

Measuring Success:

Benchmarks for a
Competitive Wisconsin
2007



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Competitive Wisconsin
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Wisconsin Taxpayers Alliance

A nonprofit, nonpartisan public-policy
research organization dedicated to
citizen education

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Prologue

Wisconsin's economy is a significant engine for progress. Producing more than \$225 billion of goods and services annually, the state, if it were a country, would rank among the world's top 30 economies. Wisconsin's economy produces more than Austria, Norway, Denmark, and Israel.

To keep this powerful engine well oiled and on the track requires continually monitoring its progress in job growth, education, and training. For the past decade, responding to the charge of a gubernatorial commission, Competitive Wisconsin, Inc. (CWI) and researchers at the Wisconsin Taxpayers Alliance (WISTAX) have teamed up to offer the state's only annual report card on the state of Wisconsin's economy.

Titled *Measuring Success: Benchmarks for a Competitive Wisconsin*, the report has been published since 1998. The original *Benchmarks* publication tracked 28 indicators in six major areas. Several changes have occurred over the years, and the 2007 edition tracks 33 measures in the same six areas:

- economic health;
- quality of life;
- workforce excellence;
- public sector;
- business climate; and
- environmental quality.

Each measure is reported: first, as a time series to gauge Wisconsin's progress against its own past; and second, as a comparison with neighboring states and the nation as a whole. Wisconsin's

competitive advantage is rated positive (+), neutral (●) or negative (−) relative to its past and to surrounding states.

Refinements

Each measure is evaluated annually and, if necessary, refined or replaced. None of the indicators changed this year, although several could not be updated because new data were not available. Annual cost-of-living figures are difficult to find. Two years ago, we shifted to the Berry-Fording-Hanson state cost-of-living index. However, the index has not been updated recently.

Special Thanks

The WISTAX research staff is grateful to the directors and members of Competitive Wisconsin, Inc. for their continual support and commitment to this one-of-a-kind project.



Highlights

The 2007 edition of *Benchmarks* shows significant change in the Badger State. Unfortunately, it was not all in the right direction. Compared to our performance in past years, 17 benchmarks changed this year—eight improvements and nine declines. In addition to tracking Wisconsin performance over time, *Benchmarks* also compares how the state is doing versus other states and the nation. In total, 14 indicators showed movement (six positive and eight negative).

The number of benchmarks in which Wisconsin is moving in a positive direction declined for the third consecutive year. This year, five of 33 measures were rated positive, compared to seven last year, nine two years ago, and 11 the year before that. The state's direction was negative on eight measures, one fewer than last year. Compared to the region and the nation, 11 of 33 benchmarks were positive, an improvement of four over last year. However, 13 were rated negative, up from eight a year ago.

Strengths

Two of Wisconsin's greatest assets have traditionally been its workforce and its social safety net. The state's unemployment rate declined to 4.7% in 2006. That was nearly a percentage point below its 2003 level. The percentage of citizens without health insurance declined for the third straight year. At 8.8%, the uninsured rate was 7.0 points below the national average.

Wisconsin's export sector remained strong in 2006, although it continued to trail the nation. Venture capital investments continued to rise. However, the Badger State is significantly behind the U.S. and some neighbors on this important measure. High school graduation rates and test scores were relatively high, despite little improvement over the last five years.

Room To Improve

Other indicators, however, are signalling weakness. State per capita personal income continued to decline relative to the nation's. In 2006, Wisconsin's incomes trailed the national average by 5.9%, the most since 1991 (-6.7%). As recently as 2003, our per capita incomes were within 2.3% of the U.S. average. Employment growth has also slowed, with job numbers rising only 0.7% here compared to 1.7% nationally.

The Badger State's violent crime rate rose for a second straight year and is now at a modern high. Although much of the increase came from Milwaukee, violent crime rose in other parts of the state. Wisconsin's home ownership rate fell for the second year in a row and was the lowest in the region.

Wisconsin's business climate showed three areas of concern. The number of private businesses dropped slightly in 2006. This may be an indicator of a slowing state economy. The state's manufacturing sector as a share of all jobs also declined. However, Wisconsin remains one of the nation's top manufacturing states. And energy costs, particularly for electricity, are rising. While state costs remain below the national average, electric costs here are now higher than in most surrounding states.

Looking Ahead

Relative to recent U.S. economic growth, Wisconsin is not making marked progress in its competitive position, at least based on the measures used here. Some areas warranting attention are the percentage of college graduates, venture capital, and research and development (R&D). Addressing these will boost lagging personal incomes. Rising energy costs are also a concern.

The state's high school students remain among the nation's brightest and attend college at high rates. By attending to our trouble spots and building on this advantage, the state can improve its economic health and quality of life.



Economic Health

Incomes and jobs grow when a state economy is healthy. Other factors contribute to state competitiveness, though they are less appreciated when incomes and jobs are stagnant or declining.

While the number of Wisconsin jobs continued to rise in 2006, it did so at a slowing rate. Personal incomes fell further behind the national average, though household income rebounded after several years of below-average growth.

Based on state trends and regional comparisons, scores are given for each measure. Where Wisconsin has a competitive advantage, a **+** is indicated; where Wisconsin can improve, a **-** is shown; a **o** indicates a neutral position.

▶ Personal income per capita

Wisconsin Trend	-
Regional Comparison	-

▶ Household income

Wisconsin Trend	o
Regional Comparison	+

▶ Employment growth

Wisconsin Trend	o
Regional Comparison	-

▶ Unemployment

Wisconsin Trend	+
Regional Comparison	o

■ Agricultural income

Wisconsin Trend	-
Regional Comparison	-



Personal Income Per Capita

Significance

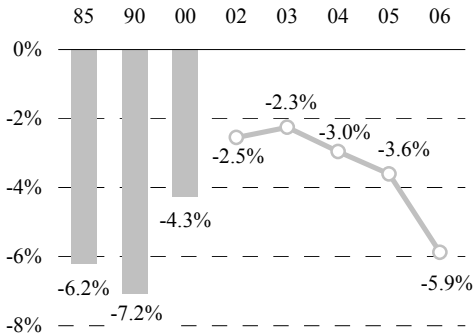
One measure of a state's relative economic health is its personal income per capita. This measure accounts for wages, dividends and interest, rental income, and government payments.

Performance

As a result of incomes that have increased less than the national average, Wisconsin's personal income per capita fell to 5.9% below that of the U.S. This gap marks the largest since 1991. Per capita incomes in Wisconsin (\$34,476) continued to fall short of those in Illinois (\$38,297) and Minnesota (\$38,751).

Income Gap Continues to Widen

Personal Income Per Capita, % Below U.S.



State Growth Below Average

2006 Amount and 5-Year Change

Wisconsin, 2006	\$34,476	17.3%
U.S.	\$36,629	19.8%
Illinois	38,297	17.7
Iowa	33,017	21.8
Michigan	33,784	12.8
Minnesota	38,751	18.8

Source: U.S. Bureau of Economic Analysis.



Household Income

Significance

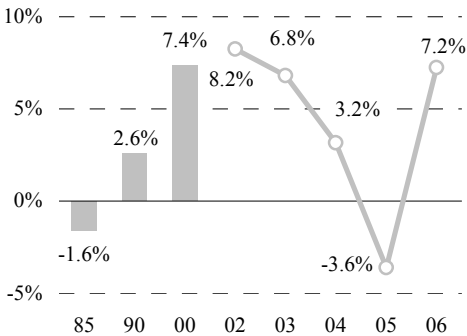
Median household income is a reflection of the economic well-being of families. Household income depends on wages and the number of household members who work.

Performance

Wisconsin's median household income (\$51,692) rose above the national average, recovering from the 2005 drop below the national norm. Since 2001, median household income in Wisconsin has risen 14.0%, nearly twice as fast as household income in Illinois, Michigan, and Minnesota.

Household Income Above U.S.

Med. Household Inc., % Above (Below) U.S.



State Growth Near U.S. Average

2006 Amount and 5-Year Change

Wisconsin, 2006	\$51,692	14.0%
U.S.	\$48,201	14.1%
Illinois	48,671	5.4
Iowa	48,126	17.4
Michigan	48,647	8.0
Minnesota	56,211	6.7

Source: U.S. Census Bureau.



Employment Growth

Significance

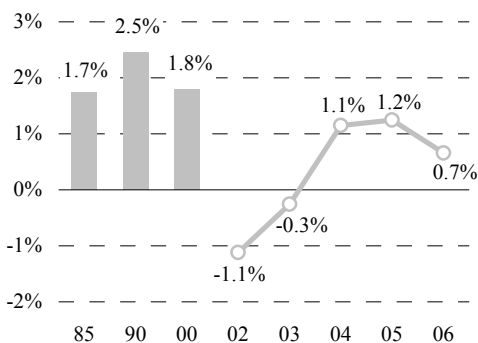
Job growth is an important measure of economic health. The annual change in nonfarm employment reflects the rate at which the state is creating jobs.

Performance

The number of Wisconsin jobs increased 0.7% in 2006, a drop from higher growth levels in the prior two years. Wisconsin created jobs at a slower rate than all of its neighbors except Michigan (-1.1%). The state was also below the national average (1.7%).

Employment Growth Slows in 2006

Annual % Change in Nonfarm Employment



Below-Average Growth in Wisconsin

One-Year and 5-Year Change

Wisconsin, 2006	0.7%	1.7%
U.S.	1.8%	3.3%
Illinois	1.2	-1.0
Iowa	1.5	2.6
Michigan	-1.1	-4.9
Minnesota	1.4	2.6

Source: U.S. Bureau of Labor Statistics.



Unemployment

Significance

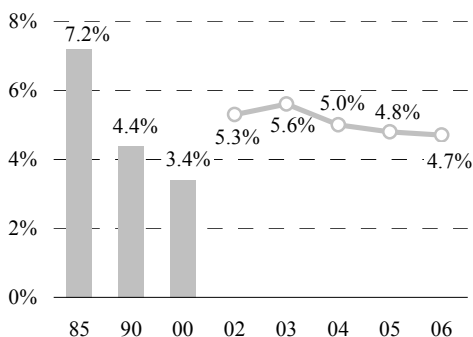
Unemployment quantifies unused economic resources. The unemployment rate measures the percentage of the labor force actively seeking work that is not gainfully employed.

Performance

After increasing from 1999 to 2003, the state's unemployment rate has fallen three years in a row. Wisconsin's rate (4.7%) was slightly above the U.S. rate (4.6%), but below Michigan's (6.9%). The rates in Illinois (4.5%), Iowa (3.7%), and Minnesota (4.0%) were all lower than Wisconsin's.

Unemployment Rate Falls

Average Annual % Unemployed



State Above U.S. Average

2006 Level and 5-Year Change

Wisconsin, 2006	4.7%	0.3 pts.
U.S.	4.6%	-0.1 pts.
Illinois	4.5	-0.9
Iowa	3.7	0.4
Michigan	6.9	1.7
Minnesota	4.0	0.2

Source: U.S. Bureau of Labor Statistics.



Agricultural Income

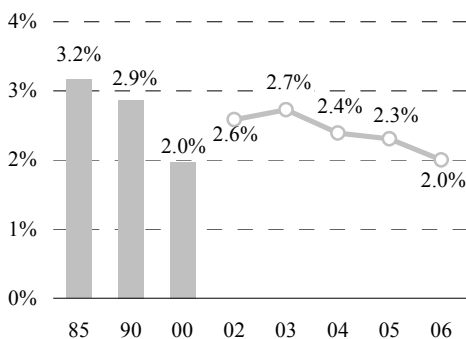
Significance

Agriculture is important to Wisconsin's economy, providing employment on and off the farm. The state's share of total U.S. farm income is one indicator of relative agricultural strength.

Performance

Wisconsin's share of total U.S. farm income in 2006 fell to 2.0% from 2.7% in 2003. Farm income declined in Wisconsin (-34.0%) and nationally (-25.6%) in 2006. Illinois was the only neighboring state with an increase.

State Share of Farm Income Declines



Farm Income Volatile

One-Year and 5-Year Change

Wisconsin, 2006	-34.0%	-14.7%
U.S.	-25.6%	-10.1%
Illinois	8.4	-11.6
Iowa	-27.1	39.6
Michigan	-4.5	119.3
Minnesota	-25.6	220.6

Source: U.S. Bureau of Economic Analysis.



Quality of Life

Prospective newcomers to Wisconsin—both employers and employees—want safe neighborhoods, affordable housing, and a reasonable cost of living.

Historically, Wisconsin's violent crime rate has been one of the nation's lowest. However, in 2006, it reached a new high. Meanwhile, home ownership fell for the second straight year. At the same time, the state's poverty rate dropped and the percentage of state citizens without health insurance declined for the third consecutive year.

Based on state trends and regional comparisons, scores are given for each measure. Where Wisconsin has a competitive advantage, a **+** is indicated; where Wisconsin can improve, a **-** is shown; a **o** indicates a neutral position.

► **Health insurance coverage**

Wisconsin Trend	+
Regional Comparison	+

► **Violent crimes**

Wisconsin Trend	-
Regional Comparison	o

► **Cost of living**

Wisconsin Trend	o
Regional Comparison	o

► **Home-ownership rate**

Wisconsin Trend	-
Regional Comparison	-

► **Poverty rate**

Wisconsin Trend	o
Regional Comparison	+



Health Insurance Coverage

Significance

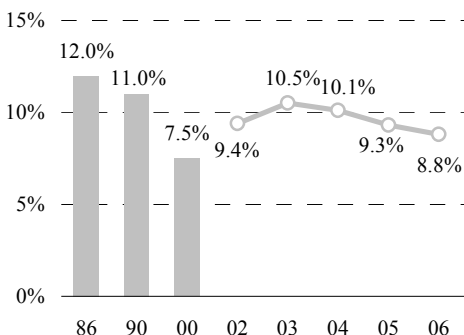
The availability and affordability of health insurance is becoming increasingly important for competitiveness. Lower uninsured rates are associated with more productive workforces.

Performance

Wisconsin's uninsured rate (8.8%) declined for the third consecutive year and was the lowest since 2001 (7.3%). The state's rate remained well below the U.S. average (15.8%) and was lowest in the region.

State's Uninsured Rate Declining...

% Uninsured All Year



And Lowest in the Region

Current Level and 5-Year Change

Wisconsin, 2006	8.8%	1.5 pts.
U.S.	15.8%	1.7 pts.
Illinois	14.0	0.9
Iowa	10.5	3.1
Michigan	10.5	0.7
Minnesota	9.2	1.7

Source: U.S. Census Bureau.



Violent Crimes

Significance

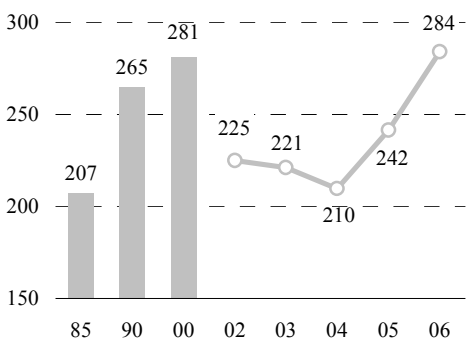
Keeping our violent crime in check is important for state competitiveness. Safe communities are attractive to both workers and employees, supporting job growth.

Performance

After falling for seven straight years, Wisconsin's violent crime rate increased in 2005 and again in 2006. At 284 crimes per 100,000 residents, the state's 2006 violent crime was a new high for the state. Violent crime here remains well below the national average (474).

Violent Crimes Continue to Rise...

Violent Crimes Per 100,000 Population



But State Remains Lowest in Region

2006 Level (Per 100,000) and 5-Year Change

Wisconsin, 2006	284	22.9%
U.S.	474	-6.1%
Illinois	542	-15.0
Iowa	284	5.4
Michigan	562	1.3
Minnesota	312	18.2

Source: Federal Bureau of Investigation.



Cost of Living

Significance

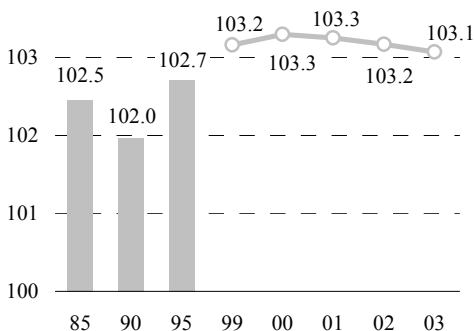
Affordable living is an asset for any state. A low cost of living is attractive to new workers as well as new businesses.

Performance

A state-by-state comparison of the cost of living shows Wisconsin was 3.1% above the national median. Since 1985, the Badger State's cost of living fluctuated between 1.9% and 4.0% above the median state.

Wisconsin Above National Norm

U.S. Median = 100



Third in Region

2003 Level and 5-Year Change

Wisconsin, 2003	103.1	-0.5
U.S.	100.0	na
Illinois	105.1	-0.5
Iowa	99.5	-1.1
Michigan	102.7	-0.5
Minnesota	105.1	-0.6

Source: Berry-Fording-Hanson state cost-of-living index (2004 revision).



Home-Ownership Rate

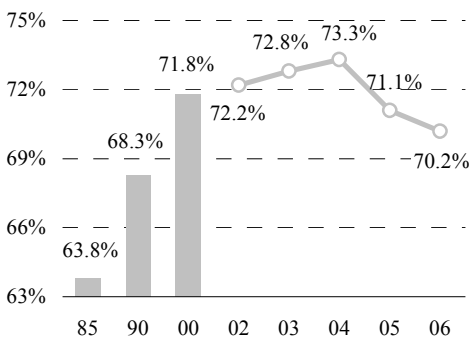
Significance

The home-ownership rate measures the percentage of households that own their own homes. Higher rates typically reflect greater economic well-being as well as a commitment to the surrounding community.

Performance

Wisconsin's home-ownership rate fell for the second year in a row, reaching 70.2% in 2006. That is the lowest it has been since 1998 (70.1%). Although home ownership here was above the national average (68.8%), it trailed all surrounding states.

Home Ownership Continues to Fall ...



But Remains Above National Average

2006 Level and 5-Year Change

Wisconsin, 2005	70.2%	-2.1 pts.
U.S.	68.8%	1.0 pts.
Illinois	70.4	1.0
Iowa	74.0	-2.6
Michigan	77.4	0.3
Minnesota	75.6	-0.5

Source: U.S. Census Bureau.



Poverty Rate

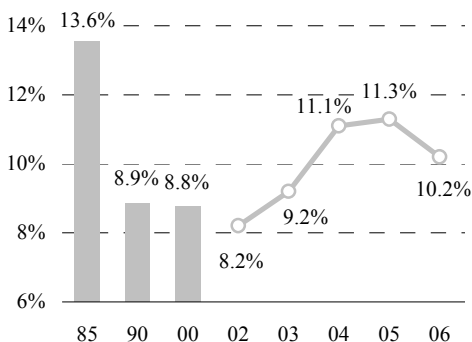
Significance

A productive, competitive state economy requires citizens who are ready to learn and to work. Lowering the number of Wisconsinites in poverty promotes this goal and can reduce the demand for tax-funded public assistance.

Performance

After rising for three years, Wisconsin's poverty rate declined in 2006 to 10.2%. Wisconsin's rate was more than two percentage points lower than the U.S. average (12.5%) and lower than all surrounding states except Minnesota (8.1%)

Poverty Rate Falls in Wisconsin



State Below U.S. Average

2005-06 Average and 5-Year Change

Wisconsin, 2006	10.2%	1.5 pts.
U.S.	12.5%	1.0 pts.
Illinois	11.0	0.2
Iowa	10.8	3.5
Michigan	12.6	2.9
Minnesota	8.1	1.4

Source: U.S. Census Bureau.



Workforce Excellence

Employers have long appreciated Wisconsin's hard-working and well-educated workforce. High school graduation rates, test scores, and college degrees are all measures of our workforce excellence.

Test scores and graduation rates were above national averages, and the percentage of low-birth-weight babies dropped slightly. However, the number of math and science PhD's relative to population declined, and the percentage of the population with a college degree fell for the second consecutive year.

Based on state trends and regional comparisons, scores are given for each measure. Where Wisconsin has a competitive advantage, a **+** is indicated; where Wisconsin can improve, a **-** is shown; a **o** indicates a neutral position.

▶ **Low birth weights**

Wisconsin Trend	o
Regional Comparison	+

▶ **Student test scores**

Wisconsin Trend	o
Regional Comparison	+

▶ **College entrance scores**

Wisconsin Trend	o
Regional Comparison	+

▶ **High school graduation rates**

Wisconsin Trend	o
Regional Comparison	+

continued . . .

▶ **Percentage of college graduates**

Wisconsin Trend **○**
Regional Comparison **-**

▶ **Doctoral degrees in the sciences**

Wisconsin Trend **○**
Regional Comparison **-**

▶ **Healthy lifestyles**

Wisconsin Trend **○**
Regional Comparison **○**



Low Birth Weights

Significance

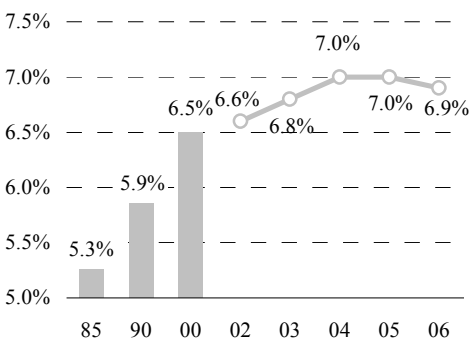
Low-birth-weight babies (below five pounds, eight ounces) are most at risk. Early difficulties often translate into problems later in life that negatively impact competitiveness.

Performance

The percentage of low-birth-weight babies in Wisconsin declined slightly in 2006. At 6.9%, the state was lower than the national average (8.3%), Illinois (8.6%), and Michigan (8.3%). Iowa's rate (6.9%) was the same as Wisconsin's, while Minnesota (6.5%) was the lowest in the region.

Low-Birth-Weight Percentage Declining

% of Newborns Below Five Lbs., Eight Oz.



Wisconsin Below Nation

2006 Level and 5-Year Change

Wisconsin, 2006	6.9%	0.3 pts.
U.S.	8.3%	0.7 pts.
Illinois	8.6	0.7
Iowa	6.9	0.5
Michigan	8.3	0.3
Minnesota	6.5	0.2

Source: National Center for Health Statistics; Wisconsin Department of Health and Family Services.



Student Test Scores

Significance

Wisconsin needs a population strong in basic academic subjects to help ensure a technically competitive workforce.

Performance

On fall 2006 state proficiency tests, students performed well in most subjects. However, 10th-grade results were generally below results for fourth and eighth graders. On the national math test, Wisconsin students scored above national averages in both fourth and eighth grades and were second in the region.

Fall 2006 State Test Results Mixed

% Students “Proficient” or “Advanced”

	4th Gr.	8th Gr.	10th Gr.
Reading	82%	84%	74%
Language	77	62	71
Math	78	74	70
Science	77	74	72
Soc. Std.	91	82	76

Wisconsin Above National Average

% Students “Proficient” or “Advanced” in Math (2007 NAEP)

	Wisconsin: 4th Gr. 47%	8th Gr. 37%
U.S.	38%	31%
Illinois	37	31
Iowa	43	35
Michigan	37	29
Minnesota	50	43

Source: State tests, Wisconsin Department of Public Instruction; National Assessment of Education Progress (NAEP) 2007 mathematics test, U.S. Department of Education.



College Entrance Scores

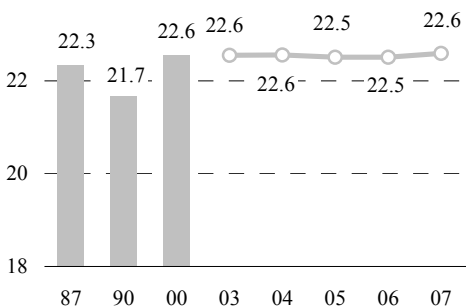
Significance

Admission to most universities, including those in the University of Wisconsin System, requires satisfactory ACT or SAT scores. State-wide average college entrance exam scores indicate student readiness for college.

Performance

Wisconsin's graduates scored well on college entrance exams. Combined ACT/SAT scores, converted to ACT equivalents, averaged 22.6 (out of 36) in 2007. State scores were above the U.S. average (21.6) and all surrounding states except Minnesota (22.9).

ACT/SAT* Scores Remain High



ACT/SAT* Scores Second in Region

2007 Level and 5-Year Change

Wisconsin, 2007	22.6	0.0 pts.
U.S.	21.6	0.2 pts.
Illinois	20.9	0.2
Iowa	22.6	0.3
Michigan	21.9	0.1
Minnesota	22.9	0.3

*Combined ACT/SAT scores. See Appendix for details
Source: ACT.org and The College Board.



High School Graduation Rates

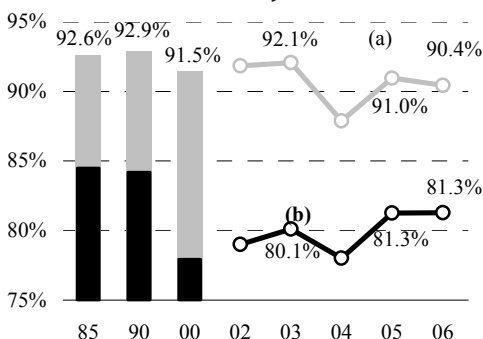
Significance

High school graduation is a basic necessity for employment. Graduation rates are one indicator of workforce quality. The chart below shows the number of high school graduates relative to 12th-grade enrollment (a) and to ninth-grade enrollment four years earlier (b).

Performance

Two graduation rate measures moved in different directions in 2006. Relative to ninth-grade enrollment four years earlier, the state's graduation rate was unchanged at 81.3%. Based on the size of the senior class, graduation declined slightly to 90.4%.

Graduation Rates Steady



State Above Average

2005 Level and 5-Year Change

Wisconsin, 2005	81.3%	3.3 pts.
U.S.	69.8%	2.7 pts.
Illinois	73.1	1.9
Iowa	83.3	0.3
Michigan	71.0	2.2
Minnesota	84.6	0.9

Source: Wisconsin Department of Public Instruction (chart); NCES (table).



Percentage of College Graduates

Significance

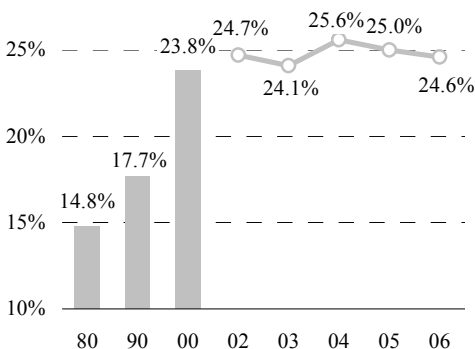
In an information economy, having a highly educated workforce is essential. The share of the population with at least a bachelor's degree is one measure of the potential productivity of the state.

Performance

The percentage of Wisconsin's population holding at least a bachelor's degree (24.6%) has declined 0.3 percentage points over the last five years. During those same years, the national average rose 1.8 points to 28.0%. Wisconsin is now last in the region on this measure.

Bachelor's Degrees Continue to Decline ...

% of Population with Bachelor's Degree



And Remain Below Average

2006 Level and 5-Year Change

Wisconsin, 2006	24.6%	-0.3 pts.
U.S.	28.0%	1.8 pts.
Illinois	31.2	4.5
Iowa	24.7	0.8
Michigan	26.1	2.1
Minnesota	33.5	2.1

Source: U.S. Census Bureau.



Doctoral Degrees in the Sciences

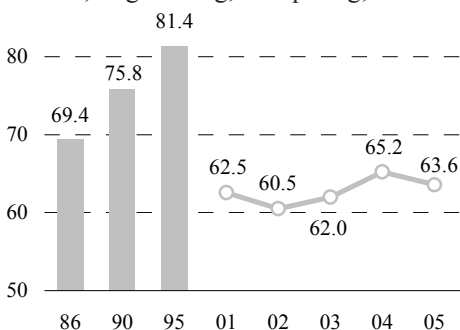
Significance

High-quality research sows the seeds of tomorrow's economic progress. PhD's in science, engineering, computer sciences, and mathematics provide the human capital for this research.

Performance

The number of doctoral degrees granted in the sciences declined slightly in 2005 and is down 11% over the last five years. Wisconsin's universities awarded 63.6 per one million population, slightly above the national average but below Illinois, Iowa, and Michigan. Wisconsin awarded more than 88 per million population in 1994.

PhD's Per Million Population Leveling Off Science, Engineering, Computing, and Math



Above National Average

Per One Million Population and 5-Year Change

Wisconsin, 2005	63.6	-13.7%
U.S.	63.3	8.2%
Illinois	71.8	3.6
Iowa	88.7	9.1
Michigan	69.6	8.0
Minnesota	59.6	9.3

Source: National Science Foundation.



Healthy Lifestyles

Significance

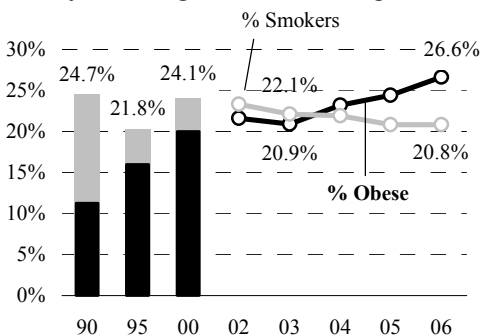
A workforce that is healthy is generally more productive. In addition, a healthier population reduces health care costs for citizens, employers, and governments.

Performance

While the percentage of Wisconsin adults who smoke is on the decline, the percent who are obese is steadily rising. In 2006, 20.8% of Wisconsin adults smoked, compared to 24.1% in 2000. However, 26.6% of adults were obese, up more than six percentage points from 2000.

% Smokers Declines

Obesity, Smoking as % of Adult Population



Wisconsin Health Mixed

% Adults Who Are Obese, Smoke; 2006

	Wisconsin: Obese 26.6%	Smoke 20.8%
U.S.	25.1%	20.1%
Illinois	25.1	20.5
Iowa	25.7	21.4
Michigan	28.8	22.4
Minnesota	24.7	18.3

Source: U.S. Center for Disease Control.



Public Sector

Efficient delivery of quality public services enhances state competitiveness. However, government must ensure that taxes, public debt, and regulation do not become burdensome.

Wisconsin remained below the national average in government employment relative to population. However, state-local tax burdens were relatively high. One reason for the tax level is that federal support relative to the taxes we send to Washington remained low. The state's bond rating also remained low.

Based on state trends and regional comparisons, scores are given for each measure. Where Wisconsin has a competitive advantage, a **+** is indicated; where Wisconsin can improve, a **-** is shown; a **o** indicates a neutral position.

► State-local tax burden

Wisconsin Trend	o
Regional Comparison	-

► Return on federal dollars

Wisconsin Trend	o
Regional Comparison	o

► State bond rating

Wisconsin Trend	o
Regional Comparison	-

► State-local government employees per capita

Wisconsin Trend	o
Regional Comparison	+



State-Local Tax Burden

Significance

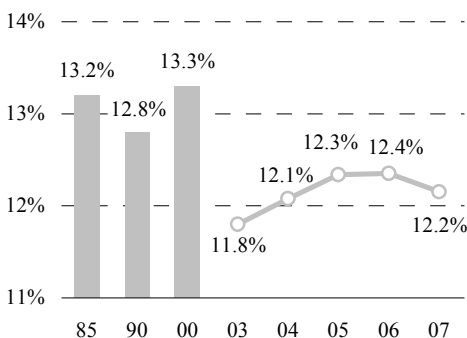
State and local taxes can impact competitiveness. They factor into employer and worker decisions, which directly affect job growth and economic stability.

Performance

Wisconsinites paid 12.2% of personal income in state-local taxes in 2006-07, a decline of 0.2 percentage points from the previous year. In 2006, Wisconsin's tax burden was above all neighboring states except Minnesota (11.9%).

Tax Burden Declines

State-Local Taxes as % of Personal Income



Wisconsin Above National Average*

2006 Level and 5-Year Change

Wisconsin, 2006	11.6%	-0.2 pts.
U.S.	10.6%	0.2 pts.
Illinois	10.9	0.7
Iowa	10.4	-0.5
Michigan	10.8	0.7
Minnesota	11.9	0.5

*See Appendix, page 50, to reconcile graph and table.
Source: Wisconsin Taxpayers Alliance (graph); Tax Foundation (table).



Return on Federal Dollars

Significance

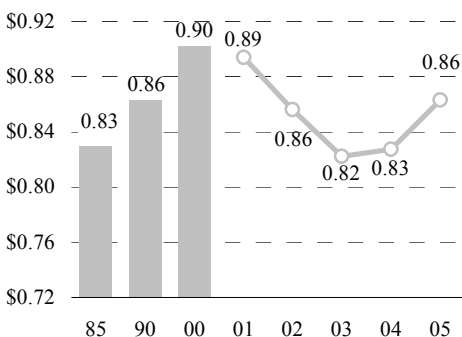
States that receive more federal dollars than they pay in federal taxes can face less local tax pressure. Federal monies help fund infrastructure and research that can spur a state's economy.

Performance

Wisconsin's return on federal tax dollars rose in 2005, reaching 86¢ per dollar paid in federal taxes. The state ranked above Illinois (75¢) and Minnesota (72¢).

Return on Federal Dollars Lags

Federal Spending in Wisconsin Per Dollar of Federal Taxes Paid



State Ranks in Middle of Midwest States

Federal Spending Per Dollar of Taxes Paid and 5-Year Change

Wisconsin, 2005	\$0.86	-4.4%
U.S.	na	na
Illinois	\$0.75	-7.1%
Iowa	1.10	-0.8
Michigan	0.92	5.3
Minnesota	0.72	-13.9

Source: Tax Foundation.



State Bond Rating

Significance

A state's bond rating reflects the perception of a state's financial situation. High bond ratings allow states to borrow money at lower interest rates and pay less in debt service. Low ratings often result from poor fiscal management.

Performance

Wisconsin's bond ratings have not been changed by any of the major rating services since March 2004, when Fitch downgraded them from AA to AA-. Standard & Poor's has a positive outlook on the bonds, while Moody's and Fitch see them as stable.

State's GO Bond Ratings Are Low ...

	2005	2006	2007
Moody's	Aa3	Aa3	Aa3
Standard & Poor's	AA-	AA-	AA-
Fitch	AA-	AA-	AA-

And Are Below Most Neighbors

Moody's GO Bond Rating, 2007 and 2002

Wisconsin	Aa3 (2007)	Aa3 (2002)
U.S.	na	na
Illinois	Aa3	Aa2
Iowa	Aa1	Aa1
Michigan	Aa2	Aaa
Minnesota	Aa1	Aaa

Source: Wisconsin Department of Administration and rating organizations listed above. (Ratings and outlooks as of May 2007.)



State-Local Government Employees Per Capita

Significance

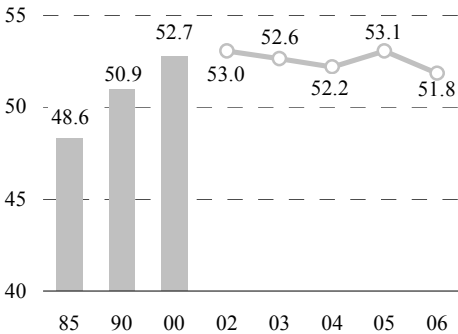
Wisconsin is generally considered a high-public-service state. To efficiently deliver the services that residents desire, effective use of public employees is necessary.

Performance

After rising in 2005, the number of government employees per 1,000 population in Wisconsin fell to 51.8 in 2006. The state remained below the U.S. average, but above Illinois (49.5) and Michigan (48.2).

Relative Size of Government Falls

State-Local Employees Per 1,000 Population



State In Middle In Region

2006 Level and 5-Year Change

State	2006 Level	5-Year Change
Wisconsin	51.8	-1.5 pts.
U.S.	53.0	0.0 pts.
Illinois	49.5	0.3
Iowa	62.3	2.3
Michigan	48.2	-1.7
Minnesota	52.7	-3.6

Source: U.S. Census Bureau.



Business Climate

Growth in the number of employers can particularly impact statewide job and income growth. Energy costs, transportation infrastructure, and an active research base all enhance business climate.

That climate has strengths and weaknesses. Wisconsin continued to have good roads and a growing export sector. However, the number of businesses in the state declined.

Energy costs continued to rise. Patents per capita increased after four years of decline. Venture capital rose slightly, but remained far below the national average.

Based on state trends and regional comparisons, scores are given for each measure. Where Wisconsin has a competitive advantage, a **+** is indicated; where Wisconsin can improve, a **-** is shown; a **o** indicates a neutral position.

▶ **Economic dynamism**

Wisconsin Trend	-
Regional Comparison	-

▶ **Export sector**

Wisconsin Trend	+
Regional Comparison	o

▶ **Manufacturing jobs**

Wisconsin Trend	-
Regional Comparison	+

▶ **Energy costs**

Wisconsin Trend	-
Regional Comparison	o

continued...

- ▶ **Highway condition**
 - Wisconsin Trend ○
 - Regional Comparison +

- ▶ **R&D spending**
 - Wisconsin Trend ○
 - Regional Comparison -

- ▶ **Patents**
 - Wisconsin Trend ○
 - Regional Comparison ○

- ▶ **High-tech employment**
 - Wisconsin Trend ○
 - Regional Comparison -

- ▶ **Venture capital**
 - Wisconsin Trend +
 - Regional Comparison -



Economic Dynamism

Significance

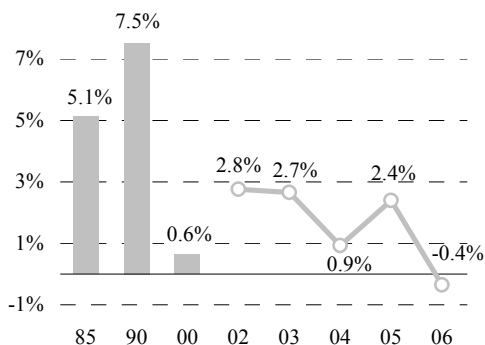
New businesses are constantly being created in a vibrant economy, while less innovative companies go out of business. The percent increase in new private establishments is one measure of this economic dynamism.

Performance

The number of new private businesses in Wisconsin dropped in 2006 (-0.4%), while the number of businesses grew nationally (2.5%). Wisconsin's neighbors all had increases in 2006.

Number of Private Businesses Dropped

% Increase (Decrease) from Prior Year



Wisconsin Below Nation, Neighbors 2006

Level and 5-Year Change in Growth Rate

Wisconsin, 2006	-0.4%	-2.1 pts.
U.S.	2.5%	1.5 pts.
Illinois	3.3	4.2
Iowa	1.0	7.6
Michigan	1.3	2.7
Minnesota	2.0	1.7

Source: U.S. Bureau of Labor Statistics.



Export Sector

Significance

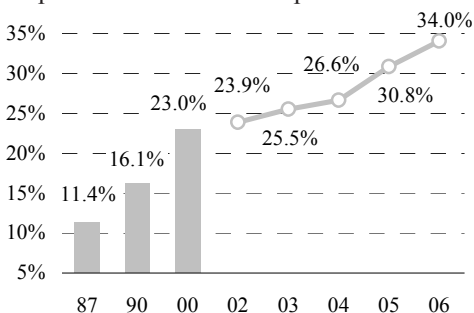
In an increasingly global economy, exports are vital. They create new jobs and bring capital and firms to the state. They diversify Wisconsin's economy, making it less vulnerable to economic downturns.

Performance

Wisconsin exports climbed 15.0% in 2006, reaching 34.0% of the manufacturing, mining and farm (MMF) sector. While the state continued to lag the nation (51.6%), the export share here increased 10.6 percentage points over the last five years, compared to 5.4% nationally.

State Export Sector Surges

Exports as % of MMF Output



State Gains on Most Neighbors

2006 % of MMF Output and 5-Year Change

Wisconsin, 2006	34.0%	10.6 pts.
U.S.	51.6%	5.4 pts.
Illinois	51.7	8.0
Iowa	27.7	7.2
Michigan	56.1	10.4
Minnesota	42.1	6.1

Source: U.S. Bureau of Economic Analysis; WISER Trade.



Manufacturing Jobs

Significance

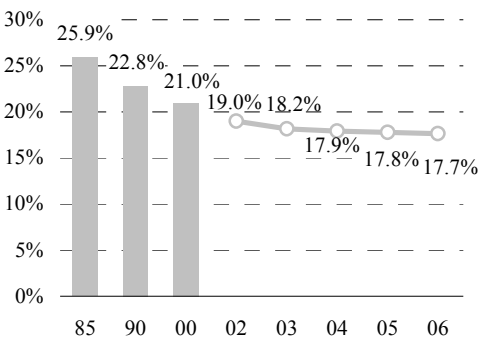
Manufacturing has traditionally been the engine driving the state economy. Manufacturing's share of total employment suggests how this core sector is doing here versus elsewhere.

Performance

As a share of total employment, the manufacturing sector declined slightly to 17.7%, though still remaining higher than the other states in the region. The five-year change in manufacturing jobs has also fallen in Wisconsin (-9.9%). Nationally, manufacturing jobs fell 13.6% during the same time.

Manufacturing Declines

Mfg. Jobs as % of Total Employment



State Leads Neighbors and U.S.

Mfg. Jobs as % of Total Employment and 5-Year Change

Wisconsin, 2006	17.7%	-9.9%
U.S.	10.4%	-13.6%
Illinois	11.5	-16.2
Iowa	15.4	-3.8
Michigan	14.9	-20.9
Minnesota	12.6	-8.2

Source: U.S. Bureau of Labor Statistics.



Energy Costs

Significance

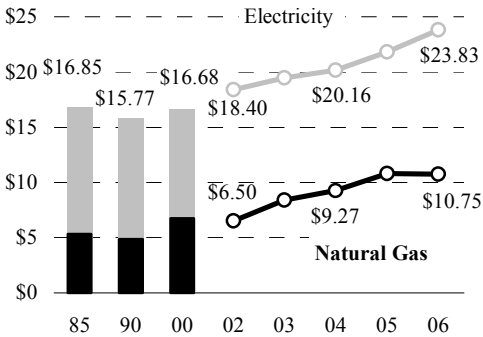
Low energy prices are critical for state competitiveness. Energy is an indispensable cost of business, and rising prices can make state businesses less competitive.

Performance

Wisconsin electricity prices have been rising since 2000, up to \$23.83 per million Btu in 2006. Natural gas prices, that had risen for three consecutive years, were down slightly to \$10.75 per million Btu in 2006 from \$10.90 in 2005. Electricity prices were higher nationwide (\$25.94) than in Wisconsin.

Energy Prices Shift

Avg. of Comm., Res., & Mfg., \$/Mil. Btu's



Wisconsin is Below National Averages

Electric (col. 2) and Nat. Gas (col. 3), \$/Mil. Btu's

Wisconsin, 2006	\$23.83	\$8.34 ¹
U.S.	\$25.94	\$8.54
Illinois	20.84	8.25
Iowa	20.46	8.07
Michigan	24.56	8.35
Minnesota	20.40	8.35

¹See Appendix, page 51.

Source: WI Dept. of Administration, Div. of Energy



Highway Condition

Significance

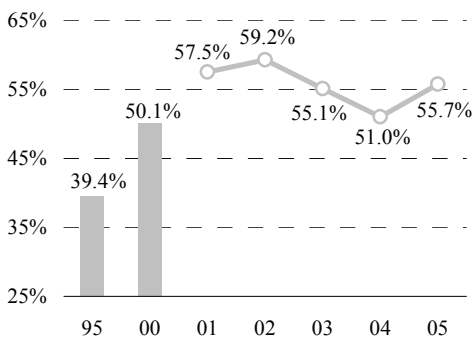
Highways are an important aspect of a state's infrastructure and can impact business location and expansion decisions. Well-paved highways ease transportation and reduce long-term costs.

Performance

In 2005, 55.7% of Wisconsin highway miles were in one of the two top smoothness categories, up from 2004. In reported miles, Wisconsin is above the national average and its four neighbors.

Highway Conditions Rise

% Highway Miles Rated in Top Two Smoothness Categories



State Above National Average

2005 Level

Wisconsin, 2005	55.7%
U.S.	52.8%
Illinois	44.5
Iowa	43.1
Michigan	49.9
Minnesota	51.6

Source: Federal Highway Administration.



R&D Spending

Significance

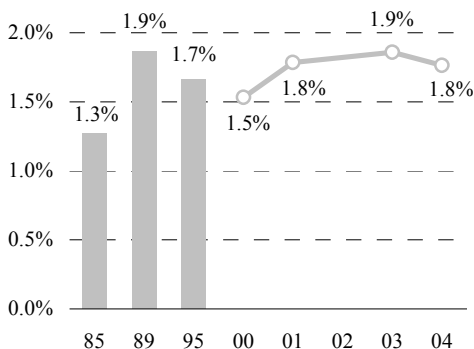
Research and development (R&D) spending promotes continued adaptation in a rapidly changing economy. In an increasingly technology-driven economy, states active in R&D are best positioned to become tomorrow's leaders.

Performance

As a share of Wisconsin's total output, R&D spending declined in 2004, reaching 1.76%. The state remained behind the national average (2.44%) and all of its neighbors, except Iowa (1.46%).

Wisconsin Investment in R&D Falls...

R&D as a Share of Gross State Output



And Trails Most Neighbors

Share of Gross State Product and 5-Year Change

Wisconsin, 2004	1.76%	0.25 pts.
U.S.	2.44%	-0.08 pts.
Illinois	2.11	-0.08
Iowa	1.46	0.29
Michigan	4.60	-1.16
Minnesota	2.69	0.43

Source: National Science Foundation.



Patents

Significance

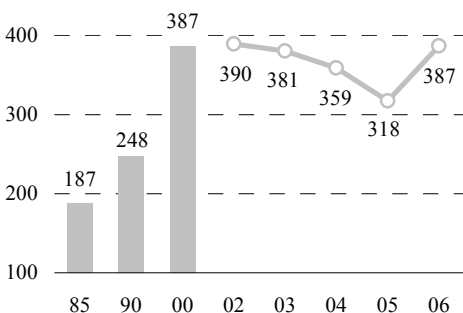
The number of patents received in a state reflects the impact that both public and private sectors have in advancing science and technology.

Performance

From 1993 to 2001, patents awarded to Wisconsinites rose steadily. However, the number fell four consecutive years afterward before reviving in 2006. Wisconsinites were awarded 2,151 patents in 2006, up 22.5% from 1,756 in 2005. Wisconsin still trails Minnesota (3,268) and Michigan (4,179) in the number of patents this year.

Wisconsin Patent Rate Revives ...

Patents Per One Million Population



State Above U.S., Some Neighbors

Patents Per Million Population and 5-Year Change

Wisconsin, 2006	387	-7.1%
U.S.	342	-1.2%
Illinois	316	-7.4
Iowa	245	-11.7
Michigan	414	-2.2
Minnesota	632	7.8

Source: U.S. Patent and Trademark Office.



High-Tech Employment

Significance

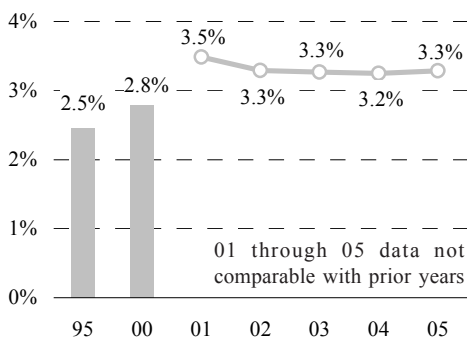
Within manufacturing and service industries, high-tech companies have become critical for economic growth. In addition, jobs in these industries pay well above average.

Performance

As a share of private employment, Wisconsin's high-tech industries remained steady at 3.3% in 2005. Wisconsin trails Illinois (4.1%), Michigan (4.8%) and Minnesota (5.5%) in its share of high-tech employment.

High-Tech Employment Flat ...

Share of Private Employment



But State Still Below Average

2005 Level and 4-Year Change

Wisconsin, 2005	3.3%	-0.2 pts.
U.S.	5.0%	-0.9 pts.
Illinois	4.1	-0.9
Iowa	na	na
Michigan	4.8	-0.4
Minnesota	5.5	-0.3

Source: American Electronics Association.



Venture Capital

Significance

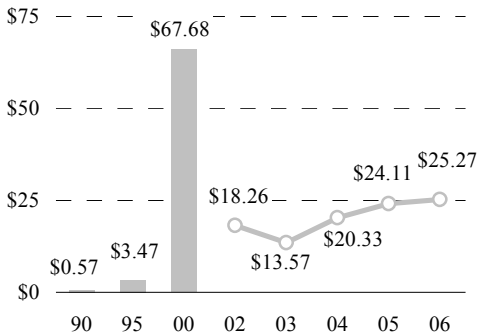
Often, young companies with high growth potential turn to venture capital firms, rather than to traditional lenders, for start-up money. The amount of venture capital per worker is one indication of a state's entrepreneurial vitality.

Performance

Venture capital investments per worker rose in Wisconsin for the third year in a row, reaching \$25.27. Despite this increase, Wisconsin continued to trail the U.S. (\$194.23), Minnesota (\$130.08), Illinois (\$69.21), and Michigan (\$29.44).

Venture Capital Activity Increases

Venture Capital Disbursements Per Worker



Wisconsin Below Average

2006 Level and 5-Year Change

Wisconsin, 2006	\$25.27	-23.6%
U.S.	\$194.23	-36.9%
Illinois	69.21	-56.2
Iowa	1.02	-75.3
Michigan	29.44	-12.5
Minnesota	130.08	-25.8

Source: Pricewaterhouse-Coopers/Thomson Venture Economics/NVCA.



Environmental Quality

Land, air, and water quality all contribute to making Wisconsin special. Our environment is an asset in attracting new firms and employees to the state.

The state experienced an increase in surface water discharges and air emissions in 2005. The number of hazardous waste sites remained the same.

Based on state trends and regional comparisons, scores are given for each measure. Where Wisconsin has a competitive advantage, a **+** is indicated; where Wisconsin can improve, a **-** is shown; a **o** indicates a neutral position.

▶ **Surface water discharges**

Wisconsin Trend	-
Regional Comparison	-

▶ **Air emissions**

Wisconsin Trend	+
Regional Comparison	+

▶ **Hazardous waste sites**

Wisconsin Trend	o
Regional Comparison	o



Surface Water Discharges

Significance

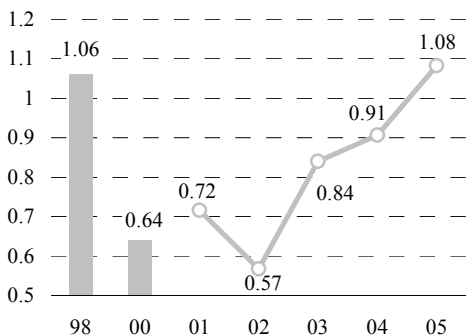
Clean water is a vital part of a healthy environment. Toxic discharges into surface waters pollute the environment, jeopardizing both health and recreation.

Performance

Wisconsin's surface water pollution rose for the third year in a row, to 1.08 pounds of pollution per capita. The state's water pollution is above the U.S. average (0.84), as well as all of its neighbors. While other states had pollution levels that have decreased since 2000, Wisconsin's rose by 69.0%.

Water Pollution Rises in 2005

Pounds of Water Pollution Per Capita



State Above U.S. and Neighbors

2005 Level and 5-Year Change

Wisconsin, 2005	1.08	69.0%
U.S.	0.84	-11.1%
Illinois	0.67	22.2
Iowa	0.84	-56.4
Michigan	0.07	-44.6
Minnesota	0.41	48.7

Source: U.S. Environmental Protection Agency.



Air Emissions

Significance

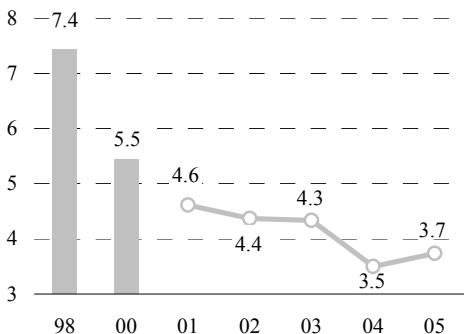
Polluted air can have a strong negative impact on a state's well-being and competitiveness. Clean air promotes a healthy workforce and provides an incentive for employers to relocate.

Performance

Wisconsin's air pollution levels rose in 2005, growing for the first time in seven years. However, at 3.7 pounds of emissions per person, the state's pollution is half its 1998 amount (7.4). Wisconsin's air emissions are below the national average (5.1) and all bordering states except Minnesota (3.2).

Air Emissions Grow

Pounds of Emissions Per Capita



State Below Three Neighbors

2005 Level and 5-Year Change

Wisconsin, 2005	3.7	-31.4%
U.S.	5.1	-25.3%
Illinois	4.1	-28.6
Iowa	8.4	0.2
Michigan	9.7	41.0
Minnesota	3.2	1.0

Source: U.S. Environmental Protection Agency.



Hazardous Waste Sites

Significance

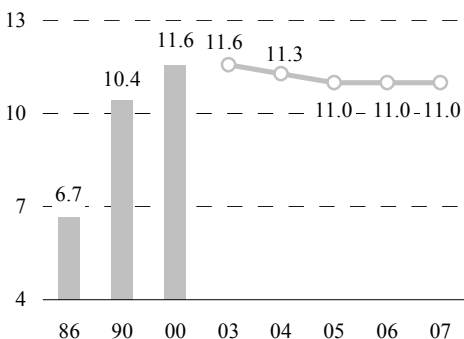
Contaminated properties depress property values, threaten the quality of the environment, and cost taxpayers if the public bears the charge of cleaning them. The Environmental Protection Agency lists sites that no responsible party is able and willing to clean up.

Performance

Wisconsin had 38 proposed and final sites in 2007, the same as in 2006 and 2005. In sites per 10,000 square land miles, Wisconsin (11.0) was above the national average (6.9).

Site Concentration Unchanged

Sites Per 10,000 Square Miles of Land



State Above Average in Sites

Per 10,000 Square Miles of Land and 5-Year Change

Wisconsin, 2007	11.0	-5.0%
U.S.	6.9	0.8%
Illinois	13.9	8.9
Iowa	3.4	-14.3
Michigan	18.5	-2.9
Minnesota	5.0	4.2

Source: U.S. Environmental Protection Agency.



Appendix: Data Sources

This section aids the reader in more fully understanding the measures analyzed in this report. They are organized by category; individual measures follow the same order as the text. Any comments or problems with the data are also discussed here.

Economic Health (pages 5-10)

Personal Income Per Capita

Source: U.S. Bureau of Economic Analysis, Regional Economic Information System.

Comment: September 2007 revisions.

Household Income

Source: U.S. Census Bureau, *Median Income of Households*.

Comment: Estimates based on Current Population Survey.

Employment Growth

Source: U.S. Bureau of Labor Statistics, Current Employment Statistics.

Unemployment

Source: U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics.

Agricultural Income

Source: U.S. Bureau of Economic Analysis, Regional Economic Information System; state estimates of personal income and earnings by industry, September 2007 revisions.

Quality of Life (pages 11-16)

Health Insurance Coverage

Source: U.S. Census Bureau, Current Population Survey; Wisconsin Department of Health and Family Services.

Comment: The data are subject to sampling error.

Violent Crimes

Source: Federal Bureau of Investigation.

Comment: Includes murder, forcible rape, robbery, and aggravated assault.

Cost of Living

Source: Berry-Fording-Hanson state cost-of-living index.

Comment: 2004 revision.

Home-Ownership Rate

Source: U.S. Census Bureau, Housing Vacancy Survey.

Comment: Home-ownership rates are defined as the proportion of owner-occupied households to the total number of occupied households.

Poverty Rate

Source: U.S. Census Bureau, Current Population Survey.

Comment: The data are collected at the national level, making state data less reliable. Reported poverty rates are based on two-year averages, as recommended.

Workforce Excellence (pages 17-25)

Low Birth Weights

Source: National Center for Health Statistics, *Vital Statistics of the U.S.*; Wisconsin Department of Health and Family Services.

Comment: The data are based on registered births.

Student Test Scores

Source: Wisconsin Department of Public Instruction, *2006-07 Knowledge and Concepts Examinations*; U.S. Department of Education, *National Assessment of Education Progress 2007 Mathematics Test*.

Comment: Wisconsin test scores for 2003 through 2007 are not comparable to prior years' scores.

College Entrance Scores

Source: Wisconsin Department of Public Instruction; U.S. Department of Education.

Comment: SAT scores are converted to their ACT equivalents and averaged with actual ACT scores.

High School Graduation Rates

Source: Wisconsin Department of Public Instruction; NCES.

Percentage of College Graduates

Source: U.S. Census Bureau, Current Population Survey.

Doctoral Degrees in the Sciences

Source: National Science Foundation.

Healthy Lifestyles

Source: U.S. Center for Disease Control.

Public Sector (pages 27-31)

State-Local Tax Burden

Source: Wisconsin Taxpayers Alliance, *The Wisconsin Taxpayer*; "Total Taxes" (various years); Tax Foundation, state and local tax estimates.

Comment: Total taxes data in graph are based on fiscal years; 2006-07 taxes divided by 2006 personal income.

Tax Foundation data (in table) are calendar year 2006 estimated taxes divided by 2006 personal income.

Return on Federal Dollars

Source: Tax Foundation.

State Bond Rating

Source: Wisconsin Department of Administration, Capital Finance Office; rating organizations.

Comment: Ratings and outlooks as of May 2007.

State-Local Government Employees Per Capita

Source: U.S. Census Bureau, Public Employment.

Business Climate (pages 33-43)

Economic Dynamism

Source: U.S. Bureau of Labor Statistics, Current Employment and Wages.

Comment: This benchmark is the percent increase in the number of firms.

Export Sector

Source: U.S. Bureau of Economic Analysis; WISERTrade.

Manufacturing Jobs

Source: U.S. Bureau of Labor Statistics, Current Employment Statistics, *Employment, Hours and Earnings*.

Energy Costs

Source: Wisconsin Department of Administration, Division of Energy, *Wisconsin Energy Statistics* (various years).

Comment: The energy prices listed are the average of residential, commercial, and industrial sectors. Electric prices were converted from cents per kilowatt hour to dollars per million Btu's. The difference between the figures in the chart and the table arises because prices for commercial and industrial gas used to develop the averages in the chart do not include the price of transport gas but represent the cost of gas purchased directly from the utility. The average gas price shown for the U.S. and neighboring states is the "city gate" price, or the price charged at the point where a pipeline or distribution company delivers gas to the utility.

Highway Condition

Source: Federal Highway Administration, *Functional System Length* (various years), *Paved Miles by Measured Pavement Roughness*.

Comment: State highway departments use scanning equipment to measure surface smoothness of highway miles on the International Roughness Index (IRI). IRI ratings are grouped into eight levels of roughness. This measure

calculates the percentage of total miles in the best two of the eight IRI categories. States may be using different scanning technologies, which makes comparison difficult. Wisconsin changed its scanning technology in late 1999.

R&D Spending

Source: National Science Foundation.

Comment: R&D spending includes government, universities and colleges, other nonprofit organizations, and private industry.

Patents

Source: U.S. Patent and Trademark Office.

Comment: Includes patents for inventions, designs, botanical plants, and reissues. Includes only U.S. patents granted by state of origin.

High-Tech Employment

Source: American Electronics Association.

Comment: Data are percentages of total employment in various high-tech industries.

Venture Capital

Source: National Venture Capital Association; PricewaterhouseCoopers; Thomson Venture Economics.

Environmental Quality (pages 45-48)

Surface Water Discharges

Source: U.S. Environmental Protection Agency, toxic release inventory.

Comment: Reportable chemicals change annually.

Air Emissions

Source: U.S. Environmental Protection Agency, toxic release inventory.

Hazardous Waste Sites

Source: U.S. Environmental Protection Agency, *Auxiliary Information: National Priorities List, Proposed Rule and Final Rule*.



The authors of this report—all with the Wisconsin Taxpayers Alliance—are: Todd A. Berry, President; Dale J. Knapp, Research Director; Penny Durham, Research Associate; and Danielle Kapanke, Administrative Assistant. Founded in 1932, WISTAX is a nonprofit, nonpartisan organization dedicated to public-policy research and citizen education.