218	213	233	226
California	93	92	98	97	85	93
Colorado	161	154	146	167	139	154
Connecticut	145	144	144	154	153	148
Delaware	143	142	130	142	145	140
Florida	170	183	187	188	165	179
Georgia	179	192	203	197	195	193
Hawaii	72	74	68	76	79	74
Idaho	180	183	186	181	188	184
Illinois	167	174	182	188	186	180
Indiana	237	223	226	240	225	230
Iowa	251	250	254	281	253	258
Kansas	229	221	231	218	236	227
Kentucky	214	203	204	220	201	208
Louisiana	181	179	168	196	172	179
Maine	169	178	171	188	172	176
Maryland	135	147	154	147	154	147
Massachusetts	115	119	118	113	109	115
Michigan	238	254	260	285	241	256
Minnesota	170	193	208	212	208	198
Mississippi	241	252	221	196	199	222
Missouri	209	205	222	206	238	216
Montana	144	134	147	135	151	142
Nebraska	260	268	244	257	248	256
Nevada	185	183	189	186	151	179
New Hampshire	174	170	173	175	181	175
New Jersey	117	118	129	123	121	122
New Mexico	177	162	166	149	172	165
New York	106	109	102	107	113	107
North Carolina	180	180	166	178	176	176
North Dakota	262	269	235	225	219	242
Ohio	216	211	209	237	224	219
Oklahoma	245	264	255	235	230	246
Oregon	131	136	139	126	143	135
Pennsylvania	185	186	190	199	194	191
Rhode Island	128	123	144	144	145	137
South Carolina	191	181	197	185	187	188
South Dakota	221	220	221	229	217	222
Tennessee	176	188	188	183	178	182
Texas	234	236	242	231	225	233
Utah	165	164	176	171	166	168
Vermont	163	149	154	178	165	162
Virginia	153	158	163	163	156	159
Washington	**131**	**136**	**154**	**151**	**129**	**140**
West Virginia	285	258	261	247	222	255
Wisconsin	188	192	193	188	206	193
Wyoming	183	186	184	204	161	184
United States	173	177	178	183	173	177
Washington's Rank	**44**	**42**	**39**	**39**	**45**	**43**

Source: U.S. Census Bureau, American FactFinder, 2016

Table 3.10
Economic Growth and Competitiveness
Monthly Income Spent on Rent
(Percent)*

	2010	2011	2012	2013	2014	2010-14
Alabama	12.7	12.9	13.7	12.8	14.8	13.4
Alaska	17.3	18.8	18.1	16.4	19.0	17.9
Arizona	16.7	16.8	18.3	16.7	18.7	17.4
Arkansas	13.4	12.9	14.3	14.7	13.5	13.8
California	21.7	23.0	22.5	21.8	23.0	22.4
Colorado	13.9	15.5	16.8	14.9	17.7	15.8
Connecticut	14.1	15.0	15.8	15.0	15.4	15.1
Delaware	16.0	16.6	19.2	18.4	18.0	17.6
Florida	20.0	20.2	20.6	20.4	22.3	20.7
Georgia	16.0	16.1	16.1	17.0	16.8	16.4
Hawaii	21.7	22.7	25.0	22.9	21.4	22.7
Idaho	13.5	13.9	14.6	14.9	14.3	14.2
Illinois	15.8	16.6	16.9	16.9	17.1	16.7
Indiana	13.1	14.4	14.4	14.0	14.8	14.1
Iowa	11.5	11.8	11.7	10.9	11.8	11.5
Kansas	12.5	13.3	12.8	14.0	13.3	13.2
Kentucky	12.8	13.8	14.2	13.8	14.7	13.9
Louisiana	16.1	16.9	18.1	15.8	18.1	17.0
Maine	14.2	15.1	15.8	14.4	15.7	15.1
Maryland	16.6	16.4	16.6	18.2	17.2	17.0
Massachusetts	16.3	16.4	16.9	18.1	18.5	17.2
Michigan	14.3	14.1	14.3	13.1	14.8	14.1
Minnesota	14.6	13.9	13.7	13.8	13.7	14.0
Mississippi	14.0	14.1	16.0	19.3	17.7	16.2
Missouri	12.6	13.4	12.7	14.4	12.1	13.1
Montana	14.8	15.6	15.2	16.4	14.6	15.3
Nebraska	11.4	11.1	12.6	11.8	12.6	11.9
Nevada	17.5	19.4	19.7	18.6	19.6	18.9
New Hampshire	14.0	14.5	15.0	15.1	14.5	14.6
New Jersey	17.0	18.0	17.7	19.2	19.7	18.3
New Mexico	14.6	16.8	17.0	19.1	16.8	16.9
New York	20.0	21.2	23.6	23.4	22.8	22.2
North Carolina	14.2	14.6	17.0	15.8	16.2	15.6
North Dakota	11.3	11.0	12.0	12.4	12.7	11.9
Ohio	13.0	13.9	14.7	13.2	14.0	13.8
Oklahoma	12.8	12.0	12.7	14.0	14.4	13.2
Oregon	15.4	16.0	16.6	18.5	16.2	16.6
Pennsylvania	14.2	14.5	14.6	14.4	14.9	14.5
Rhode Island	16.0	17.7	16.0	16.6	16.3	16.5
South Carolina	14.5	16.1	15.5	16.1	16.3	15.7
South Dakota	12.2	12.2	13.0	11.7	12.2	12.3
Tennessee	15.4	14.7	15.6	16.0	16.3	15.6
Texas	15.1	15.3	15.3	16.3	16.4	15.7
Utah	13.5	14.7	14.8	14.8	14.7	14.5
Vermont	14.0	16.4	15.8	13.8	15.6	15.1
Virginia	15.6	16.2	16.3	16.5	16.9	16.3
Washington	**15.8**	**16.3**	**15.7**	**16.0**	**18.2**	**16.4**
West Virginia	11.1	12.1	12.0	12.6	14.7	12.5
Wisconsin	13.3	13.6	13.8	14.7	13.6	13.8
Wyoming	12.5	13.5	13.2	11.6	14.7	13.1
United States	16.0	16.6	17.0	16.9	17.6	16.8
Washington's Rank	**35**	**34**	**26**	**28**	**41**	**33**

Source: U.S. Census Bureau, American FactFinder, 2016

Table 3.11
Economic Growth and Competitiveness
Total Average Hourly Wages
(Dollars)

	2011	2012	2013	2014	2015	2011-15
Alabama	18.84	19.01	19.35	19.66	20.15	19.40
Alaska	24.80	25.02	25.53	25.98	26.81	25.63
Arizona	21.00	21.13	21.33	21.43	21.78	21.33
Arkansas	17.47	17.72	17.95	18.24	18.53	17.98
California	24.96	25.17	25.49	25.91	26.57	25.62
Colorado	22.84	23.13	23.53	23.97	24.61	23.62
Connecticut	25.40	25.85	26.16	26.47	27.06	26.19
Delaware	22.80	23.25	23.68	23.81	24.18	23.54
Florida	19.59	19.68	19.78	20.11	20.60	19.95
Georgia	20.48	20.82	21.17	21.48	21.84	21.16
Hawaii	21.44	21.54	21.84	22.23	22.95	22.00
Idaho	18.52	18.48	18.67	19.12	19.62	18.88
Illinois	22.38	22.68	22.92	23.45	24.02	23.09
Indiana	19.08	19.38	19.61	19.94	20.23	19.65
Iowa	18.66	19.02	19.35	19.77	20.12	19.38
Kansas	19.24	19.53	19.83	20.20	20.64	19.89
Kentucky	18.58	18.72	19.00	19.25	19.65	19.04
Louisiana	18.65	18.86	18.99	19.32	19.62	19.09
Maine	19.32	19.64	19.92	20.26	20.80	19.99
Maryland	24.93	25.17	25.41	25.70	26.27	25.50
Massachusetts	26.32	26.73	27.12	27.70	28.37	27.25
Michigan	21.01	21.14	21.42	21.70	22.26	21.51
Minnesota	22.19	22.42	22.77	23.23	23.91	22.90
Mississippi	16.72	16.98	17.34	17.67	18.08	17.36
Missouri	19.47	19.79	20.20	20.57	20.98	20.20
Montana	17.71	18.29	18.79	19.17	19.53	18.70
Nebraska	18.82	19.00	19.33	19.75	20.49	19.48
Nevada	20.13	20.16	20.30	20.34	20.58	20.30
New Hampshire	21.74	21.92	22.22	22.63	23.42	22.39
New Jersey	24.78	25.00	25.39	25.92	26.42	25.50
New Mexico	19.61	19.92	19.94	20.31	20.76	20.11
New York	25.39	25.76	26.24	26.75	27.42	26.31
North Carolina	19.83	20.07	20.39	20.81	21.24	20.47
North Dakota	18.69	19.64	20.39	21.20	21.95	20.37
Ohio	20.00	20.52	20.76	21.11	21.52	20.78
Oklahoma	18.36	18.83	19.20	19.64	20.11	19.23
Oregon	21.29	21.75	22.01	22.53	23.12	22.14
Pennsylvania	21.19	21.40	21.77	22.00	22.38	21.75
Rhode Island	22.78	23.31	23.47	23.83	24.41	23.56
South Carolina	18.54	18.61	18.75	19.03	19.51	18.89
South Dakota	17.01	17.32	17.56	17.93	18.66	17.70
Tennessee	18.81	18.90	19.33	19.55	19.85	19.29
Texas	20.72	20.97	21.35	21.79	22.38	21.44
Utah	19.69	20.12	20.55	20.94	21.22	20.50
Vermont	20.71	21.00	21.18	21.41	22.15	21.29
Virginia	23.50	23.82	24.10	24.40	24.84	24.13
Washington	**24.17**	**24.59**	**25.04**	**25.26**	**25.97**	**25.01**
West Virginia	17.42	17.84	18.05	18.21	18.80	18.06
Wisconsin	19.92	20.15	20.34	20.62	21.12	20.43
Wyoming	20.44	20.76	21.05	21.60	22.04	21.18
U.S. Average *	21.74	22.01	22.33	22.71	23.23	22.40
Washington's Rank	**8**	**8**	**8**	**8**	**8**	**8**

SOURCE: "Occupational Employment Statistics," US Department of Commerce, Bureau of Labor Statistics, 2015
*U.S. Average includes Washington D.C.

Table 3.12
Economic Growth and Competitiveness
Average Hourly Wages, 2015
(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	52.79	33.36	37.59	41.41	29.79	20.67
Alaska	51.58	37.36	39.60	50.47	35.64	24.45
Arizona	49.04	31.54	38.47	37.65	28.97	20.19
Arkansas	41.46	29.02	31.53	32.06	26.78	18.56
California	61.02	39.40	49.48	46.87	38.80	25.55
Colorado	59.02	36.37	43.60	42.63	35.46	22.88
Connecticut	62.29	38.73	42.04	40.09	41.62	25.75
Delaware	65.47	36.49	43.12	40.55	38.33	21.26
Florida	55.62	32.28	35.23	34.84	29.78	20.84
Georgia	53.48	34.01	38.99	36.98	30.06	21.23
Hawaii	44.81	30.78	36.75	37.46	32.18	23.68
Idaho	39.42	30.53	32.96	37.72	26.79	20.07
Illinois	52.37	34.92	39.68	37.77	34.51	23.21
Indiana	45.00	30.08	33.24	33.66	28.08	19.89
Iowa	42.68	29.46	34.79	33.14	27.79	19.71
Kansas	47.81	31.61	34.42	35.38	30.44	19.37
Kentucky	43.53	29.12	32.55	33.05	25.83	19.40
Louisiana	45.38	28.60	30.09	39.34	31.49	20.09
Maine	43.36	29.40	33.90	34.76	28.73	21.08
Maryland	59.04	37.90	45.98	45.04	41.21	23.59
Massachusetts	60.23	39.87	46.14	42.60	36.50	21.93
Michigan	51.36	32.64	36.00	38.48	29.04	21.77
Minnesota	54.23	33.43	39.79	37.02	32.94	21.97
Mississippi	39.35	27.75	31.38	33.55	28.13	18.63
Missouri	49.80	32.37	37.15	37.06	29.17	19.09
Missouri	39.38	28.79	28.64	32.75	26.10	17.87
Nebraska	48.86	31.51	34.44	33.08	28.48	18.50
Nevada	47.07	30.73	35.87	37.03	32.94	24.08
New Hampshire	54.32	34.00	40.34	36.77	31.15	21.96
New Jersey	68.50	38.46	45.46	42.20	39.77	25.86
New Mexico	44.45	29.95	36.08	41.22	37.48	20.23
New York	69.14	43.15	44.02	38.82	35.20	24.45
North Carolina	56.94	34.54	39.79	36.07	32.58	20.64
North Dakota	47.79	28.38	31.07	32.45	28.53	21.99
Ohio	49.97	31.70	36.44	35.97	32.15	21.13
Oklahoma	44.41	29.44	31.36	38.20	29.46	18.41
Oregon	47.78	31.98	39.15	40.92	28.96	21.65
Pennsylvania	57.48	34.06	37.93	36.66	32.64	20.32
Rhode Island	59.99	36.40	39.26	41.17	35.12	23.14
South Carolina	45.83	28.96	33.19	36.02	29.54	19.36
South Dakota	48.12	29.77	29.65	30.51	26.09	18.62
Tennessee	43.95	30.36	33.48	35.04	29.36	18.81
Texas	58.00	36.34	40.81	43.77	34.03	22.70
Utah	44.84	30.73	35.48	35.37	28.64	19.95
Vermont	48.33	31.70	35.53	33.51	35.44	20.19
Virginia	61.79	39.24	46.52	41.31	39.76	22.91
Washington	**56.61**	**36.49**	**49.23**	**43.32**	**33.71**	**22.58**
West Virginia	40.06	28.20	32.20	33.40	24.96	17.44
Wisconsin	48.15	30.18	34.50	33.05	28.87	20.49
Wyoming	46.15	32.57	29.17	36.10	26.86	22.09
U.S. Average	55.30	35.48	41.43	39.89	34.24	22.19
Washington's Rank	**14**	**9**	**2**	**5**	**16**	**14**

Source: "Occupational Employment Statistics," US Department of Commerce, Bureau of Labor Statistics, 2015

Table 3.12
Economic Growth and Competitiveness
Average Hourly Wages, 2015
(Dollars)

	Legal SOC 23-0000	Education, Training, and Library SOC 25-0000	Arts, Design, Entertainment, Sports, and Media SOC 27-0000	Healthcare Practitioners and Technical SOC 29-0000	Healthcare Support SOC 31-0000	Protective Service SOC 33-0000
Alabama	40.36	22.26	20.56	32.98	12.25	17.34
Alaska	46.85	30.34	25.35	44.07	19.83	26.44
Arizona	45.47	21.71	22.50	36.74	15.05	21.47
Arkansas	34.80	21.00	19.68	32.06	11.71	16.46
California	59.87	28.58	34.28	45.78	16.91	25.95
Colorado	48.56	24.77	24.04	38.08	15.62	21.77
Connecticut	50.92	29.88	27.88	41.88	16.30	24.22
Delaware	54.43	26.00	22.83	39.43	14.78	19.43
Florida	46.14	22.48	23.57	35.21	13.73	19.48
Georgia	47.59	22.74	24.73	35.91	13.29	16.77
Hawaii	39.19	24.47	24.77	43.54	15.77	21.23
Idaho	36.83	18.81	18.89	34.03	13.14	19.13
Illinois	49.28	26.70	26.60	35.89	14.42	24.06
Indiana	38.61	22.64	20.24	34.50	13.41	18.02
Iowa	36.09	23.20	18.52	32.87	13.84	20.42
Kansas	38.94	20.86	19.47	33.46	12.95	18.46
Kentucky	36.35	23.93	20.15	32.48	13.51	16.45
Louisiana	39.06	22.06	25.22	30.19	11.48	16.90
Maine	36.91	22.87	18.68	38.15	13.57	18.87
Maryland	42.30	29.30	28.34	40.18	15.32	22.53
Massachusetts	57.13	30.63	29.16	43.53	16.24	25.20
Michigan	41.32	25.43	23.46	36.70	13.80	20.61
Minnesota	47.79	25.12	24.40	37.78	14.81	22.48
Mississippi	37.73	19.86	19.36	31.21	11.37	14.53
Missouri	41.31	22.76	23.29	32.39	12.87	18.58
Montana	31.22	20.52	17.37	35.19	13.23	19.12
Nebraska	39.32	22.72	20.40	32.60	13.59	20.47
Nevada	46.35	23.18	24.84	41.51	16.01	19.82
New Hampshire	40.97	24.36	22.61	41.18	15.87	21.57
New Jersey	56.24	27.88	28.13	43.05	14.52	26.79
New Mexico	32.94	23.67	22.37	35.89	13.34	19.68
New York	61.38	30.58	36.66	41.66	14.41	24.21
North Carolina	41.18	22.86	24.18	34.89	12.27	17.13
North Dakota	38.12	23.47	18.44	32.84	14.85	20.38
Ohio	41.04	26.11	21.35	34.95	12.87	20.01
Oklahoma	41.81	19.68	21.00	32.99	12.93	18.92
Oregon	45.30	25.90	24.64	42.43	16.31	23.93
Pennsylvania	47.22	26.70	24.33	35.21	13.73	20.70
Rhode Island	44.68	29.09	26.45	41.83	14.99	12.05
South Carolina	35.84	22.29	21.17	34.01	12.69	16.94
South Dakota	34.15	19.94	18.30	32.07	12.83	18.19
Tennessee	44.82	21.97	23.34	31.75	12.97	16.94
Texas	49.20	23.28	24.96	35.84	13.44	20.40
Utah	39.37	24.66	21.70	33.77	13.31	18.57
Vermont	41.51	22.34	22.01	38.08	15.08	19.72
Virginia	49.75	25.93	27.51	36.24	14.00	21.41
Washington	**46.45**	**25.10**	**26.45**	**40.53**	**16.67**	**25.65**
West Virginia	33.52	21.68	20.27	31.25	12.12	15.94
Wisconsin	37.61	24.03	21.31	36.13	14.59	19.46
Wyoming	36.14	22.61	18.50	36.79	14.45	20.90
U.S. Average	49.74	25.48	27.39	37.40	14.19	21.45
Washington's Rank	**15**	**17**	**9**	**12**	**3**	**4**

Source: "Occupational Employment Statistics," US Department of Commerce, Bureau of Labor Statistics, 2015

Table 3.12
Economic Growth and Competitiveness
Average Hourly Wages, 2015
(Dollars)

	Food Preparation and Serving Related SOC 35-0000	Building and Grounds Cleaning and Maintenance SOC 37-0000	Personal Care and Service SOC 39-0000	Sales and Related SOC 41-0000	Office and Administrative Support SOC 43-0000	Farming, Fishing, and Forestry SOC 45-0000
Alabama	9.67	11.28	10.58	15.78	15.7	14.88
Alaska	13.25	14.92	14.75	17.07	20.36	19.85
Arizona	10.87	11.93	12.16	17.35	16.98	10.03
Arkansas	9.38	10.79	9.92	15.34	14.72	13.61
California	12.23	14.46	13.48	20.15	19.31	10.99
Colorado	11.21	13.09	12.8	20.63	18.19	13.73
Connecticut	12.08	15.68	14.3	21.33	20.18	14.67
Delaware	11.19	12.91	13.02	18.6	17.6	15.21
Florida	11.41	11.62	12.2	17.94	15.96	11.58
Georgia	9.69	11.78	11.64	17.87	16.64	13.87
Hawaii	13.79	15.32	13.81	16.52	18.11	15.51
Idaho	9.68	12.47	10.74	16.5	15.32	14.26
Illinois	10.73	13.98	12.71	19.89	17.83	14.89
Indiana	9.86	12.1	10.82	17.35	16.06	13.94
Iowa	9.68	12.53	11.48	16.37	16.19	16.22
Kansas	9.70	12.29	11.62	18.14	15.97	14.77
Kentucky	9.66	11.45	11.08	16.12	15.67	13.79
Louisiana	9.67	10.84	9.98	15.25	15.15	17.65
Maine	10.90	13.28	11.47	15.46	16.37	16.53
Maryland	11.50	13.41	13.49	18.64	18.83	16.29
Massachusetts	12.59	16.32	14.65	22.15	20.18	14.96
Michigan	10.64	12.88	11.89	18.29	16.8	15.09
Minnesota	10.79	13.46	12.28	19.98	18.27	15.92
Mississippi	9.46	10.41	10.9	14.26	14.81	15.49
Missouri	10.05	12.02	10.85	16.84	16.47	13.82
Montana	10.48	12.2	11.66	16.09	15.54	15.01
Nebraska	10.21	12.13	12.02	17.24	15.82	15.82
Nevada	12.17	14.04	12.63	16.02	16.88	16.36
New Hampshire	11.19	13.5	12.49	20.53	17.22	15.72
New Jersey	11.91	14.36	14.97	20.94	18.87	13.57
New Mexico	10.06	11.09	10.7	15.05	15.83	11.59
New York	12.57	15.67	14.01	23.81	19.7	16.11
North Carolina	9.90	11.45	11.67	18.56	16.32	13.71
North Dakota	11.26	13.62	12.92	18.38	16.91	16.28
Ohio	10.29	12.47	11.7	18.14	16.51	14.78
Oklahoma	9.70	11.07	10.85	16.13	15.81	14.72
Oregon	11.47	13.63	12.69	17.68	17.59	15.1
Pennsylvania	10.47	13.15	11.84	18.93	17.16	14.82
Rhode Island	11.45	14.33	12.9	20.5	18.51	12.74
South Carolina	9.81	10.98	10.85	15.51	15.77	15.81
South Dakota	10.16	11.62	11.76	17.4	14.32	13.86
Tennessee	9.62	11.47	11.05	16.54	16.12	13.48
Texas	10.40	11.26	10.49	19.61	17.04	12.57
Utah	10.39	11.53	11.91	18.46	15.84	12.78
Vermont	13.06	14.48	14.07	18.23	17.51	15.68
Virginia	11.00	12.21	12.47	18.61	17.58	15.77
Washington	**13.06**	**14.73**	**14.44**	**19.91**	**18.88**	**15.8**
West Virginia	10.06	11.3	10.46	13.84	14.67	12.93
Wisconsin	9.91	12.46	11.43	18.47	16.85	14.82
Wyoming	10.71	13.26	12.33	17.28	16.34	14.61
U.S. Average	10.98	13.02	12.33	18.90	17.47	12.67
Washington's Rank	**3**	**6**	**4**	**10**	**6**	**12**

Source: "Occupational Employment Statistics," US Department of Commerce, Bureau of Labor Statistics, 2015

Table 3.12
Economic Growth and Competitiveness
Average Hourly Wages, 2015
(Dollars)

	Construction and Extraction SOC 47-0000	Installation, Maintenance, and Repair SOC 49-0000	Production SOC 51-0000	Transportation and Material Moving SOC 53-0000
Alabama	18.74	21.67	16.47	15.26
Alaska	31.39	28.21	21.43	25.18
Arizona	20.57	21.28	17.12	16.91
Arkansas	17.36	19.00	15.40	15.15
California	26.56	24.33	17.19	17.15
Colorado	21.67	23.22	17.96	18.74
Connecticut	25.87	24.13	20.06	17.32
Delaware	22.68	24.12	17.76	16.23
Florida	18.03	19.77	15.67	15.50
Georgia	18.53	20.93	15.67	16.16
Hawaii	29.78	25.13	18.03	21.02
Idaho	19.17	20.35	16.13	16.36
Illinois	29.36	23.33	17.48	17.59
Indiana	23.57	21.35	16.96	16.33
Iowa	20.91	20.90	16.49	16.18
Kansas	20.81	21.51	17.96	16.51
Kentucky	20.58	20.87	16.85	16.72
Louisiana	20.30	20.57	20.81	18.26
Maine	19.46	21.42	17.78	16.09
Maryland	22.74	23.67	18.52	17.80
Massachusetts	28.67	25.48	18.99	17.81
Michigan	23.29	21.74	17.65	16.45
Minnesota	25.97	22.81	17.79	17.83
Mississippi	18.28	19.04	16.15	15.20
Missouri	24.08	20.86	17.06	16.08
Montana	22.71	20.89	18.13	17.86
Nebraska	19.48	21.19	16.62	17.12
Nevada	23.58	23.71	16.84	17.20
New Hampshire	21.37	23.59	17.90	16.61
New Jersey	28.20	24.83	18.02	16.67
New Mexico	19.72	20.71	17.94	17.18
New York	29.62	24.21	18.12	18.91
North Carolina	18.04	20.99	15.97	15.13
North Dakota	25.04	25.00	20.62	21.31
Ohio	22.43	21.09	17.57	15.77
Oklahoma	19.61	20.21	17.34	17.02
Oregon	23.92	22.56	17.69	16.80
Pennsylvania	23.51	21.61	18.03	16.81
Rhode Island	23.58	23.12	17.85	16.61
South Carolina	18.45	20.21	17.30	15.25
South Dakota	17.86	20.96	15.68	15.23
Tennessee	18.74	20.67	16.16	15.41
Texas	19.99	21.13	17.82	17.29
Utah	20.06	21.78	16.95	17.10
Vermont	20.48	21.97	18.06	17.65
Virginia	20.36	22.65	17.51	17.41
Washington	**26.83**	**24.87**	**20.70**	**18.89**
West Virginia	21.28	18.78	18.41	15.82
Wisconsin	24.28	21.47	17.53	16.02
Wyoming	23.87	25.27	24.93	20.68
U.S. Average	22.88	22.11	17.41	16.90
Washington's Rank	**7**	**6**	**4**	**6**

Source: "Occupational Employment Statistics," US Department of Commerce, Bureau of Labor Statistics, 2015

Chapter 4: Quality of Life – Summary

- ***Quality of Life*** **declined one place to 21st best in the nation.**
- **The state's rank relative to other states improved in six indicators, worsened in three, and remained unchanged in one.**
- **The state's year-over-year performance also improved in six indicators, worsened in three and was unchanged in one.**

Property Crime, Violent Crime Rate, Arrests Per Violent Crime

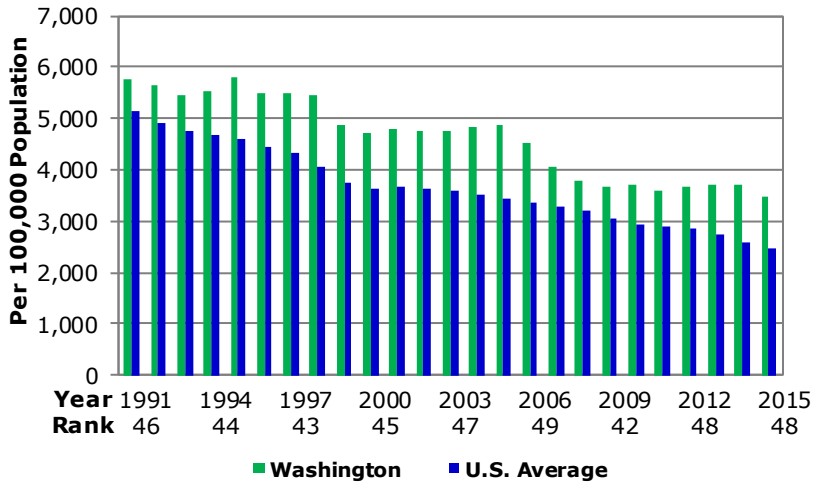
The FBI generates consistent criminal statistics across states

Due to former discrepancies including variable reporting methods, crime definitions, multiple reports for different arrests, charges and convictions for a crime, the International Association of Chiefs of Police established the Uniform Crime Reporting (UCR) program. Reported by the U.S. Federal Bureau of Investigation (FBI), the program's primary objective is to generate a reliable set of criminal statistics by mandating specific reporting requirements and criteria for gathering data that ensures consistency among states. The UCR program is a nationwide, statistical effort of over 17,000 cities, counties, and state law enforcement agencies, with data in this report going back to 1991.

Washington's rank for violent crime rate improved while the state's property crime rate and arrest rate worsened

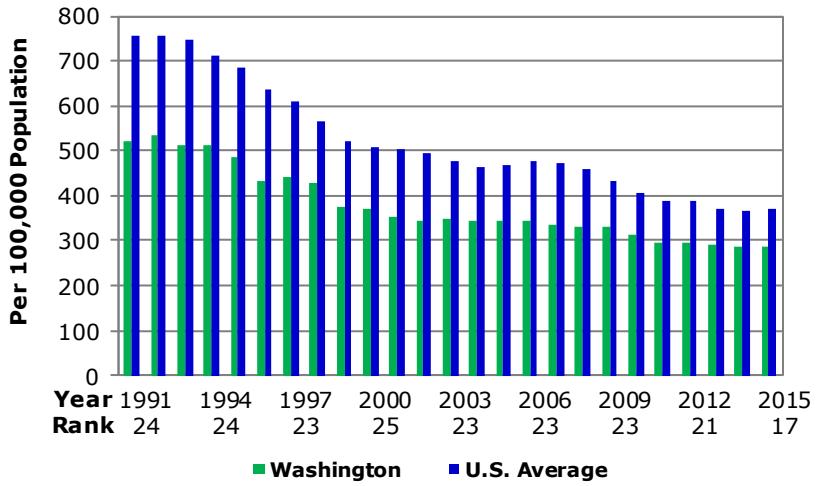
In 2015, Washington's violent crime (murder, non-negligent manslaughter, forcible rape, robbery, and aggravated assault), as measured per 100,000 people, decreased from 285 to 284, the state's lowest rate since 1991. This improved the state's rank to 17th in the nation from 20th in 2014. The rate remains much lower than the U.S. rate at 373. The property crime (burglary, larceny-theft, motor vehicle theft, and arson) rate in Washington, also measured per 100,000 people, decreased from 3,706 in 2014 to 3,464 in 2015. The decrease only improved the state's rank from 50th to 48th, as the state's property crime rate remains much higher than the U.S. average of 2,487. Washington's arrests per violent crime remain unchanged at 0.42 in 2015, the same as the national average.

Figure 4.1: Property Crime



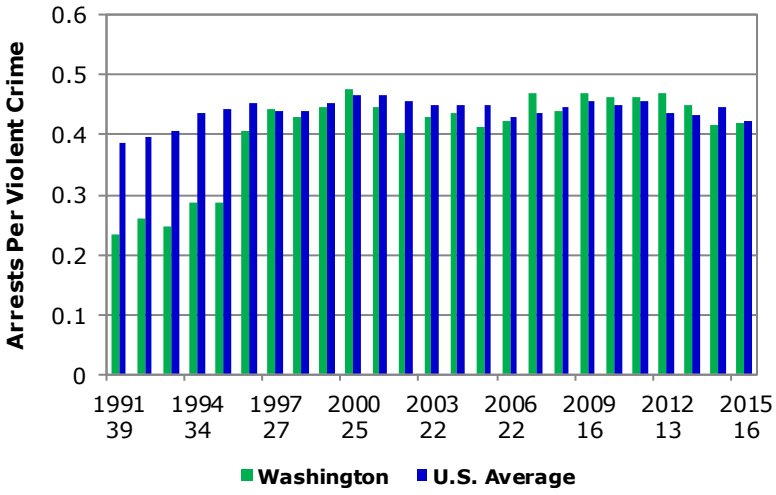
Source: U.S. Department of Justice. Federal Bureau of Investigation; data through 2015

Figure 4.2: Violent Crime Rate



Source: U.S. Department of Justice. Federal Bureau of Investigation; data through 2015

Figure 4.3: Arrests Per Violent Crime



Source: U.S. Department of Justice. Federal Bureau of Investigation; data through 2015

Air Quality

The United Health Foundation measures air pollution

Air quality is measured by the amount of micrograms of fine particles per cubic meter in the air we breathe. The United Health Foundation measures air pollution by particulate matter of 2.5 microns and smaller. The smaller particles are, the more risk there is for health problems. Particulate matter of 2.5 microns or less is known as fine particulate, which is found in smoke and haze.

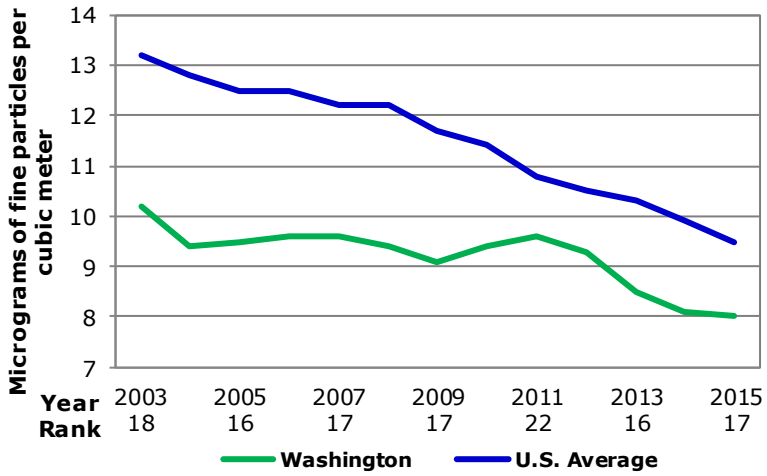
Data show the micrograms per cubic meter in each state

Air pollution is monitored in places where population density is significant or where pollution has been a problem in the past. The average exposure of the general public to fine particles is found by pollution reports provided by each county reporting in a state, which is weighted by population. In counties where pollution data is not available, it is assumed that pollution is equal to the average of the lowest reported pollution areas in the state or region for each of the last three years. The data reports the micrograms of fine particles per cubic meter in each state.

Air pollution decreased in Washington in 2015, ranking the state at 17th in the nation

In 2015, there was 8.0 micrograms of fine particles per cubic meter in Washington, a slight decrease from 8.1 in 2014. During this time the national average dropped from 9.9 micrograms of fine particle per cubic meter to 9.5. Washington's rank declined one place to 17th in the nation for 2015. The state's five-year average from 2011 to 2015 of 8.7 micrograms is less than the U.S. five-year average of 10.2 micrograms, and ranks Washington 18th among the states.

Figure 4.4: Air Quality



Source: U.S. Environmental Protection Agency. National Air Quality and Emissions Trends Report; data through 2015

Drinking Water

Public water systems must abide by the standards established by the EPA

Public water systems 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. The number of contaminants regulated by the EPA has risen from 23 in 1986 to over 100 today.

The EPA annually reports the number of systems whose water has violated SDWA standards

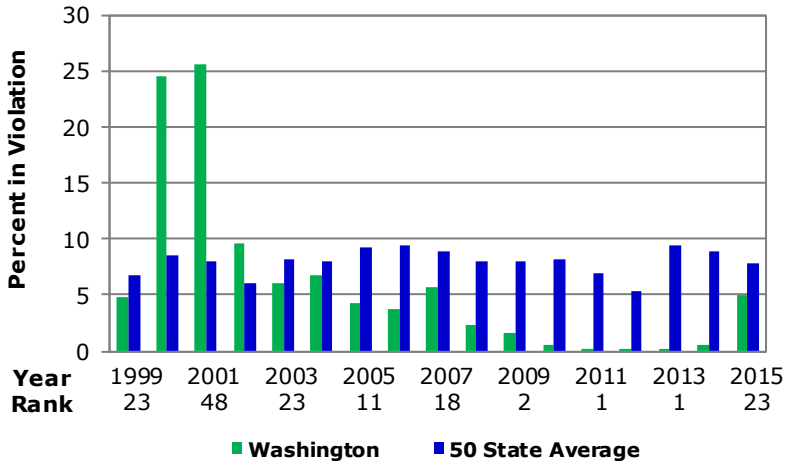
The EPA annually reports the number of systems whose water has violated SDWA standards and the total number of people served by these systems. There are five major categories of violations: Maximum Contaminant Level, Monitoring, Maximum Residual Disinfectant Level, Treatment Technique, and Consumer Confidence and Public/State Notification violations. Each of the violation categories is associated with multiple sub-categories and different Rules, Rule Codes, and Contaminants. The corresponding table, found at the end of the chapter, indicates the percentage of each state's population served by a water system subject to the SDWA that is in violation of any of its rules.

Washington's rank dropped to its lowest level since 2003

In 2015, Washington's rank dropped to its lowest level since 2003, at 23rd in the nation. Compared to the U.S. average of 7.9 percent, only 4.9 percent of Washington residents were served by water systems that violated the SDWA. This is higher than the previous four years, all featuring rates below 1 percent. The state's 5-year average from 2011-2015 was 1.2 percent, beating

the U.S. average of 7.7 percent and ranking 6th in the country for the past five years.

Figure 4.5: Drinking Water



Source: U.S. Environmental Protection Agency, Community Public Water Systems Compliance Statistics; data through 2015

Toxins Released

The EPA reports the amount of toxic chemical releases

The Toxics Release Inventory (TRI), reported by the U.S. Environmental Protection Agency (EPA), provides the public with information concerning toxic chemical releases from industrial facilities. Each year, facilities that meet certain thresholds must report their releases and other waste management activities for listed toxic chemicals to the EPA and to the state or tribal entity in whose jurisdiction the facility is located.

Washington doesn't have a widespread presence of high pollutant industries

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. Washington never saw a noticeable increase in its TRI reports because many of the added industries, such as metal and coal mining, are not widespread in the state.

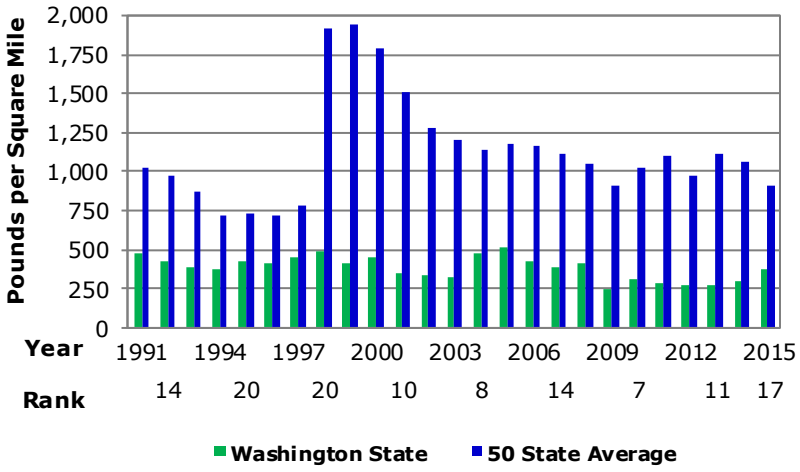
The U.S. reported a 17.1 percent decrease in total releases of toxins in 2015

In 2015, U.S. industries reported a 17.1 percent decrease in their total releases of toxics, from 3.9 to 3.4 billion pounds. This figure includes effluent releases directly into the air, water or land, whether it is on-site or off-site landfills, surface impoundments, land treatment facilities, or underground injection wells.

Washington's toxin releases increased by 23.5 percent in 2015

Washington industries reported 25.9 million pounds of toxic releases in 2015, an increase of 23.5 percent from 2014. This increased the state's toxin release to 367 pounds per square mile from 297 the year before. Washington's rank decreased to 17th lowest in the nation from 12th in 2014. The state's 2015 releases remain well below the national average of 903 pounds per square mile. Washington's five-year average release of 298 pounds per square mile was also well below the national average of 1,031 pounds and ranked 12th among the states.

Figure 4.6: Toxins Released



Source: U.S. Environmental Protection Agency. Office of Pollution Prevention and Toxics; data through 2015

State Health Index

The United Health Foundation provides a composite health index for each state

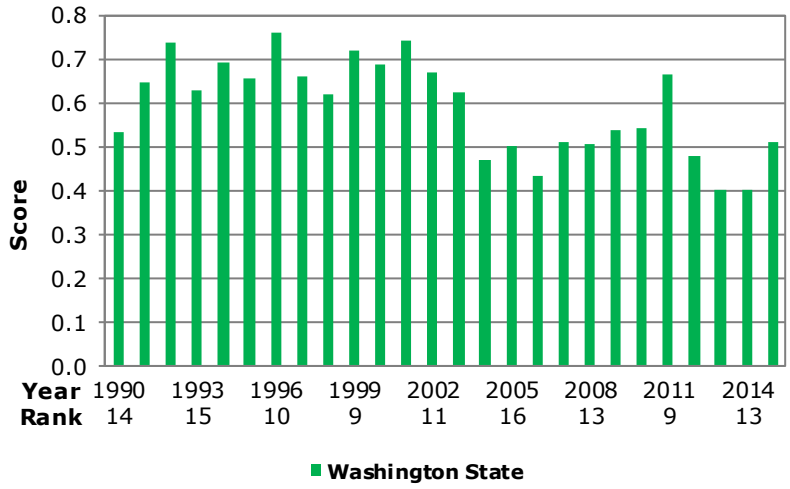
The United Health Foundation America's Health Rankings provide a composite indicator that measures the relative healthiness of each state and the general health of the population in the United States. The measures that comprise America's Health Rankings are of two types – determinants and outcomes. Determinants represent those actions that can affect the future health of the population, whereas outcomes represent what has already occurred. Index values represent scores which are the weighted number of standard deviations a state is above or below the national mean.

Washington's 2015 index improved to 9th best in the nation

Washington's 2015 index value improved to 0.51 from 0.40 the year before. This improved the state's rank to 9th best from 13th best the year before. The state ranked 9th highest in the nation in health determinants and 13th highest in health outcomes. The study highlighted as strengths: low incidence of infectious disease, low rate of cardiovascular deaths, and small disparity in health status by education level. The study indicated challenges of: low rate of high school graduation, low immunization

coverage among children, and high prevalence of excessive drinking.

Figure 4.7: State Health Index



Source: United Health Foundation, America's Health Rankings; data through 2015

Parks and Recreation Areas

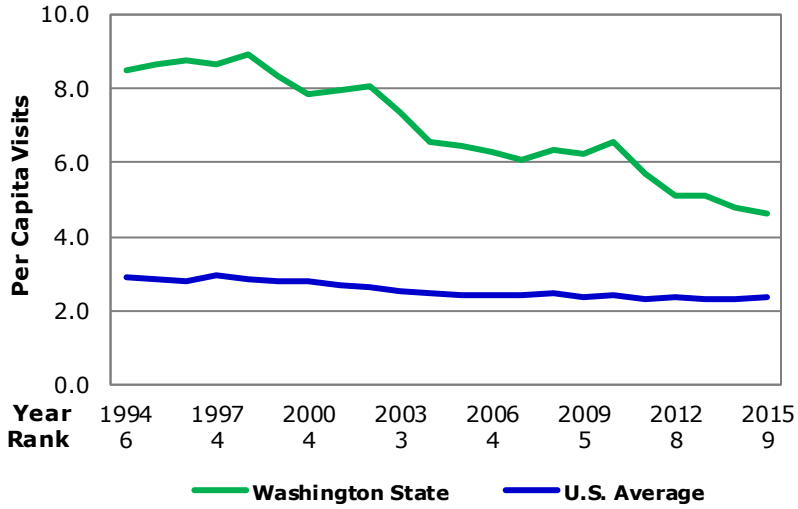
Washington's park system is more than a century old

Established in 1913, the Washington state park system has provided the public with places to recreate and enjoy for over a century. Washington's park system is one of the most abundant and busiest state park systems in the nation. With over 130 state parks and recreation areas covering about 120,000 acres, Washington ranks 3rd among all 50 states in the number of operating parks and 19th in the amount of park acreage managed.

Washington's per capita visits decreased but its national rank improved

In 2015, Washington's park and recreation area visits per capita decreased to 4.6. However, the state was still far above the national average number of visits per capita (2.4) and the state's rank improved from 10th to 9th in the nation. Washington ranks even higher in five-year average visits per capita, coming in at 8th in the nation with an average of 5.1 visits per capita. The national five-year average is 2.3. Since state park visits per capita began being recorded in 1987, Washington has always ranked very high, although its lowest rankings occurred in 2013 and 2014 when the state placed 10th in the nation.

Figure 4.8: Parks and Recreation Areas



Source: National Association of State Parks Directors. Washington State Parks and Recreation Commission; data through 2015

State Arts

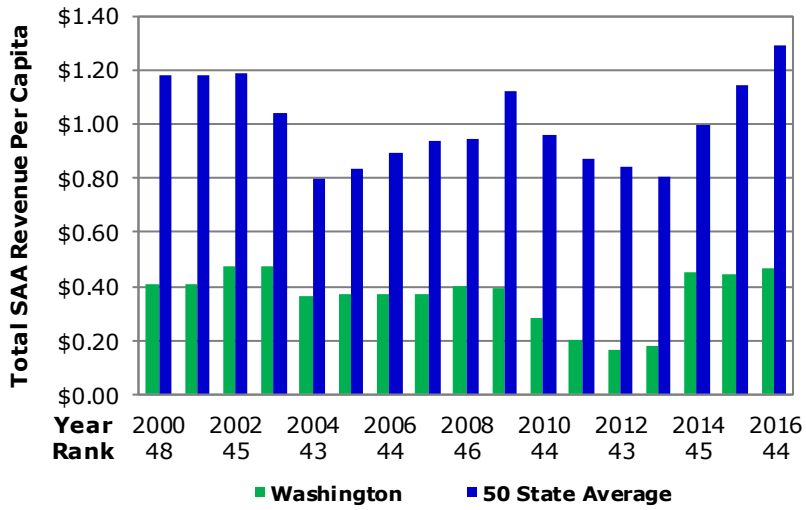
Measures art agency funding

The National Assembly of State Arts Agencies (NASAA) reports annual, fiscal year summaries about state art agency revenue. Using data from these fiscal year reports, the State Arts indicator expresses funding for state art programs and allows for state-to-state comparisons. The estimates for total per capita state arts agency revenue that are shown in Table 4.9 are calculated by totaling state legislative appropriations, other state funds, federal funds from sources such as the National Endowment for the Arts (NEA), and other non-federal funds received. Though arts agencies are the primary source of funding, some states also fund the arts through other agencies, such as arts education through the Department of Education; this funding is not included in the data.

Per capita arts funding was 7th lowest in the nation

Washington's per capita arts funding rose during fiscal year 2016 to $0.47 from $0.44 in fiscal year 2015, helping the state's ranking improve to 44th in the nation. Washington's per capita arts funding of $0.16 remains far below the U.S. average of $1.29. The state's five-year average funding was $0.34, ranking 44th in the nation, while the national average was $1.01 for the same period.

Figure 4.9: State Arts



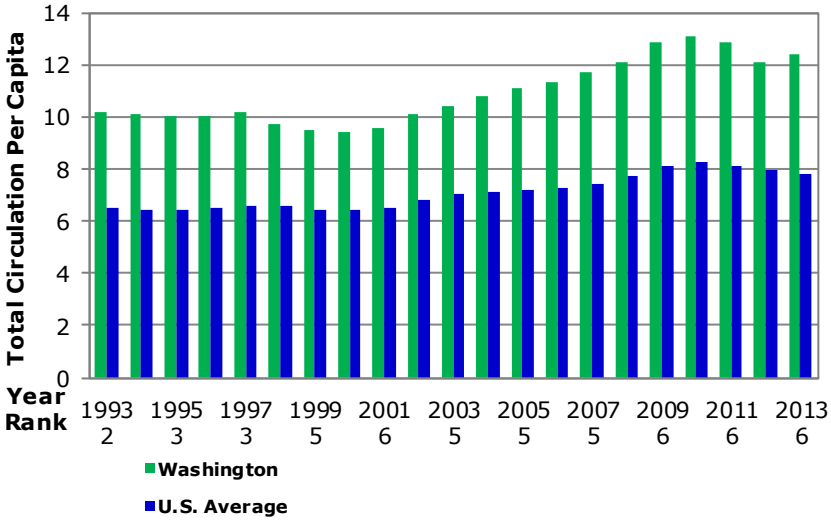
Source: National Assembly of State Arts Agencies; data through 2016

Public Library Service

Measures the amount of circulation per capita

The United States Institute of Museum and Library Services administers the Public Library Survey. The survey has been conducted annually since 1988 and monitors the state of public libraries across the nation. In this climate study, the public library service indicator ranks each state's public library service by measuring the amount of circulation (or the amount of media such as books, videos, or musical recordings checked out at each library) per capita.

Figure 4.10: Public Library Service



Source: U.S. Department of Education. National Center for Education Statistics; data through 2013

Washington ranked 6th in per capita circulation in FY 2013

Washington consistently performs well in per capita circulation, ranking 6th in the nation for the fifth consecutive year during fiscal year 2013. Washington's per capita circulation was 12.4, compared to the national average of 7.8 in 2013. The state's five-year average, 12.7, was also higher than the U.S. five-year average of 8.1. Washington's high five-year average helps it rank 6th in the nation in this category as well.

Table 4.1
Quality of Life
Property Crime Rate
(Per 100,000 Population)

	2011	2012	2013	2014	2015	2011-15
Alabama	3,605	3,502	3,351	3,178	2,979	3,323
Alaska	2,638	2,739	2,885	2,760	2,818	2,768
Arizona	3,555	3,539	3,399	3,198	3,033	3,345
Arkansas	3,758	3,660	3,603	3,338	3,252	3,522
California	2,584	2,759	2,658	2,441	2,618	2,612
Colorado	2,595	2,685	2,659	2,530	2,642	2,622
Connecticut	2,153	2,140	1,974	1,920	1,812	2,000
Delaware	3,432	3,341	3,066	2,982	2,691	3,102
Florida	3,517	3,277	3,105	3,416	2,813	3,226
Georgia	3,641	3,411	3,347	3,281	3,022	3,340
Hawaii	3,184	3,075	3,054	3,050	3,796	3,232
Idaho	2,076	1,984	1,864	1,855	1,744	1,904
Illinois	2,679	2,579	2,274	2,076	1,989	2,319
Indiana	3,162	3,029	2,854	2,649	2,596	2,858
Iowa	2,351	2,272	2,194	2,094	2,047	2,192
Kansas	3,089	3,143	2,947	2,735	2,720	2,927
Kentucky	2,726	2,553	2,363	2,247	2,178	2,413
Louisiana	3,684	3,541	3,582	3,459	3,353	3,524
Maine	2,546	2,510	2,292	1,986	1,830	2,233
Maryland	2,857	2,754	2,664	2,508	2,315	2,619
Massachusetts	2,253	2,153	2,051	1,857	1,691	2,001
Michigan	2,545	2,531	2,328	2,044	1,886	2,266
Minnesota	2,547	2,568	2,420	2,298	2,222	2,411
Mississippi	3,016	2,811	2,725	2,921	2,834	2,861
Missouri	3,313	3,314	3,137	2,907	2,854	3,105
Montana	2,394	2,584	2,557	2,473	2,624	2,526
Nebraska	2,763	2,755	2,623	2,524	2,241	2,581
Nevada	2,576	2,809	2,838	2,625	2,668	2,703
New Hampshire	2,486	2,324	2,194	1,963	1,746	2,142
New Jersey	2,147	2,047	1,883	1,734	1,627	1,888
New Mexico	3,538	3,601	3,705	3,542	3,697	3,617
New York	1,907	1,922	1,825	1,718	1,604	1,795
North Carolina	3,500	3,370	3,128	2,873	2,750	3,124
North Dakota	1,947	2,010	2,094	2,110	2,117	2,056
Ohio	3,298	3,117	2,928	2,799	2,588	2,946
Oklahoma	3,372	3,401	3,274	2,991	2,886	3,185
Oregon	3,151	3,224	3,174	2,879	2,947	3,075
Pennsylvania	2,224	2,166	2,061	1,932	1,813	2,039
Rhode Island	2,663	2,572	2,442	2,174	1,898	2,350
South Carolina	3,921	3,822	3,624	3,460	3,293	3,624
South Dakota	1,858	2,060	1,915	1,864	1,943	1,928
Tennessee	3,608	3,371	3,181	3,061	2,936	3,231
Texas	3,483	3,362	3,258	3,019	2,831	3,191
Utah	2,988	2,992	2,950	2,879	2,980	2,958
Vermont	2,408	2,399	2,214	1,524	1,407	1,990
Virginia	2,257	2,162	2,066	1,930	1,867	2,056
Washington	**3,579**	**3,659**	**3,710**	**3,706**	**3,464**	**3,624**
West Virginia	2,103	2,365	2,104	2,035	2,020	2,125
Wisconsin	2,450	2,454	2,189	2,088	1,974	2,231
Wyoming	2,270	2,294	2,198	1,965	1,903	2,126
United States	2,905	2,868	2,734	2,596	2,487	2,718
Washington's Rank	**44**	**48**	**50**	**50**	**48**	**49**

Source: U.S. Department of Justice. Federal Bureau of Investigation. Crime in the United States-Uniform Crime Reports, 2015.

Table 4.2
Quality of Life
Violent Crime Rate
(Per 100,000 Population)

	2011	2012	2013	2014	2015	2011-15
Alabama	420	450	431	427	472	440
Alaska	610	603	640	636	730	644
Arizona	414	429	417	400	410	414
Arkansas	482	469	460	480	521	483
California	411	423	402	396	426	412
Colorado	314	309	308	309	321	312
Connecticut	276	283	263	237	219	255
Delaware	566	547	491	489	499	519
Florida	515	487	470	541	462	495
Georgia	375	379	366	377	378	375
Hawaii	251	239	252	259	293	259
Idaho	202	208	217	212	216	211
Illinois	424	415	380	370	384	395
Indiana	332	346	357	365	388	358
Iowa	257	264	271	274	286	270
Kansas	356	355	340	349	390	358
Kentucky	240	223	210	212	219	220
Louisiana	555	497	519	515	540	525
Maine	123	123	129	128	130	127
Maryland	494	477	474	446	457	469
Massachusetts	427	406	413	391	391	406
Michigan	443	455	450	427	416	438
Minnesota	231	231	234	229	243	234
Mississippi	269	261	275	279	276	272
Missouri	448	451	433	443	497	454
Montana	276	272	253	324	350	295
Nebraska	254	259	262	280	275	266
Nevada	568	608	603	636	696	622
New Hampshire	217	188	215	196	199	203
New Jersey	308	290	289	261	255	281
New Mexico	573	559	613	597	656	600
New York	397	407	394	382	380	392
North Carolina	346	353	342	330	347	344
North Dakota	248	245	270	265	239	253
Ohio	305	300	286	285	292	294
Oklahoma	458	469	441	406	422	439
Oregon	249	248	254	232	260	249
Pennsylvania	362	349	335	314	315	335
Rhode Island	246	252	257	219	243	243
South Carolina	597	559	509	498	505	533
South Dakota	256	322	317	327	383	321
Tennessee	608	644	591	608	612	613
Texas	409	409	408	406	412	409
Utah	197	206	224	216	236	216
Vermont	148	143	121	99	118	126
Virginia	198	190	196	196	196	195
Washington	**295**	**296**	**289**	**285**	**284**	**290**
West Virginia	296	316	300	302	338	311
Wisconsin	250	281	278	290	306	281
Wyoming	219	201	205	196	222	209
United States	387	388	369	366	373	376
Washington's Rank	**21**	**21**	**22**	**20**	**17**	**20**

Source: U.S. Department of Justice. Federal Bureau of Investigation. Crime in the United States-Uniform Crime Reports, 2015

Table 4.3
Quality of Life
Arrests Per Violent Crime

	2011	2012	2013	2014	2015	2011-15
Alabama#	0.04	0.06	0.07	0.09	0.32	0.12
Alaska	0.46	0.58	0.54	0.53	0.41	0.50
Arizona	0.34	0.32	0.35	0.35	0.34	0.34
Arkansas	0.31	0.35	0.32	0.32	0.33	0.33
California	0.70	0.65	0.66	0.69	0.65	0.67
Colorado	0.39	0.37	0.36	0.37	0.38	0.37
Connecticut	0.50	0.46	0.40	0.48	0.43	0.45
Delaware	0.45	0.48	0.48	0.47	0.47	0.47
Florida	0.44	0.44	0.44	0.37	0.41	0.42
Georgia	0.42	0.41	0.37	0.35	0.29	0.37
Hawaii	NA	NA	0.75	0.79	0.37	0.64
Idaho	0.43	0.45	0.44	0.40	0.44	0.43
Illinois	0.57	0.56	0.56	0.44	0.37	0.50
Indiana	0.51	0.41	0.45	0.42	0.40	0.44
Iowa	0.57	0.58	0.54	0.54	0.63	0.57
Kansas	0.31	0.31	0.31	0.29	0.27	0.30
Kentucky	0.36	0.40	0.41	0.41	0.36	0.39
Louisiana	0.62	0.68	0.53	0.36	0.36	0.51
Maine	0.46	0.47	0.47	0.45	0.46	0.46
Maryland	0.40	0.38	0.37	0.40	0.40	0.39
Massachusetts	0.45	0.43	0.40	0.43	0.41	0.42
Michigan	0.31	0.28	0.28	0.28	0.28	0.28
Minnesota	0.42	0.00	0.44	0.45	0.45	0.35
Mississippi	0.49	0.43	0.40	0.43	0.38	0.43
Missouri	0.41	0.40	0.38	0.37	0.36	0.38
Montana	0.33	0.35	0.34	0.30	0.29	0.32
Nebraska	0.50	0.47	0.44	0.47	0.36	0.45
Nevada	0.41	0.39	0.40	0.43	0.41	0.41
New Hampshire	0.38	0.40	0.34	0.36	0.32	0.36
New Jersey	0.44	0.45	0.44	0.47	0.42	0.44
New Mexico	0.39	0.41	0.38	0.39	0.38	0.39
New York	0.31	0.33	0.31	0.31	0.34	0.32
North Carolina	0.61	0.61	0.57	0.57	0.55	0.58
North Dakota	0.31	0.31	0.30	0.33	0.38	0.33
Ohio	0.29	0.29	0.28	0.27	0.22	0.27
Oklahoma	0.32	0.28	0.30	0.30	0.32	0.30
Oregon	0.47	0.47	0.45	0.50	0.46	0.47
Pennsylvania	0.54	0.55	0.55	0.54	0.50	0.54
Rhode Island	0.33	0.34	0.31	0.34	0.34	0.33
South Carolina	0.31	0.32	0.33	0.32	0.29	0.31
South Dakota	0.33	0.32	0.32	0.35	0.39	0.34
Tennessee	0.45	0.45	0.47	0.44	0.42	0.45
Texas	0.31	0.29	0.28	0.27	0.28	0.29
Utah	0.29	0.36	0.33	0.36	0.36	0.34
Vermont	0.63	0.65	0.73	0.86	0.69	0.71
Virginia	0.42	0.44	0.42	0.43	0.40	0.42
Washington	**0.46**	**0.47**	**0.45**	**0.42**	**0.42**	**0.44**
West Virginia	0.44	0.41	0.38	0.45	0.48	0.43
Wisconsin	0.56	0.56	0.51	0.46	0.45	0.51
Wyoming	0.47	0.44	0.47	0.44	0.48	0.46
U.S. Average	0.46	0.44	0.43	0.45	0.42	0.44
Washington's Rank	**15**	**13**	**16**	**25**	**16**	**19**

Source: U.S. Department of Justice. Federal Bureau of Investigation. Crime in the United States-Uniform Crime Reports, 2015
#Because of changes in the state's reporting practices, 2010-2014 figures are not comparable to previous years' data.

Table 4.4
Quality of Life
Air Quality
(Micrograms of fine particles per cubic meter)

	2011	2012	2013	2014	2015	2011-15
Alabama	11.5	11.0	10.7	10.0	9.5	10.5
Alaska	6.3	6.0	5.4	4.9	6.0	5.7
Arizona	9.3	9.4	9.6	9.9	9.7	9.6
Arkansas	10.9	10.8	10.7	10.3	9.7	10.5
California	15.1	15.3	15.1	13.9	12.5	14.4
Colorado	7.0	6.7	6.7	6.8	7.0	6.8
Connecticut	9.9	9.3	9.0	8.7	8.8	9.1
Delaware	11.6	11.0	10.6	10.2	9.7	10.6
Florida	7.8	7.6	7.6	7.4	7.2	7.5
Georgia	12.0	11.5	11.2	10.3	9.8	11.0
Hawaii	8.6	8.9	9.1	8.7	7.6	8.6
Idaho	8.6	8.7	8.6	10.4	11.7	9.6
Illinois	11.8	11.7	11.7	11.4	11.1	11.5
Indiana	13.1	13.1	12.6	11.7	11.3	12.4
Iowa	10.2	10.1	9.9	9.6	9.3	9.8
Kansas	9.3	9.1	8.9	8.8	8.6	8.9
Kentucky	11.9	11.4	11.1	10.4	10.1	11.0
Louisiana	9.8	9.5	9.6	9.2	8.6	9.3
Maine	8.2	7.8	7.5	7.6	7.4	7.7
Maryland	11.5	10.9	10.8	10.0	9.6	10.6
Massachusetts	8.9	8.4	8.1	7.7	7.2	8.1
Michigan	10.1	9.5	9.3	8.8	8.8	9.3
Minnesota	8.6	8.2	8.1	8.0	8.0	8.2
Mississippi	10.3	10.0	9.8	9.3	8.9	9.7
Missouri	10.9	10.3	10.0	10.0	9.7	10.2
Montana	7.7	7.6	7.2	6.3	5.7	6.9
Nebraska	8.2	8.2	8.2	8.0	7.8	8.1
Nevada	8.9	8.4	9.1	9.3	10.0	9.1
New Hampshire	7.8	7.5	7.6	7.5	7.2	7.5
New Jersey	9.8	9.2	9.1	9.0	8.8	9.2
New Mexico	5.8	6.1	6.6	7.1	6.6	6.4
New York	9.7	9.2	9.0	8.5	8.0	8.9
North Carolina	10.8	10.0	9.6	9.0	8.7	9.6
North Dakota	5.7	5.6	5.6	5.4	5.2	5.5
Ohio	12.5	12.0	11.6	10.9	10.6	11.5
Oklahoma	10.2	9.9	9.7	9.7	9.5	9.8
Oregon	7.3	7.3	7.0	6.9	6.7	7.0
Pennsylvania	12.4	12.0	11.7	11.7	11.4	11.8
Rhode Island	8.7	8.4	8.5	8.4	7.8	8.4
South Carolina	11.0	10.5	10.2	9.5	9.0	10.0
South Dakota	7.1	6.7	6.4	6.3	6.3	6.6
Tennessee	11.1	10.4	10.1	9.5	9.1	10.0
Texas	10.4	10.3	10.2	10.2	9.9	10.2
Utah	9.6	9.9	9.3	10.1	8.9	9.6
Vermont	7.1	7.0	6.9	6.4	6.2	6.7
Virginia	10.4	9.7	9.3	8.7	8.3	9.3
Washington	**9.6**	**9.3**	**8.5**	**8.1**	**8.0**	**8.7**
West Virginia	11.9	11.2	10.7	9.8	9.4	10.6
Wisconsin	10.5	10.0	9.6	9.3	9.1	9.7
Wyoming	5.2	5.1	5.3	5.0	5.0	5.1
U.S. Average	10.8	10.5	10.3	9.9	9.5	10.2
Washington's Rank	**22**	**23**	**16**	**16**	**17**	**18**

Source: United Health Foundation, America's Health Rankings, Air Pollution, 2015

Table 4.5
Quality of Life
Drinking Water Index
(Percent)*

	2011	2012	2013	2014	2015	2011-15
Alabama	2.0	1.3	4.1	5.4	3.2	3.2
Alaska	7.0	10.8	8.8	21.2	11.9	12.0
Arizona	2.9	3.1	2.5	2.5	26.3	7.5
Arkansas	11.0	9.4	10.4	7.5	12.3	10.1
California	2.8	2.0	2.7	2.5	4.0	2.8
Colorado	7.1	1.7	1.5	4.2	1.3	3.1
Connecticut	1.3	1.0	0.4	0.3	1.9	1.0
Delaware	24.6	0.8	12.0	15.2	0.5	10.6
Florida	3.6	2.6	5.6	6.7	7.0	5.1
Georgia	2.7	1.5	12.0	14.3	3.7	6.9
Hawaii	0.5	0.2	2.8	45.4	1.1	10.0
Idaho	12.5	10.5	6.8	6.4	7.2	8.7
Illinois	3.4	3.1	5.7	1.4	2.2	3.1
Indiana	3.6	2.5	1.3	5.8	3.9	3.4
Iowa	6.5	5.2	3.9	9.5	13.6	7.7
Kansas	10.5	4.6	3.8	4.5	9.2	6.5
Kentucky	11.5	10.9	3.3	15.3	10.6	10.3
Louisiana	8.8	12.5	127.4	17.5	22.1	37.7
Maine	9.6	7.9	2.7	1.8	1.9	4.8
Maryland	1.3	0.3	0.9	31.8	30.7	13.0
Massachusetts	10.8	3.8	25.7	12.0	6.9	11.8
Michigan	3.4	1.0	0.7	0.8	2.3	1.6
Minnesota	3.8	1.0	0.8	0.7	0.8	1.4
Mississippi	8.0	7.8	10.2	5.9	8.6	8.1
Missouri	6.7	4.7	3.9	4.8	8.8	5.8
Montana	9.3	12.3	14.4	9.5	12.1	11.5
Nebraska	10.8	10.8	8.7	8.2	11.5	10.0
Nevada	2.6	1.3	1.1	0.1	0.5	1.1
New Hampshire	10.9	0.2	10.9	20.5	11.6	10.8
New Jersey	16.2	7.5	5.0	8.0	8.0	9.0
New Mexico	8.5	6.0	7.1	7.8	7.9	7.5
New York	5.3	4.3	48.7	3.7	2.7	13.0
North Carolina	4.2	2.6	2.9	5.8	4.7	4.1
North Dakota	2.8	0.9	0.3	5.8	3.2	2.6
Ohio	3.1	2.2	1.6	6.9	17.8	6.3
Oklahoma	15.3	15.1	21.7	23.5	21.3	19.4
Oregon	5.4	2.5	20.2	18.1	4.5	10.2
Pennsylvania	21.0	13.3	5.0	12.0	15.2	13.3
Rhode Island	12.7	5.3	14.9	14.6	2.5	10.0
South Carolina	1.2	1.7	2.7	4.7	4.5	3.0
South Dakota	6.3	7.2	3.7	2.5	4.4	4.8
Tennessee	0.7	14.8	6.8	1.9	5.5	6.0
Texas	8.3	5.9	6.1	7.2	15.5	8.6
Utah	5.0	13.0	11.3	7.7	9.0	9.2
Vermont	15.5	12.0	7.8	8.8	5.6	9.9
Virginia	2.9	8.2	2.9	2.0	1.3	3.5
Washington	**0.2**	**0.2**	**0.3**	**0.5**	**4.9**	**1.2**
West Virginia	4.2	2.3	4.5	3.1	5.3	3.9
Wisconsin	6.5	7.0	4.9	5.1	8.3	6.3
Wyoming	3.5	2.1	1.4	10.8	2.9	4.1
50 State Average**	7.0	5.4	9.5	8.8	7.9	7.7
Washington's Rank	**1**	**3**	**1**	**3**	**23**	**3**

*Percent of population served by water supply in violation of EPA standards.
**The 50 state average is an average of indicators listed. It may differ from the U.S. average.
Source: U.S. Environmental Protection Agency, GPRA Summary Report, 2016

Table 4.6
Quality of Life
Toxins Released
Pounds per square mile

	2011	2012	2013	2014	2015	2011-15
Alabama	1,622	1,576	1,672	1,733	1,618	1,644
Alaska	1,705	1,425	1,578	1,892	953	1,511
Arizona	857	750	615	689	750	732
Arkansas	667	667	669	710	617	666
California	231	205	218	191	197	208
Colorado	250	270	263	283	261	265
Connecticut	370	392	408	347	273	358
Delaware	2,569	3,157	2,303	2,536	2,578	2,629
Florida	1,233	1,053	1,117	1,071	1,009	1,097
Georgia	1,257	1,153	1,196	1,158	953	1,144
Hawaii	401	417	402	414	398	406
Idaho	652	462	581	601	562	571
Illinois	1,833	2,014	2,144	2,066	1,994	2,010
Indiana	4,264	4,049	4,232	4,348	3,736	4,126
Iowa	716	723	709	626	628	680
Kansas	298	252	258	265	225	260
Kentucky	2,076	1,931	1,795	1,791	1,543	1,827
Louisiana	2,655	2,894	2,785	2,784	2,830	2,790
Maine	320	356	359	302	280	323
Maryland	941	671	686	671	657	725
Massachusetts	421	396	398	387	367	394
Michigan	845	732	721	634	753	737
Minnesota	290	315	304	332	300	308
Mississippi	1,168	1,193	1,393	1,444	1,345	1,308
Missouri	1,063	1,013	1,031	1,002	1,083	1,038
Montana	232	231	237	257	261	244
Nebraska	352	308	337	338	271	321
Nevada	4,845	2,578	3,354	2,593	2,926	3,259
New Hampshire	237	89	82	69	51	106
New Jersey	1,724	1,586	1,343	1,326	9,077	3,011
New Mexico	120	201	187	167	184	172
New York	354	328	308	305	297	318
North Carolina	1,132	1,084	1,016	1,172	1,184	1,118
North Dakota	298	488	675	660	663	557
Ohio	3,281	2,709	2,722	2,563	2,410	2,737
Oklahoma	575	944	438	381	385	544
Oregon	221	238	176	169	162	193
Pennsylvania	2,229	2,157	2,088	1,885	1,441	1,960
Rhode Island	228	234	246	291	374	274
South Carolina	1,661	1,585	1,587	1,495	1,250	1,516
South Dakota	77	68	87	80	84	79
Tennessee	2,089	1,876	1,859	2,047	2,058	1,986
Texas	800	852	915	942	869	876
Utah	2,316	2,261	6,189	2,459	2,700	3,185
Vermont	38	32	28	32	37	34
Virginia	1,117	1,005	1,083	1,005	915	1,025
Washington	**283**	**268**	**273**	**297**	**367**	**298**
West Virginia	1,694	1,685	1,568	1,510	1,298	1,551
Wisconsin	550	525	547	552	489	533
Wyoming	196	175	206	188	210	195
U.S. Average	1,105	976	1,115	1,057	903	1,031
Washington's Rank	**11**	**11**	**12**	**12**	**17**	**12**

Source: U.S. Environmental Protection Agency. Office of Pollution Prevention and Toxics.
Toxics Release Inventory Public Data Release Reports, 2015

Table 4.7
Quality of Life
State Health Index
*Score

	2011	2012	2013	2014	2015	2011-15
Alabama	-0.80	-0.71	-0.82	-0.66	0.06	-0.59
Alaska	0.04	0.23	0.28	0.13	-0.70	0.00
Arizona	0.14	0.11	0.02	-0.04	-0.89	-0.13
Arkansas	-0.72	-0.87	-0.89	-0.93	-0.07	-0.70
California	0.30	0.28	0.31	0.35	0.35	0.32
Colorado	0.54	0.62	0.57	0.57	0.56	0.57
Connecticut	0.94	0.68	0.65	0.74	0.67	0.74
Delaware	-0.01	-0.17	-0.10	-0.23	-0.16	-0.13
Florida	-0.16	-0.17	-0.21	-0.15	-0.17	-0.17
Georgia	-0.40	-0.37	-0.32	-0.32	-0.37	-0.35
Hawaii	0.96	0.99	0.92	0.91	0.89	0.93
Idaho	0.53	0.32	0.44	0.34	0.24	0.37
Illinois	0.01	-0.11	-0.10	-0.08	0.35	0.02
Indiana	-0.29	-0.41	-0.49	-0.38	0.00	-0.31
Iowa	0.51	0.38	0.32	0.22	-0.44	0.20
Kansas	0.20	0.07	0.12	0.08	0.11	0.11
Kentucky	-0.60	-0.60	-0.72	-0.75	-0.60	-0.65
Louisiana	-1.13	-1.00	-0.84	-0.80	-0.99	-0.95
Maine	0.63	0.40	0.37	0.30	0.71	0.48
Maryland	0.20	0.32	0.28	0.35	0.33	0.29
Massachusetts	0.87	0.80	0.73	0.74	0.37	0.70
Michigan	-0.09	-0.23	-0.22	-0.21	-0.28	-0.20
Minnesota	0.88	0.92	0.73	0.73	0.70	0.79
Mississippi	-1.09	-1.04	-0.89	-1.00	-0.29	-0.86
Missouri	-0.41	-0.40	-0.37	-0.28	-0.95	-0.48
Montana	0.17	0.07	0.28	0.28	0.21	0.20
Nebraska	0.46	0.54	0.46	0.50	-0.13	0.37
Nevada	-0.40	-0.29	-0.29	-0.33	0.45	-0.17
New Hampshire	1.09	0.79	0.70	0.68	0.49	0.75
New Jersey	0.46	0.62	0.53	0.47	0.69	0.55
New Mexico	-0.07	-0.27	-0.18	-0.18	0.47	-0.05
New York	0.35	0.34	0.37	0.39	-0.32	0.23
North Carolina	-0.18	-0.26	-0.25	-0.29	-0.35	-0.27
North Dakota	0.58	0.66	0.56	0.55	0.44	0.56
Ohio	-0.28	-0.31	-0.41	-0.36	-0.37	-0.34
Oklahoma	-0.66	-0.72	-0.67	-0.74	-0.66	-0.69
Oregon	0.72	0.43	0.43	0.41	0.31	0.46
Pennsylvania	0.11	-0.02	-0.02	0.01	-0.03	0.01
Rhode Island	0.55	0.39	0.32	0.37	0.38	0.40
South Carolina	-0.64	-0.69	-0.64	-0.64	-0.56	-0.63
South Dakota	0.41	0.24	0.28	0.34	0.32	0.32
Tennessee	-0.42	-0.49	-0.58	-0.71	-0.59	-0.56
Texas	-0.42	-0.27	-0.25	-0.11	-0.19	-0.25
Utah	0.89	0.77	0.70	0.73	0.65	0.75
Vermont	1.23	0.95	0.87	0.85	0.29	0.84
Virginia	0.28	0.26	0.26	0.30	0.83	0.39
Washington	**0.67**	**0.48**	**0.40**	**0.40**	**0.51**	**0.49**
West Virginia	-0.57	-0.85	-0.73	-0.71	0.19	-0.53
Wisconsin	0.55	0.47	0.31	0.23	-0.77	0.16
Wyoming	0.31	0.20	0.36	0.21	0.13	0.24
U.S. Average	0.00	0.00	0.00	0.00	0.00	0.00
Washington's Rank	**9**	**12**	**14**	**13**	**9**	**11**

*Scores reflect the number of standard deviations above or below the national average.
Source: United Health Foundation, America's Health Rankings, 2015

Table 4.8
Quality of Life
State Parks and Recreational Areas
(Per Capita Park Visits)

	2011	2012	2013	2014	2015	2011-15
Alabama	0.9	0.8	0.9	1.0	1.0	0.9
Alaska	7.5	7.6	6.3	6.3	5.1	6.6
Arizona	0.3	0.3	0.3	0.3	0.4	0.3
Arkansas	2.8	2.9	2.6	2.7	3.0	2.8
California	1.7	1.8	1.8	1.9	1.9	1.8
Colorado	2.4	2.4	2.2	2.2	2.3	2.3
Connecticut	2.2	2.1	2.1	2.3	2.5	2.2
Delaware	5.1	5.2	5.5	5.4	6.8	5.6
Florida	1.1	1.3	1.3	1.4	1.5	1.3
Georgia	0.9	0.9	0.9	0.7	0.8	0.8
Hawaii	7.5	8.0	9.2	9.9	10.4	9.0
Idaho	2.8	3.1	3.0	3.1	3.0	3.0
Illinois	3.3	3.2	3.2	3.1	3.1	3.2
Indiana	2.4	2.6	2.4	2.5	2.5	2.5
Iowa	4.5	4.9	5.2	5.5	4.5	4.9
Kansas	2.2	2.2	2.3	2.3	2.3	2.3
Kentucky	1.6	1.6	1.6	1.6	1.5	1.6
Louisiana	0.5	0.5	0.4	0.4	0.4	0.4
Maine	1.9	2.3	1.9	1.9	1.9	2.0
Maryland	1.8	1.9	1.7	1.7	1.9	1.8
Massachusetts	4.6	4.6	4.5	4.4	4.4	4.5
Michigan	2.0	2.5	2.5	2.4	2.6	2.4
Minnesota	1.7	1.5	1.5	1.6	1.8	1.6
Mississippi	0.4	0.4	0.3	0.4	0.4	0.4
Missouri	2.8	3.2	2.8	3.1	3.1	3.0
Montana	1.8	2.0	2.0	2.1	2.5	2.1
Nebraska	6.6	5.9	6.4	6.7	6.2	6.4
Nevada	1.1	1.1	1.1	1.1	1.1	1.1
New Hampshire	0.7	0.8	0.9	0.8	0.9	0.8
New Jersey	1.9	1.9	1.6	1.7	1.8	1.8
New Mexico	2.2	2.0	1.8	1.8	2.1	2.0
New York	2.9	3.0	2.7	3.1	3.1	3.0
North Carolina	1.5	1.5	1.4	1.5	1.6	1.5
North Dakota	1.5	1.5	1.6	1.6	1.6	1.6
Ohio	5.0	4.4	4.5	3.7	3.5	4.2
Oklahoma	2.6	2.3	2.1	2.3	2.2	2.3
Oregon	10.9	11.0	11.3	11.7	12.5	11.5
Pennsylvania	3.0	3.0	3.0	3.0	3.0	3.0
Rhode Island	5.8	5.0	5.7	1.2	3.4	4.2
South Carolina	1.6	1.5	1.5	1.6	1.7	1.6
South Dakota	9.1	9.2	9.6	9.2	8.6	9.1
Tennessee	5.0	5.0	4.6	4.9	5.1	4.9
Texas	0.3	0.3	0.3	0.3	0.3	0.3
Utah	1.7	1.8	1.2	1.2	1.5	1.5
Vermont	1.3	1.4	1.4	1.5	1.5	1.4
Virginia	1.0	1.0	0.9	1.1	1.1	1.0
Washington	**5.7**	**5.1**	**5.1**	**4.8**	**4.6**	**5.1**
West Virginia	4.0	4.6	4.1	4.2	4.1	4.2
Wisconsin	2.5	2.8	2.6	2.7	2.7	2.7
Wyoming	5.2	5.5	5.7	6.7	7.6	6.1
U.S. Average	2.3	2.4	2.3	2.3	2.4	2.3
Washington's Rank	**7**	**8**	**10**	**10**	**9**	**8**

Source: National Association of State Parks Directors. Annual Information Exchange, 2016

Table 4.9
Quality of Life
State Arts
Total Per Capita State Arts Agency Revenue*

(Fiscal Years)	2012	2013	2014	2015	2016	2012-16
Alabama	0.73	0.96	0.93	1.00	1.04	0.93
Alaska	1.09	0.95	2.54	2.56	3.32	2.09
Arizona	0.00	0.10	0.49	0.49	0.35	0.29
Arkansas	1.00	0.71	0.94	1.56	0.81	1.00
California	0.10	0.11	0.18	0.27	0.30	0.19
Colorado	0.40	0.47	0.69	0.79	0.69	0.61
Connecticut	2.10	1.70	1.95	2.17	1.79	1.94
Delaware	1.85	1.84	4.33	4.50	4.41	3.39
Florida	0.32	0.33	0.58	2.41	1.86	1.10
Georgia	0.06	0.08	0.15	0.15	0.16	0.12
Hawaii	3.75	3.65	4.18	4.62	4.33	4.10
Idaho	0.43	0.45	0.87	0.87	0.92	0.71
Illinois	0.70	0.74	0.85	0.85	0.70	0.77
Indiana	0.42	0.49	0.55	0.55	0.62	0.53
Iowa	0.30	0.33	0.77	0.79	0.80	0.60
Kansas	0.00	0.28	0.26	0.22	0.08	0.17
Kentucky	0.70	0.70	0.82	0.82	0.80	0.77
Louisiana	0.72	0.85	0.65	0.64	0.64	0.70
Maine	0.52	0.49	1.16	1.19	1.35	0.94
Maryland	2.26	2.25	2.77	2.88	3.08	2.65
Massachusetts	1.40	1.37	1.82	1.97	2.26	1.76
Michigan	0.13	0.14	0.78	0.98	0.98	0.60
Minnesota	5.55	5.58	6.45	6.41	6.42	6.08
Mississippi	0.56	0.56	0.86	0.87	0.95	0.76
Missouri	1.16	1.26	1.35	1.30	1.31	1.28
Montana	0.48	0.44	2.16	2.44	2.21	1.55
Nebraska	0.74	0.77	1.42	1.46	1.60	1.20
Nevada	0.35	0.40	0.72	0.71	0.83	0.60
New Hampshire	0.27	0.35	1.05	1.02	0.90	0.72
New Jersey	1.86	2.34	2.05	1.93	1.92	2.02
New Mexico	0.71	0.85	0.99	1.04	1.11	0.94
New York	1.86	2.20	2.07	2.06	2.32	2.10
North Carolina	0.76	0.89	0.86	0.85	0.87	0.85
North Dakota	1.00	0.98	2.02	2.04	2.27	1.66
Ohio	0.66	0.57	1.10	1.11	1.35	0.96
Oklahoma	1.06	1.16	1.22	1.16	1.16	1.15
Oregon	0.52	0.49	0.90	0.94	0.82	0.73
Pennsylvania	0.71	0.66	0.79	0.82	0.82	0.76
Rhode Island	2.01	2.38	2.21	2.70	16.84	5.23
South Carolina	0.41	0.43	0.83	0.84	1.04	0.71
South Dakota	0.81	0.80	1.71	1.78	1.85	1.39
Tennessee	1.28	1.26	1.23	1.22	1.21	1.24
Texas	0.10	0.23	0.25	0.26	0.32	0.23
Utah	1.83	0.99	1.80	1.65	1.66	1.59
Vermont	0.81	0.81	3.19	3.01	2.85	2.13
Virginia	0.47	0.46	0.54	0.51	0.52	0.50
Washington	**0.16**	**0.18**	**0.45**	**0.44**	**0.47**	**0.34**
West Virginia	0.65	0.65	1.31	1.24	1.23	1.02
Wisconsin	0.15	0.42	0.27	0.27	0.28	0.28
Wyoming	2.46	2.25	3.27	3.38	3.35	2.94
U.S. Average	0.84	0.81	1.00	1.13	1.29	1.01
Washington's Rank	**43**	**46**	**45**	**45**	**44**	**44**

Source: National Assembly of State Arts Agencies, State Arts Agency Revenues, 2016

*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.

Table 4.10
Quality of Life
Public Library Service
(Circulation per Capita)

	2009	2010	2011	2012	2013	2009-2013
Alabama	4.6	4.6	4.4	4.5	4.5	4.5
Alaska	6.4	6.3	6.4	7.1	7.1	6.7
Arizona	7.4	8.2	7.9	7.8	7.2	7.7
Arkansas	5.3	5.5	5.7	5.4	5.5	5.5
California	6.2	6.3	6.5	6.1	6	6.2
Colorado	13	13.3	13	13.1	12.9	13.1
Connecticut	9.7	10.2	9.8	9.7	9.2	9.7
Delaware	10.5	11.5	6	7	6.7	8.3
Florida	6.8	7.1	6.8	6.6	6.3	6.7
Georgia	5.1	4.7	4.5	4.2	3.9	4.5
Hawaii	5.6	5.4	5.1	5	4.8	5.2
Idaho	10.3	10.7	10.9	10.9	11	10.8
Illinois	9.7	10.3	10.4	10.3	10.2	10.2
Indiana	14.1	13.7	13.6	12.7	12.7	13.4
Iowa	9.7	9.9	9.8	9.7	9.4	9.7
Kansas	11.8	11.6	11	10.7	10.6	11.1
Kentucky	6.9	7	6.9	6.8	6.9	6.9
Louisiana	4.2	4.4	4.4	4.5	4.4	4.4
Maine	7.9	8.4	8.3	8.4	8.2	8.2
Maryland	10.7	10.7	10.2	10	10	10.3
Massachusetts	8.9	9.8	9.9	9.9	9.6	9.6
Michigan	8.6	9	9.2	8.9	8.8	8.9
Minnesota	11.2	11.1	11.1	10.5	10.1	10.8
Mississippi	3	3	2.9	2.8	2.7	2.9
Missouri	10.1	10.6	9.9	10	10.3	10.2
Montana	6.9	7.5	7.6	7.6	6.3	7.2
Nebraska	10.4	10.3	9.7	9.4	8.8	9.7
Nevada	7.2	7.6	7.1	7.4	7.6	7.4
New Hampshire	8.9	12.2	11.7	11.6	11	11.1
New Jersey	7.8	7.6	7.2	7.1	6.8	7.3
New Mexico	6.5	6.7	6.3	5.7	5.6	6.2
New York	8.4	8.7	8.6	8.2	7.9	8.4
North Carolina	6	6	5.7	5.7	5.4	5.8
North Dakota	7.8	7.2	6.6	6.7	6.5	7
Ohio	17	16.3	16.6	16.4	16.1	16.5
Oklahoma	7.1	7.4	7.2	7.1	7.3	7.2
Oregon	15.4	16.2	17.2	17.2	16.3	16.5
Pennsylvania	6	5.8	5.5	5.6	5.5	5.7
Rhode Island	7.3	7.4	7.5	7.1	6.8	7.2
South Carolina	6.1	6.2	5.7	5.6	5.7	5.9
South Dakota	8.4	8.2	8.8	8.9	9.5	8.8
Tennessee	4	4.2	4.1	4.2	4.1	4.1
Texas	5.1	5.2	5.1	5.5	5	5.2
Utah	13.4	13.7	13.8	13.5	13.2	13.5
Vermont	7.8	8.8	8.9	7.8	7.7	8.2
Virginia	9.8	10	9.9	9.7	9.5	9.8
Washington	**12.9**	**13.1**	**12.9**	**12.1**	**12.4**	**12.7**
West Virginia	4.3	4.4	4	3.6	3.5	4
Wisconsin	11.5	11.4	11.3	11.1	11	11.3
Wyoming	9.5	9.8	9.2	8.8	8.6	9.2
U.S. Average*	8.1	8.3	8.1	8.0	7.8	8.1
Washington's Rank	**6**	**6**	**6**	**6**	**6**	**6**

Source: U.S. Institute of Museum and Library Services, Public Libraries in the United States Survey, 2013.
* The District of Columbia is included in the U.S. average.

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