26th Annual Highway Report: Executive summary of findings and state rankings

Each state's overall rating is determined by rankings in 13 categories, including highway expenditures per mile, Interstate and primary road pavement conditions, urbanized area congestion, bridge conditions, and fatality rates.

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This is an excerpt of the executive summary from the 26th Annual Highway Report.

Reason Foundation's *Annual Highway Report* has tracked the performance of the 50 state-owned highway systems from 1984 to 2019. The *26th Annual Highway Report* ranks the performance of state highway

systems in 2019, with congestion and bridge condition data from 2020.

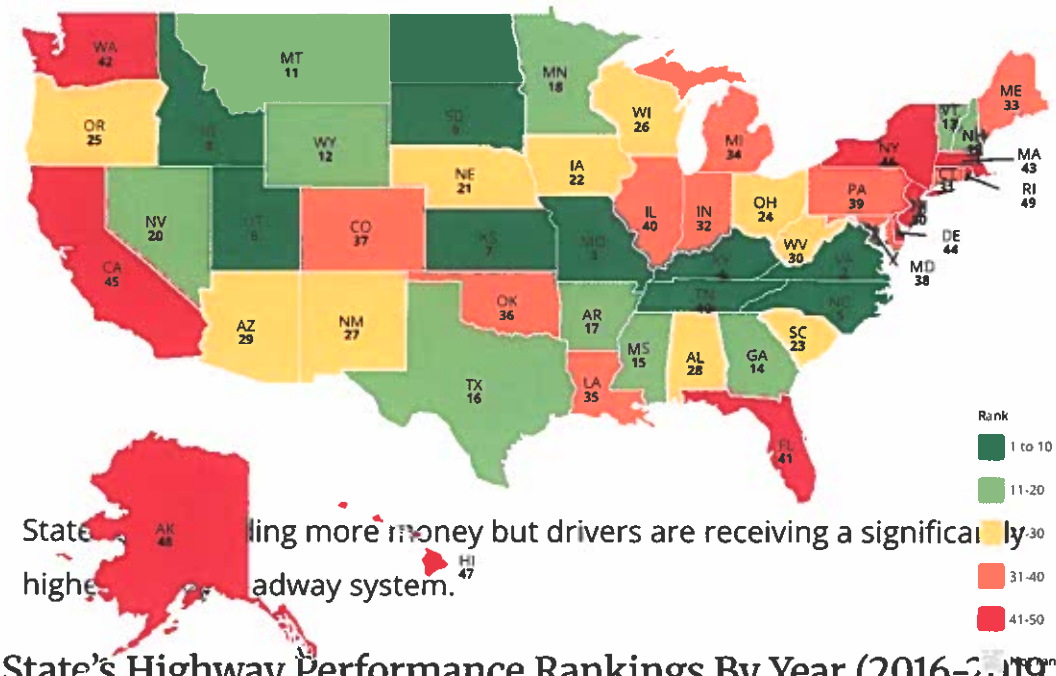
Each state's overall rating is determined by rankings in 13 categories, including highway expenditures per mile, Interstate and primary road pavement conditions, urbanized area congestion, bridge conditions, and fatality rates. The study is based on spending and performance data state highway agencies submitted to the federal government and reviews changes in highway performance over the past year.

Although individual state highway sections (roads, bridges, pavements) steadily deteriorate over time due to age, traffic, and weather, they are improved by maintenance and reconstruction. As a result, system performance can improve even as individual roads and bridges deteriorate.

Table ES1 summarizes recent system trends for key indicators.

From 2018 to 2019, for example, the U.S. continued a decades-long trend of steady, incremental improvement.

All four spending measures for the U.S. state-owned highway system increased between 2018 and 2019 (states spent more money on their highway systems in 2019 than in 2018). Eight of the nine highway performance measures used in the report improved including Rural Interstate Pavement Condition, Urban Interstate Pavement Condition, Rural Arterial Pavement Condition, Urban Arterial Pavement Condition, Urbanized Area Congestion, Structurally Deficient Bridges (a smaller percentage of bridges is structurally deficient), Overall Fatality Rate, and Rural Fatality Rate. The ninth performance measure, Urban Fatality Rate, held steady between 2018 and 2019.



State[illegible]ling more money but drivers are receiving a significa[illegible]ly highe[illegible]adway system.

Each State's Highway Performance Rankings By Year (2016-2019 Data)

Statistic	2016	2018	2019	Percent Change 2016-18	Percent Change 2018-19
Mileage Under State Control (Thousands)	837	857	781	2.39%	-8.87%
Total Disbursements per Lane-Mile, $	$71,117	$80,658	$83,714	13.42%	3.80%
Disbursements per Lane-Mile, Capital/Bridges, $	$36,681	$40,995	$41,850	11.76%	2.09%
Disbursements per Lane-Mile, Maintenance, $	$11,929	$14,111	$14,570	18.29%	3.25%
Disbursements per Lane-Mile, Administration, $	$4,501	$5,059	$5,351	12.40%	5.77%
Consumer Price Index (1983=$1.00)	$2.42	$2.53	$2.57	4.55%	1.56%
Rural Interstate, Percent Poor Condition	1.96	2.04	2.00	4.08%	-2.00%
Urban Interstate, Percent Poor Condition	5.18	5.23	4.97	1.00%	-4.97%
Rural Other Principal Arterial, Percent Poor Condition	1.36	1.20	1.15	11.80%	-4.35%
Urban Other Principal Arterial, Percent Poor Condition*	13.97	14.06	13.52	0.64%	-3.84%
Urbanized Area Congestion	34.77	33.43	23.83	-3.85%	-28.72%
Structurally Deficient Bridges, Poor Condition	9.10	7.62	7.46	-16.26%	-2.10%
Fatality Rate per 100 Million Vehicle-Miles All Roadways	1.18	1.13	1.11	-4.24%	-1.76%
Rural Fatality Rate per 100 Million Vehicle-Miles, All Arterials	1.71	1.36	1.26	-20.47%	-7.35%
Urban Fatality Rate per 100 Million Vehicle-Miles, All Arterials	0.77	0.82	0.82	-6.50%	0%

Table ES2 summarizes system trends over the past 10 years. Over a 10-year period disbursements increased, pavement quality worsened, congestion improved (on a statewide basis), the percentage of

structurally deficient bridges decreased, and the fatality rate held steady. The worsening pavement quality and fatality rate are a change from the previous 10-year period. Figure ES2 displays this info in a graph.

Historical Trends in State Highway System Performance (2008-2018 Data)

Statistic	2008	2009	2010	2011	2012	2013	2014	2015	2016	2
Mileage Under State Control (Thousands)	816	814	NA	814	814	815	817	814	837	8
Total Disbursements per Lane-Mile, $	$145,127*	$144,533*	$150,209*	$152,589*	$162,202*	$160,997*	$173,931*	$178,116*	$71,117	$
Disbursements per Mile, Capital/Bridges, $	$77,130*	$79,951*	$81,515*	$81,844*	$86,153*	$84,494*	$90,969*	$91,992*	$36,681	$
Disbursements per Mile, Maintenance, $	$22,937*	$25,497*	$25,652*	$25,129*	$26,079*	$25,996*	$27,559	$28,020*	$11,929	$
Disbursements per Mile, Administration, $	$13,214*	$11,356*	$10,484*	$10,430*	$10,579*	$10,051*	$9,980*	$10,864*	$4,501	$
Consumer Price Index (1983=1.00)	216	216	222	225	232	235	239	239	242	2
Rural Interstate, Percent Poor Condition	1.93	1.67	NA	1.78	1.78	2	2.11	1.85	1.96	1
Urban Interstate, Percent Poor Condition	5.37	4.97	NA	5.18	4.97	5.37	5.22	5.02	5.18	5
Rural Other Principal Arterial, Percent Poor Condition	0.53	0.65	NA	0.77	0.89	1.27	1.2	1.35	1.36	1
Urban Other Principal Arterial, Percent Poor Condition	NA	NA	NA	NA	NA	NA	NA	NA	13.97	1
Urbanized Area Congestion	48.61**	46.67**	NA	42.15**	NA	40.99**	51.40**	34.95	NA	3
Structurally Deficient Bridges, Poor Condition	NA	NA	NA	NA	NA	NA	NA	9.6	9.1	8
Fatality Rate per 100 Million Vehicle-Miles All Roadways	1.25	1.14	1.11	1.1	1.13	1.1	1.08	1.13	1.18	1
Rural Fatality Rate per 100 Million Vehicle-Miles, All Arterials	NA	NA	NA	NA	NA	NA	1.3	1.58	1.71	1
Urban Fatality Rate per 100 Million Vehicle-Miles, All Arterials	NA	NA	NA	NA	NA	NA	0.67	0.7	0.77	1

The top-performing states in the report tend to be a mix of high-population and low-population states that lean both urban and rural. Very-rural, low-population states may have a slight advantage in the overall rankings. North Dakota leads the rankings for the fourth year in a row, followed by a diverse set of states: Virginia, Missouri, Kentucky, and North Carolina. A number of states with large populations and/or large metro areas fare well in the overall rankings: Virginia (2nd), Missouri (3rd), North Carolina (5th), Tennessee (10th), Georgia (14th), and Texas (16th).

At the other end of the rankings are New Jersey, Rhode Island, Alaska, Hawaii, and New York have the worst combination of highway performance and cost-effectiveness. While very-rural, low-population states may have a slight advantage, three of the five worst-performing states rank in the bottom 10 in population.

Certain states spend significantly more than the national average. This spending may be justified if these states perform well in performance categories. Unfortunately, some of the states that spend the most money are some of the worst performers in highway conditions and maintenance.

Some states had large increases or decreases in their ratings. The rankings for Georgia, New Hampshire, Utah, Vermont, Virginia, and Wyoming improved by at least 10 spots. However, the rankings for Michigan, New Mexico, Ohio, and South Carolina all worsened by at least 10 spots.

Some of the trends in this year's report include:

- For total disbursements, three states spend more than $250,000 per lane-mile: Massachusetts, New York, and New Jersey.
- For capital and bridge disbursements, four states spend more than $100,000 per lane-mile: New Jersey, Florida, Rhode Island, and New York.
- For maintenance disbursements, three states spend more than $50,000 per lane- mile: New Jersey, Washington, and New York.

- For administrative disbursements, two states spend more than $20,000 per lane- mile: Delaware and New Jersey.

System performance problems in each measured category seem to be concentrated in a few states:

- Approximately 25% of the rural Interstate mileage in poor condition is in just three states: Alaska, Colorado, and Washington.
- More than 11% of the urban Interstate mileage in poor condition is in just four states: Hawaii, Louisiana, Delaware, and New Jersey.
- Approximately 15% of the rural arterial mileage in poor condition is in just five states: Alaska, Rhode Island, Hawaii, New Jersey, and Maine.
- Approximately 43% of the urban arterial primary mileage in poor condition is in just six states: Rhode Island California, Nebraska, Massachusetts, New York, and New Jersey.
- Automobile commuters in four states spend more than 50 hours annually, on average, stuck in peak-hour traffic congestion: New Jersey, Delaware, Illinois, and New York.
- Although a majority of states saw the percentage of structurally deficient bridges decline, five states report more than 15% of their bridges as structurally deficient: Rhode Island, West Virginia, Iowa, South Dakota, and Pennsylvania.
- Three states have overall fatality rates of 1.5 per 100 million vehicle-miles traveled or higher: South Carolina, Mississippi, and New Mexico.
- Five states have rural fatality rates of 2.0 per 100 million vehicle-miles traveled or higher: Hawaii, Nevada, South Carolina, Arkansas, and Alaska.
- Urban fatality rates continue to worsen and 11 states have urban fatality rates of 1.0 per 100 million vehicle-miles traveled or higher: New Mexico, Arizona, Florida, Alaska, Tennessee, Hawaii, Arkansas, Alabama, South Carolina, Georgia, and Texas.

System performance improved this year, with more than half of the states (30 of 50) making progress in 2019 compared to 2018. However, a 10-year average of state overall performance data indicates that system performance problems are concentrated in the bottom 10 states. These states are finding it difficult to improve. There is also increasing evidence that higher-level road systems (Interstates, other freeways, and principal arterials) are in better shape than lower-level road systems, particularly local roads. Improved system performance is coming with increased costs. Since 2018, spending has increased by 4%.

26th Annual Highway Report Overall Performance and Cost-Effectiveness Rankings

Overall	State
1	North Dakota
2	Virginia
3	Missouri
4	Kentucky
5	North Carolina
6	Utah
7	Kansas
8	Idaho
9	South Dakota
10	Tennessee
11	Montana
12	Wyoming
13	Vermont
14	Georgia
15	Mississippi
16	Texas
17	Arkansas
18	Minnesota
19	New Hampshire
20	Nevada
21	Nebraska
22	Iowa
23	South Carolina
24	Ohio
25	Oregon
26	Wisconsin
27	New Mexico
28	Alabama
29	Arizona
30	West Virginia
31	Connecticut
32	Indiana
33	Maine
34	Michigan
35	Louisiana
36	Oklahoma
37	Colorado
38	Maryland
39	Pennsylvania
40	Illinois
41	Florida
42	Washington
43	Massachusetts
44	Delaware
45	California
46	New York
47	Hawaii
48	Alaska
49	Rhode Island

50 New Jersey

26th Annual Highway Report: Each State's Highway Performance Ranking By Category

State	Overall	Total Disbursements per Mile	Capital & Bridge Disbursements per Mile	Maintenance Disbursements per Mile	Administrative Disbursements per Mile	Rural Interstate Pavement Condition	U Ir P C
Alabama	28	23	29	11	40	24	3
Alaska	48	34	38	36	20	48	6
Arizona	29	37	39	15	39	32	1
Arkansas	17	9	14	7	4	33	3
California	45	44	41	47	38	40	4
Colorado	37	28	27	38	33	47	3
Connecticut	31	43	43	40	30	1	5
Delaware	44	40	32	45	50	NA	4
Florida	41	47	49	44	35	9	2
Georgia	14	20	19	25	34	23	1
Hawaii	47	41	45	39	28	NA	5
Idaho	8	21	25	16	14	1	3
Illinois	40	39	40	35	22	27	4
Indiana	32	33	36	42	19	44	4
Iowa	22	19	34	18	16	18	3
Kansas	7	18	6	14	17	17	2
Kentucky	4	12	7	13	1	21	2
Louisiana	35	15	12	22	7	43	4
Maine	33	17	16	29	6	37	4
Maryland	38	45	46	41	29	25	4
Massachusetts	43	48	42	43	48	41	1
Michigan	34	32	35	28	23	42	4
Minnesota	18	27	23	32	25	35	3
Mississippi	15	13	15	4	10	26	2
Missouri	3	5	1	9	13	11	1
Montana	11	6	8	6	9	20	1
Nebraska	21	11	10	19	2	29	2
Nevada	20	31	34	23	46	13	1
New Hampshire	19	22	20	26	44	1	2
New Jersey	50	50	50	50	49	1	4
New Mexico	27	7	5	1	36	30	2
New York	46	49	47	48	41	39	4
North Carolina	5	14	17	12	11	22	1
North Dakota	1	2	11	2	5	7	2
Ohio	24	26	22	17	42	28	3
Oklahoma	36	30	26	37	31	38	3
Oregon	25	38	29	30	32	12	2
Pennsylvania	39	35	24	34	37	36	4
Rhode Island	49	46	48	46	43	1	1
South Carolina	23	3	9	3	8	45	2

South Dakota	9	4	4	8	27	10	1
Tennessee	10	16	18	20	26	16	9
Texas	16	24	30	23	12	14	2
Utah	6	36	37	31	21	5	8
Vermont	13	25	21	33	45	7	7
Virginia	2	8	2	27	18	6	1
Washington	42	42	44	49	47	46	2
West Virginia	30	1	3	5	3	31	3
Wisconsin	26	29	28	24	24	34	3
Wyoming	12	10	13	10	15	19	3

View national trends and state-by-state performances by category:

- **Overall**
- **Total Disbursements Per Mile**
- **Capital & Bridge Disbursements Per Mile**
- **Maintenance Disbursements Per Mile**
- **Administrative Disbursements Per Mile**
- **Rural Interstate Pavement Condition**
- **Rural Arterial Pavement Condition**
- **Urban Interstate Pavement Condition**
- **Urban Arterial Pavement Condition**
- **Urbanized Area Congestion**
- **Structurally Deficient Bridges**
- **Overall Fatality Rate**
- **Rural Fatality Rate**
- **Urban Fatality Rate**

26th Annual Highway Report

Complete Report PDF

Complete State-by-State Summaries PDF

**State-controlled miles were used from 2008 to 2015. From 2016 to 2019 state-controlled* lane-*miles were used.*

***A different congestion metric was used for these years.*

****Data from 2019*

*****Data from 2020*

NOTE: Due to a significant lag in FHWA publishing data from the states that is used in this report, the Annual Highway Report that would've had 2017 was not published and thus 2017 data is not included.

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