

**ROAD AND
BRIDGE
REPORT:
WISCONSIN
VS. ILLINOIS
VS. IOWA**



A Higher Road for a Better Tomorrow

**MIDWEST ECONOMIC
POLICY INSTITUTE**

Introduction

Investments in roads are essential for economic growth. Quality roads improve business efficiency and improve the labor market. A primary factor in the success of businesses is the level and ease of access to customers, markets, materials, and workers. In addition, while construction of new roads and reconstruction of old roads helps economic growth, infrastructure investment also helps improve the safety of travelers.

Wisconsin's roads are heavily traveled. The state has approximately 5.8 million residents traveling on 115,000 miles of public roads, while almost 1.4 million jobs in Wisconsin depend on the state's transportation infrastructure network ([TRIP, 2016](#)). However, too many roads and bridges are in poor condition. The state of Wisconsin needs to devote more revenue to maintain existing roads and construct new roads to support its workforce and economy.

In 2016, the Reason Foundation, a libertarian think tank, released its 21st annual report on highway systems in the United States— *22nd Annual Highway Report: The Performance of State Highway Systems*. The Reason Foundation previously ranked Wisconsin as the 15th-best highway system in the nation in 2014. From the previous report to the current annual highway report, Wisconsin's highway performance fell 13 spots. The 22nd annual highway report ranks Wisconsin 28th in the nation (based on 2013 data).

Today, the condition of Wisconsin's roads is inadequate. Approximately 21 percent of public, major roads throughout the state are in poor condition and 42 percent of Wisconsin's major roads statewide are in "mediocre" to "poor" condition ([ASCE, 2013b](#); [TRIP, 2016](#)). Furthermore, 14 percent of bridges in Wisconsin are deteriorating and do not meet current design standards.

Driving on unsafe roads is costly to Wisconsinites. The average Wisconsin driver in the Madison area loses 36 hours a year due to congestion, while the average driver in the Milwaukee area loses 38 hours annually due to congestion. Wisconsin motorists spend a total of \$6 billion a year in extra vehicle operating costs due to deficient roads that cause congestion and traffic crashes, while the number of traffic fatalities increased by 13 percent from 2014 to 2015 ([TRIP, 2016](#)). Mediocre road systems have high economic and social costs.

This Midwest Economic Policy Institute (MEPI) Economic Commentary compares Wisconsin's road infrastructure to the systems in Iowa and Illinois. Data was collected from the Reason Foundation, the American Society of Civil Engineers, and the U.S. Department of Transportation. The findings suggest that Illinois tends to have the best road conditions of the three Midwestern states, despite having the highest urban density.

Iowa, Illinois, and Wisconsin

The Midwest is the transportation hub of America. Recent data finds that the United States would need to spend \$3.6 trillion by 2020 to bring the country's infrastructure up to par ([ASCE, 2013a](#)). Revenues must be raised and spent on transportation throughout Wisconsin, Iowa, and Illinois; inadequate investments would negatively affect the economic competitiveness of the region.

Raising revenue for transportation infrastructure of all modes is important. Wisconsin's motor fuel tax is comparable to Iowa and Illinois (Figure 1). However, motorists in Wisconsin pay about one

cent per gallon less in motor fuel taxes than motorists in Illinois and about one cent more than those in Iowa.

In 2014, Wisconsin spent \$3.5 billion on its state roads while Illinois spent \$7.2 billion and Iowa spent \$2.0 billion (Figure 1). Per capita, each state generates a similar amount of revenue to spend on road construction and maintenance. Illinois spends the least amount on highways per capita at \$561, while spending more than twice the amount Wisconsin does overall.

Iowa, Wisconsin, and Illinois all have climates that affect roads, bridges, and railways throughout the year. Due to snowy weather, roads often deteriorate in the winter months. Repairs and maintenance in warmer months are needed so that roads and bridges are safe for motorists. When a state does not fix its crumbling roads on the front-end, the cost burden is shifted onto motorists on the back-end. Wisconsinites pay about \$50 more per year than Iowans and Illinoisans in added vehicle repairs due to poor road conditions (Figure 1).

Figure 1: User Fees and Revenue Sources: Iowa, Wisconsin, Illinois

User Cost of Revenue Source	Iowa	Wisconsin	Illinois
<i>Total State Motor Fuel Taxes and Fees</i>			
Gasoline Per Gallon, July 2016	\$0.317	\$0.329	\$0.335
Diesel Per Gallon, July 2016	\$0.335	\$0.329	\$0.346
<i>Road Revenues</i>			
State Revenues Used for Highways, 2014	\$2.0 billion	\$3.5 billion	\$7.2 billion
State Revenues Used for Highways per Capita, 2014	\$641.12	\$608.51	\$561.08
<i>Personal Cost</i>			
Repairs from Poor Roads Per Motorist	\$422	\$502	\$449

Sources: American Petroleum Institute, "State Motor Fuel Taxes: Notes Summary;" U.S. Department of Transportation, "Highway Statistics Series;" ASCE, "Report Card for America's Infrastructure."

Overall, Illinois has a better road infrastructure system than both Iowa and Wisconsin (Figure 2). Illinois' road construction workers are more productive and better paid than their counterparts in Iowa and Wisconsin (Figure 2). On average, Illinois' road construction workers earn a base wage of \$41 per hour. These workers add \$129 of economic value per hour to the state's economy. Wisconsin road construction workers make about \$7 less per hour than Illinois workers, while Iowa road construction workers make approximately \$15 less per hour than Illinois workers. Of the three states, Illinois' road construction workers are the most productive, Wisconsin's are the second-most, and Iowa's add the least amount of value to the economy per hour.

One of the reasons why productivity and pay are highest in Illinois is the state's strong prevailing wage law. A prevailing wage law is essentially a minimum wage for public construction workers. The standards ensure that all workers in a certain classification with the same skillset are paid at least a baseline hourly rate determined by local market factors. Road construction worker wages and productivity are higher in Wisconsin than in Iowa because Wisconsin has had effective prevailing wage standards while Iowa does not have prevailing wage. However, Wisconsin recently voted to weaken its prevailing wage law.

Both rural and urban roads are important to a thriving economy. The Reason Foundation ranks Illinois 1st in the nation in rural and urban interstate condition in its 21st highway annual report

(Figure 2). Wisconsin ranks below Illinois and Iowa in rural interstate rank, while Iowa has poor urban interstate conditions compared to Wisconsin and Illinois.

Wisconsin has better-quality bridges and fewer traffic fatality rates than Illinois and Iowa (Figure 2). In both cases, Illinois' transportation statistics are nearly on par with Wisconsin while Iowa ranks further behind. For example, approximately 14 percent of Wisconsin's bridges are in deficient condition compared to nearly 16 percent of Illinois bridges. By contrast, 25 percent of bridges in Iowa are in deficient condition – over 11 percentage-points higher than in Wisconsin.

Iowa also invests about \$44,000 less per state-controlled road and bridge mile than Wisconsin. This lack of investment in bridge construction accounts for why Iowa's bridges and urban interstates are in poorer condition than those in Wisconsin and Illinois. In comparison, Illinois invests over \$80,000 more per state-controlled mile than Wisconsin. Illinois' higher per-gallon motor fuel taxes, higher level of capital and bridge investment, and higher productivity per road construction worker all contribute to the state having the best interstates in the United States and above-average bridges.

Figure 2: Transportation Characteristics: Iowa, Wisconsin, Illinois

Transportation or Public Construction Characteristic	Iowa	Wisconsin	Illinois
Prevailing Wage	None	Weak	Strong
Productivity Per Hour (Road Construction)	\$114.48	\$128.52	\$129.17
Base Wage Per Hour (Road Construction)	\$26.15	\$34.03	\$41.27
Capital and Bridge Investment per State-Controlled Mile	\$77,359	\$121,023	\$201,686
Percent Rural Interstate Mileage in Poor Condition	2.64%	3.71%	0.00%
Rural Interstate Rank	37	41	1
Percent Urban Interstates in Poor Condition	11.13%	7.24%	0.07%
Urban Interstate Rank	46	38	1
Percent of Bridges in Deficient Condition	24.96%	13.79%	15.58%
Bridge Rank	35	7	9
Fatality Rate Per 100 Million Vehicle-Miles	1.00	0.91	0.94
Fatality Rate Rank	20	11	16

Sources: 2012 Economic Census, "Construction;" Reason Foundation, "22nd Annual Highway Report."

Should Wisconsin Become More Like Iowa or Illinois on Road Construction?

Wisconsin's roads are in clear need of repair. The key question is whether Wisconsin wants to become more like Iowa or more like Illinois in terms of road conditions and public construction standards. Some policies enacted by the Wisconsin State Legislature and Governor in recent years will negatively affect Wisconsin's construction industry. Weakening the state's prevailing wage law will cut the wages of workers, reduce road construction worker productivity, and disproportionately negatively impact veterans in the state (Manzo et al., 2016).

Iowa has the poorest construction outcomes and infrastructure conditions of the three Midwestern states analyzed. Iowa ranks far below Illinois and Wisconsin in the following: construction worker pay, construction worker productivity per hour, road and bridge infrastructure investment per state-controlled mile, urban road interstate conditions, bridge conditions, and traffic fatality rates. Gutting Wisconsin's prevailing wage law will bring Wisconsin closer to Iowa, which has lower productivity and lower road quality because it does not have prevailing wage standards.

Illinois, on the other hand, has the best overall road and bridge conditions in the nation. Illinois has strong prevailing wage standards, high wages, high productivity, and high-quality urban and rural roads. Illinois' significant annual investment for state-controlled highways has resulted in the good, safe outcomes for motorists. Meanwhile, Illinois supports high-skill, middle-class careers in construction.

The best way to improve Wisconsin's roads is to increase infrastructure investment with well-trained, stable, and productive workers who are paid a living wage. According to the data from the Census Bureau and the Department of Labor, Wisconsin has a lower peak-construction turnover rate (4.2 percent) for workers in the "highway, street, and bridge construction" sector than the national average (6.7 percent) and has more active apprentices per thousand construction workers (96.5 per thousand) than the national average (81.8 per thousand). Wisconsin's low turnover rate and high apprenticeship ratio are the result of decades of effective prevailing wage standards. Construction workers in Wisconsin have been well-trained, have been encouraged to stay in the industry, and have treated their craft as a long-term career rather than a short-term job. By severely weakening prevailing wage, these indicators will decline closer to their respective U.S. averages.

Figure 3: Turnover Rate and Active Apprentice Rate by State

State	Turnover Rate (Q2 Average: 2010-2014)	Active Apprentices Per 1,000 Construction and Extraction Workers (2015)
Wisconsin	4.24%	96.45
<i>U.S. Average</i>	<i>6.73%</i>	<i>81.77</i>

Sources: Reason Foundation, "22nd Annual Highway Report."

The State of Wisconsin is at a crossroads. Wisconsin has inadequate road infrastructure and too many bridges are in deficient condition. The state can either decide to invest in infrastructure, middle-class jobs, business efficiency, and economic growth, or the state can enact policies that limit road quality, reduce worker productivity, and have negative consequences for businesses and motorists alike.

Conclusion

Wisconsin's roads are in need of improvement. Approximately 21 percent of public, major roads throughout the state are in poor condition and 42 percent of Wisconsin's major roads statewide are in "mediocre" to "poor" condition (ASCE, 2013b; TRIP, 2016). A Wisconsin driver in the Madison area loses 36 hours a year in congestion and Wisconsin motorists spend a total of \$6 billion a year in vehicle costs due to congestion and traffic crashes. Furthermore, 14 percent of bridges are deteriorating and traffic fatalities have increased by 13 percent from 2014 to 2015 (TRIP, 2016).

The lack of investment in Wisconsin's roads is one reason the state fell 13 spots in the Reason Foundation's highway rankings— taking 28th place in the 2016 annual highway report.

Wisconsin needs safe, high-quality roads. Iowa's roadways are in worse condition than those in Wisconsin, while Illinois has better infrastructure conditions. Wisconsin has well-trained workers and has decent roadway systems, but the state could have even higher levels of productivity, more apprenticeships, and better-quality roads if the state were to enact public construction policies similar to those in Illinois. Wisconsin should strengthen its prevailing wage laws and invest more in transportation infrastructure to create jobs, improve public safety, and boost the economy.

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