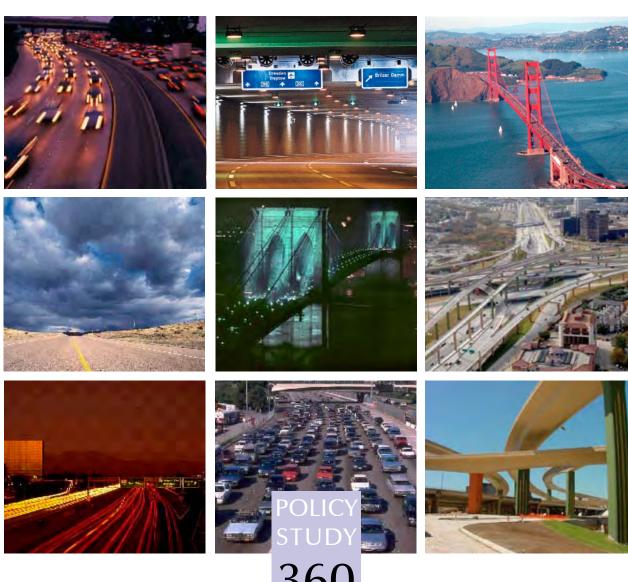


## 16th Annual Report on the Performance OF STATE HIGHWAY SYSTEMS (1984–2005)

By David T. Hartgen, Ph.D., P.E., and Ravi K. Karanam Project Director: Adrian T. Moore, Ph.D.





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By David T. Hartgen, Ph.D., P.E. and Ravi K. Karanam Project Director: Adrian T. Moore, Ph.D.

This is the 16<sup>th</sup> annual report in a series on the condition and performance of the U.S. state-owned road system. The report is supported this year by Reason Foundation, a public policy research institution. The views expressed in the report are solely those of the authors. Copyright 2007 by the authors. Permission to copy and reproduce by electronic or paper means with appropriate credit is given.

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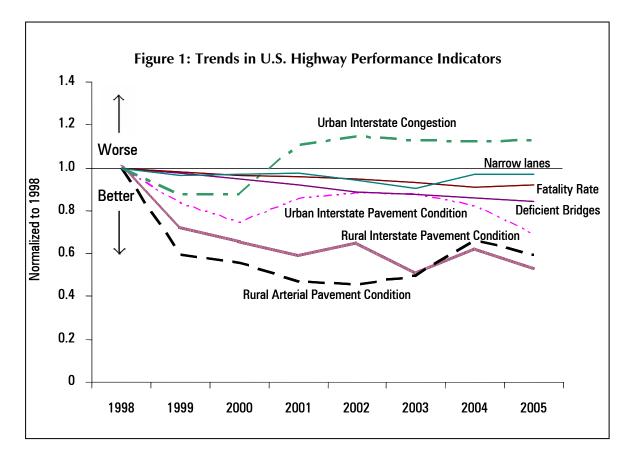
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#### Part 1

## **Overview**

The states reversed the 2004 declines in highway condition by spending federal funds approved by Congress in 2005 for improved pavements, bridge repairs, and congestion relief. The nation's continuing trend of generally improving highway performance from 1998 to 2003 was reestablished in 2005.

Federal highway funds increased about 13 percent between 2004 and 2005, as the states saw the first full year of additional funds from the new federal highway program. Capital and bridge expenditures increased 12 percent and maintenance expenditures increased 11 percent. Administrative costs were flat.



The states converted the additional funding into improved performance. The percent of roads in poor condition fell sharply for both the interstate and rural primary roads. Increasingly, the remaining serious pavement condition problems are confined to just a few states. The percentage of bridges rated deficient also improved slightly. The states also held their ground on congestion and narrow lanes. But accident rates crept up slightly.

Substantial as it is, this progress was offset slightly by several troublesome problems. The condition of secondary and local roads continues to worsen. Over one half of urban interstates remain congested, and the states' ability to deal with congestion seems to be slowing. And one quarter of the nation's bridges are still rated 'deficient'; at the current improvement rate it will take 50 years to eliminate bridge deficiencies. Highway fatalities have edged up, increasing the fatality rate slightly. And sharp increases in highway construction costs in 2005–2006 mean that fewer repairs can be made from the same dollars.

This 16<sup>th</sup> annual study tracks the performance of the state-owned roads from 1984 to 2005. Twelve indicators—covering the states' highway revenues and expenditures, pavement and bridge condition, congestion, accident rates, and narrow lanes—make up each state's overall rating. The study is based on spending and performance data submitted to the federal government by the state highway agencies.

Table 1A: Expenditures and Performance of State-Owned Highways, 1998-2005				
Statistic	1998	2004	2005	Percent Change, 04-05
Total Revenues, All Sources, \$B	\$67.80	\$90.68	\$102.71	13.27
Total Expenditures, \$B	\$66.40	\$87.69	\$98.91	12.80
Expenditures, Capital/Bridges, \$B	\$36.30	\$47.74	\$50.31	5.38
Expenditures, Maintenance, \$B	\$11.40	\$14.29	\$15.94	11.55
Expenditures, Administration, \$B	\$4.70	\$6.32	\$6.36	0.63
Highway Construction Price Index	126.9	154.4	175.4	13.6
Rural Interstate, Percent Poor Condition	3.25	2.02	1.73	-15.84
Urban Interstate, Percent Poor Condition	8.69	7.13	5.97	-16.27
Rural Primary, Percent Poor Condition	1.42	0.94	0.85	-9.57
Urban Interstate, Percent Congested	45.90	51.60	51.85	0.48
Bridges, Percent Deficient	29	25.03	24.53	-2.12
Fatality Rate per 100 Million Miles Driven	1.58	1.440	1.453	0.69
Rural Primary, Percent Narrow Lanes	11.04	10.72	10.72	-0.19

**Bold** = Worsened

The study also found wide variations among the states in road performance. Just six states (New York, Alabama, California, Utah, Alaska and Michigan) have over 60 percent of the poor rural interstate mileage in the country. And four states (California, Minnesota, New Jersey and North Carolina) have more than 70 percent of their urban interstates congested. The states also vary widely by fatality rates. Massachusetts reported the lowest rate, Montana the highest.

Congress passed new highway legislation in August 2005. The federal bill increased highway funding by about 40 percent over 1998 levels. Congress did not address fundamental reforms in how road projects are financed, so the action averted a looming drop in highway performance. But there is still cause for concern about the lack of progress in reducing congestion. It is simply unacceptable for half of urban interstates to be congested. We need to spend our dollars on real problems, not frills. States need to re-think their priorities and focus more on congestion reduction and mobility provision.

#### Part 2

## **Cost-Effectiveness Rankings of the States**

This report continues its annual ranking of the state highway systems on costs versus effectiveness. Since the states have different budgets, system sizes and traffic, comparative performance depends on both system quality and on resources available. To determine relative performance, state highway budgets (per mile of responsibility) are compared with system performance, state by state. States ranked high typically have good-condition systems along with relatively thin budgets.<sup>1</sup>

The following table shows the results for 2005. For 2005, the top three states in overall cost-effectiveness—North Dakota, South Carolina and Kansas—are followed by New Mexico, Montana, Georgia, Wyoming, Oregon, Nevada and Idaho.

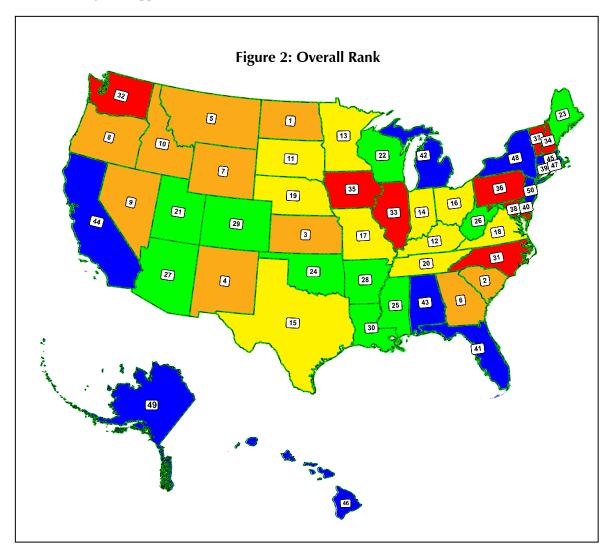
Several states improved their rankings sharply from 2004:

- Missouri jumped from 28<sup>th</sup> to 17<sup>th</sup> after sharp improvements in its pavement condition.
- Nevada moved up 12 positions from 21<sup>st</sup> to 9<sup>th</sup>.
- Indiana moved up from 23<sup>rd</sup> to 14<sup>th</sup>.
- Montana moved up from 13<sup>th</sup> to 5<sup>th</sup>.

Effectiveness Rank	State	1998 Overall Cost-	2004 Overall Cost-	Change, 2004-2005
Ellectivelless halik		Effectiveness Rating	Effectiveness Rank	
1	North Dakota	1	1	0
2	South Carolina	4	2	0
3	Kansas	11	6	3
4	New Mexico	31	4	0
5	Montana	3	13	8
6	Georgia	6	3	-3
7	Wyoming	2	9	2
8	Oregon	8	5	-3
9	Nevada	13	21	12
10	Idaho	5	7	-3
11	South Dakota	15	14	3
12	Kentucky	9	10	-2
13	Minnesota	32	12	-1
14	Indiana	23	23	9
15	Texas	7	8	-7
16	Ohio	28	17	1
17	Missouri	14	28	11
18	Virginia	18	11	-7
19	Nebraska	17	16	-3
20	Tennessee	26	19	-1
21	Utah	30	27	6
22	Wisconsin	29	18	-4
23	Maine	12	22	-1
24	Oklahoma	27	20	-4
25	Mississippi	19	26	1
26	West Virginia	22	15	-11
27	Arizona	20	29	2
28	Arkansas	47	33	5
29	Colorado	45	36	7
30	Louisiana	39	34	4
31	North Carolina	35	30	-1
32	Washington	24	38	6
33	Illinois	36	32	-1
34	New Hampshire	16	25	-9
35	lowa	25	31	-4
36	Pennsylvania	33	35	-1
37	Vermont	34	24	-13
38	Maryland	37	43	5
39	Connecticut	41	40	1
40	Delaware	38	37	-3
41	Florida	40	41	0
42	Michigan	42	39	-3
43	Alabama	10	42	-1
44	California	44	45	1
45	Massachusetts	49	48	3
46	Hawaii	46	44	-2
47	Rhode Island	43	47	0
48	New York	48	49	1
10				
49	Alaska	21	46	-3

On the other hand, several states lost ground between 2004 and 2005:

- Vermont slipped from 24<sup>th</sup> to 37<sup>th</sup>.
- New Hampshire slipped from 25<sup>th</sup> to 34<sup>th</sup>.
- West Virginia slipped form 15<sup>th</sup> to 26<sup>th</sup>.



Detailed data and trends in rankings for each of the states are shown in the attached tables:

Go to reason.org/ps360.shtml for Overall State Ranks and Comparative Performance of State Highway Systems

Part 3

## **Trends in Performance Indicators**

etails on the trends of performance measures follow. Selected system condition measures are also shown in the attached maps.

#### **System Extent**

#### **State-Controlled Miles.**

State-controlled miles include the State Highway Systems, state-agency toll roads, some ferry services, and state-owned systems serving universities and state parks. Nationwide, about 812,871 miles are under state control (Table 2, State-Controlled Highway Mileage), about 2000 more than in 2004. The smallest state-owned road systems continue to be Hawaii (975 miles) and Rhode Island (1,102 miles); the largest in Texas (79,651 miles) and North Carolina (79,779 miles). North Carolina has replaced Texas as the state with largest state-owned system.

	State-Controlle	ed Highway
Mileage		
Rank	State	Mileage
1	North Carolina	79,779
2	Texas	79,651
3	Virginia	57,884
4	Pennsylvania	43,283
5	South Carolina	41,582
6	West Virginia	34,051
7	Missouri	32,464
8	Kentucky	27,753
9	Ohio	22,461
10	Georgia	18,274
11	California	18,230
12	Washington	17,836
13	Louisiana	16,696
14	Illinois	16,521
15	Arkansas	16,444
16	New York	15,707
17	Tennessee	14,163
18	Oklahoma	13,389
19	Minnesota	13,182
20	New Mexico	12,205
21	Oregon	12,065
22	Florida	12,040
23	Wisconsin	11,794
24	Indiana	11,183
25	Alabama	11,124
26	Mississippi	10,948
27	Montana	10,789
28	Kansas	10,548
29	Colorado	10,343
30	Nebraska	10,256
31	Michigan	9,735
32	lowa	9,266
33	Maine	8,684
34	South Dakota	8,038
35	North Dakota	7,405
36	Wyoming	7,404
37	Arizona	6,959
38	Alaska	6,420
39	Nevada	5,922
40	Utah	5,868
41	Maryland	5,277
42	Delaware	5,243
43	Idaho	4,957
44	New Hampshire	4,004
45	Connecticut	3,960
46	Massachusetts	3,257
47	New Jersey	2,906
48	Vermont	2,844
49	Rhode Island	1,102
50	Hawaii	975
Total		812,871
Mean		16,257
moun		10,201

#### **State Highway Agency Mileage.**

About 775,860 miles are the responsibility of the 50 state highway agencies (Table 3, State Highway Agency Mileage). In most states these are generally the Interstates and other major U.S.-numbered and state-numbered roads, but a few states also manage major portions of the rural road system. A few states (New Jersey, Florida, California, and Massachusetts) manage significantly wider roads.

Table	3: State Highw	ay Agency	/ Mileage	
Rank	State	Miles	Lane miles	Ratio
1	West Virginia	33,987	69,955	2.06
2	Alaska	5,659	11,658	2.06
3	Maine	8,548	18,136	2.12
4	North Carolina	79,031	168,655	2.13
5	Virginia	57,860	125,165	2.16
6	South Carolina	41,391	89,543	2.16
7	Delaware	5,243	11,502	2.19
8	Pennsylvania	39,890	88,320	2.21
9	Kentucky	27,510	60,971	2.22
10	New Hampshire	3,975	8,819	2.22
11	Arkansas	16,444	36,665	2.23
12	Missouri	32,464	72,645	2.24
13	Nebraska	9,975	22,440	2.25
14	Montana	10,789	24,480	2.27
15	North Dakota	7,382	16,832	2.28
16	Vermont	2,634	6,045	2.29
17	Louisiana	16,693	38,447	2.30
18	South Dakota	7,873	18,135	2.30
19	Kansas	10,370	23,917	2.31
20	Wyoming	6,757	15,590	2.31
21	Texas	79,648	190,570	2.39
22	Nevada	5,399	13,072	2.42
23	Oregon	7,532	18,239	2.42
24	Idaho	4,957	12,041	2.43
25	Oklahoma	12,285	29,936	2.44
26	New Mexico	11,990	29,291	2.44
27	Minnesota	11,871	29,086	2.45
28	Mississippi	10,896	26,756	2.46
29	Wisconsin	11,782	29,325	2.49
30	Colorado	9,106	22,942	2.52
31	Indiana	11,183	28,317	2.53
32	Ohio	19,292	48,857	2.53
33	New York	15,033	38,084	2.53
34	Alabama	10,955	28,067	2.56
35	lowa	8,895	22,837	2.57
36	Illinois	16,103	41,833	2.60
37	Tennessee	13,817	35,941	2.60
38	Hawaii	928	2.415	2.60
39	Utah	5,858	15,260	2.60
40	Washington	7,045	18,367	2.61
41	Georgia	17,930	47,003	2.62
42	Rhode Island	1,102	2,898	2.63
43	Connecticut	3,717	9,777	2.63
44	Arizona	6,800	18,503	2.72
45	Michigan	9,698	27,567	2.72
46	Maryland	5,140	14,621	2.84
47	Massachusetts	2,849	8,756	3.07
47	California	15,213	50,559	3.32
49	Florida	12,040	41,477	3.44
50		2,321		
	New Jersey		8,486	3.66
Total		775,860	1,838,803	
Mean		15,517.2	36,776	

#### **Resources**

#### **Receipts for State-Administered Roads.**

The states obtain their road funds primarily from state-imposed road user fuel taxes and fees, the federal government, general funds, tolls, bonds and other financial initiatives. In 2005 the states received about \$102.71 billion for state-administered roads, up sharply 13.3 percent from 2004 (Table 4, Receipts per State-Controlled Mile). This reflects the first full year of SAFETEA-LU funding. Since 1984, per-mile receipts for state-owned roads have increased about 218.7 percent. In 2005, receipts per mile of responsibility averaged \$126,354, and ranged from a low of \$36,890 per mile of responsibility for South Carolina to a high of \$2,370,630 for New Jersey.

Table 4: R	eceipts per State-Co	ntrolled Mile
Rank	State	Receipts / mile
1	South Carolina	\$36,890
2	North Dakota	\$42,199
3	West Virginia	\$42,804
4	North Carolina	\$43,715
5	Montana	\$46,948
6	Missouri	\$50,099
7	South Dakota	\$53,079
8	Virginia	\$55,063
9	Arkansas	\$55,320
10	New Mexico	\$56,765
11	Wyoming	\$58,822
12	Nebraska	\$61,427
13	Maine	\$67,954
14	Oklahoma	\$71,894
15	Kentucky	\$75,688
16	Louisiana	\$79,773
17	Mississippi	\$83,296
18	Kansas	\$83,832
19	Idaho	\$85,571
20	Vermont	\$89,492
21	Alaska	\$93,028
22	lowa	\$94,827
23	Georgia	\$95,933
24	Oregon	\$98,766
25	New Hampshire	\$103,380
26	Minnesota	\$104,546
27	Tennessee	\$106,015
28	Washington	\$107,373
29	Texas	\$108,820
30	Pennsylvania	\$111,874
31	Alabama	\$112,652
32	Ohio	\$117,624
33	Indiana	\$126,436
34	Utah	\$135,117
35	Nevada	\$143,812
36	Wisconsin	\$148,768
37	Colorado	\$150,818
38	Delaware	\$203,616
39	Michigan	\$240,272
40	Illinois	\$249,760
41	Arizona	\$265,039
42	Maryland	\$274,984
43	Connecticut	\$344,347
44	Rhode Island	\$365,624
45	California	\$397,951
46	Hawaii	\$533,169
47	New York	\$600,702
48	Florida	\$621,822
49	Massachusetts	\$753,892
50	New Jersey	\$2,370,630
Mean	,	\$126,354
-	•	

#### **Capital and Bridge Disbursements.**

Capital and bridge disbursements for state-owned roads totaled \$50.309 billion in 2005, about 5.4 percent higher than in 2004 (Table 5, Capital and Bridge Disbursements per State-Controlled Mile). This again reflects the "surge" forward due to financing from SAFETEA-LU. Since 1984, per-mile capital and bridge disbursements have increased about 209.4 percent. Capital and bridge disbursements averaged \$61,891, up 5.4 percent from 2004. On a per-mile basis, 2005 capital and bridge disbursements ranged from a low of \$17,935 in South Carolina to a high of \$599,979 in New Jersey.

Table 5: Capital & Bridge Disbursements per			
State-Controlled Mile			
Rank	State	Disbursements/mile	
1	South Carolina	\$17,935	
2	Virginia	\$19,297	
3	West Virginia	\$19,778	
4	New Hampshire	\$21,350	
5	New Mexico	\$24,049	
6	North Carolina	\$26,013	
7	Missouri	\$28,979	
8	Maine	\$29,542	
9	Kentucky	\$30,546	
10	Montana	\$33,438	
11	Oklahoma	\$35,719	
12	Wyoming	\$36,132	
13	Nebraska	\$37,695	
14	North Dakota	\$38,431	
15	Arkansas	\$38,853	
16	South Dakota	\$40,046	
17	Vermont	\$43,798	
18	Pennsylvania	\$49,030	
19	Mississippi	\$51,202	
20	lowa	\$57,083	
21	Louisiana	\$57,649	
22	Colorado	\$58,392	
23	Alaska	\$58,975	
24	Oregon	\$59,961	
25	Washington	\$62,734	
26	Tennessee	\$63,348	
27	Georgia	\$63,433	
28	Idaho	\$64,862	
29	Minnesota	\$64,971	
30	Kansas	\$67,029	
31	Delaware	\$68,231	
32	Ohio	\$70,710	
33	Texas	\$71,457	
34	Indiana	\$74,421	
35	Alabama	\$77,516	
36	Wisconsin	\$80,287	
37	Utah	\$81,573	
38	Nevada	\$87,716	
39	Illinois	\$117,654	
40	Arizona	\$124,426	
41	Michigan	\$135,271	
42	Connecticut	\$140,322	
43	New York	\$147,011	
44	California	\$157,164	
45	Rhode Island	\$167,735	
46	Maryland	\$186,348	
47	Hawaii	\$214,810	
48	Florida	\$337,530	
49	Massachusetts	\$353,552	
50	New Jersey	\$599,979	
Mean	INCAN DELOGA	\$61,891	
IVICALI		φυι,ουΙ	

#### **Maintenance Disbursements.**

Maintenance disbursements increased sharply, 11.5 percent from 2004 to 2005 to \$15.94 billion, and accounted for about 16.1 percent of total disbursements (Table 6, Maintenance Disbursements per State-Controlled Mile). Since 1984 per-mile maintenance disbursements have increased about 165.3 percent. On a per-mile basis 2005 maintenance disbursements per mile of responsibility averaged about \$19,615. The lowest per-mile maintenance disbursement was \$5,077 in North Dakota, the highest \$153,845 in New Jersey.

<b>Table 6: Maintenance Disbursements per</b>			
State-Controlled Mile			
Rank	State	Disbursements/mile	
1	North Dakota	\$5,077	
2	Montana	\$5,973	
3	West Virginia	\$6,673	
4	South Dakota	\$6,983	
5	South Carolina	\$7,297	
6	Mississippi	\$8,454	
7	Kentucky	\$8,864	
8	Oregon	\$9,048	
9	Nebraska	\$9,891	
10	North Carolina	\$9,933	
11	Arkansas	\$10,092	
12	Georgia	\$10,123	
13	Idaho	\$11,678	
14	Wyoming	\$11,895	
15	lowa	\$13,382	
16	Alabama	\$13,435	
17	Oklahoma	\$13,685	
18	Kansas	\$13,833	
19	New Mexico	\$14,094	
20	Wisconsin	\$14,155	
21	Missouri	\$14,333	
22	Nevada	\$14,693	
23	Arizona	\$15,170	
24	Tennessee	\$16,955	
25	Utah	\$17,271	
26	Texas	\$17,657	
27	Virginia	\$18,282	
28	Maine	\$18,831	
29 30	Vermont Ohio	\$18,981 \$19,203	
31			
	Washington	\$20,129	
32	Louisiana	\$21,319	
33	Delaware	\$22,193	
34	Alaska	\$25,512	
35	Minnesota	\$26,084	
36	Michigan	\$27,481	
37	Pennsylvania	\$28,060	
38	Illinois	\$29,497	
39	Hawaii	\$32,291	
40	Colorado	\$32,419	
41	New Hampshire	\$34,034	
42	Connecticut	\$37,668	
43	Indiana	\$37,884	
44	California	\$43,448	
45	Maryland	\$51,132	
46	Massachusetts	\$52,779	
47	New York	\$71,744	
48	Rhode Island	\$74,506	
49	Florida	\$90,410	
50	New Jersey	\$153,845	
Mean		\$19,615	

#### **Administrative Disbursements.**

Administrative disbursements increased slightly: they totaled \$6.36 billion in 2005, about 0.63 percent higher than in 2004 (Table 7, Administrative Disbursements per State-Controlled Mile). Administrative costs accounted for about 6.43 percent of total disbursements, down from 7.21 percent in 2004. Since 1984, per-mile administrative disbursements have increased about 199.4 percent. On a per-mile basis, 2005 administrative disbursements averaged \$7,824, ranging from a low of \$1,786 in North Dakota to a high of \$68,352 in New Jersey.

<b>Table 7: Administrative Disbursements</b>			
per State-Controlled Mile			
Rank	State	Disbursements/mile	
1	North Dakota	\$1,786	
2	Arkansas	\$1,805	
3	Missouri	\$1,989	
4	South Carolina	\$2,061	
5	West Virginia	\$2,356	
6	Louisiana	\$2,837	
7	Virginia	\$3,113	
8	Maine	\$3,136	
9	Texas	\$3,147	
10	Montana	\$3,856	
11	Mississippi	\$3,920	
12	Kentucky	\$3,989	
13	North Carolina	\$4,359	
14	Nebraska	\$5,032	
15	Idaho	\$5,135	
16	lowa	\$5,148	
17	Indiana	\$5,428	
18	Wyoming	\$5,585	
19	South Dakota	\$5,840	
20	Washington	\$5,971	
21	Oregon	\$6,095	
22	Kansas	\$6,326	
23	Colorado	\$6,856	
24	Oklahoma	\$6,952	
25	Alaska	\$7,172	
26	Pennsylvania	\$7,260	
27	Ohio	\$7,523	
28	Nevada	\$7,684	
29	Minnesota	\$9,702	
30	Maryland	\$10,408	
31	Tennessee	\$10,580	
32	New Hampshire	\$10,659	
33	Michigan	\$10,757	
34	Georgia	\$11,201	
35	New Mexico	\$11,466	
36	Alabama	\$11,621	
37	Vermont	\$12,066	
38	Wisconsin	\$13,184	
39	Illinois	\$13,441	
40	Connecticut	\$14,564	
10	The I	φ. 1,00 <del>1</del>	

41

42

43

44

45

46

47

48

49

50

Mean

Utah

Florida

New York

Arizona

Hawaii

Delaware

California

Massachusetts

New Jersey

Rhode Island

\$15,337

\$16,109

\$18,687

\$24,481

\$26,962

\$37,172

\$49,924

\$50,614

\$60,807

\$68,352

\$7,824

#### **Total Disbursements.**

In total, the states disbursed about \$98.905 billion for state-owned roads in 2005, about 12.8 percent higher than in 2004 (Table 8, Total Disbursements per State-Controlled Mile). Since 1984, per-mile total disbursements have increased about 227.3 percent. On a per-mile basis, 2005 disbursements averaged \$121,674. The lowest disbursement per mile was \$31,262 in South Carolina, the highest \$2,360,450 in New Jersey.

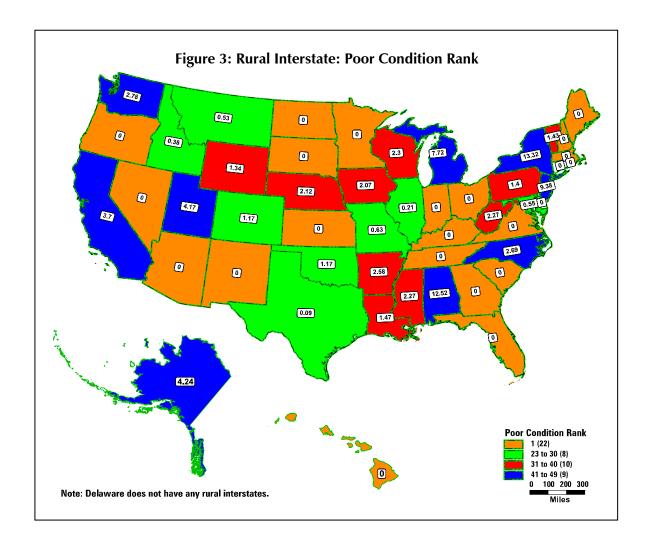
Table 8: Total Disbursements per State- Controlled Mile			
Rank	State	Dichurcomente/mile	
	South Carolina	Disbursements/mile \$31,262	
2		\$31,202	
3	West Virginia North Carolina	•	
		\$44,654	
5	Montana North Dakota	\$46,905 \$47,695	
6		\$47,685	
7	Missouri Virginia	\$52,452 \$53,569	
8	Kentucky	\$54,091	
9	South Dakota	\$55,216	
10	Arkansas	\$55,642	
11	Wyoming	\$57,558	
	1		
12 13	Nebraska	\$59,717 \$67,581	
14	New Mexico Maine		
		\$68,344	
15	Oklahoma	\$70,984	
16	Mississippi	\$74,617	
17	Louisiana	\$83,061	
18	Idaho	\$87,687	
19	lowa	\$87,886	
20	New Hampshire	\$88,191	
21	Vermont	\$91,719	
22	Oregon	\$92,102	
23	Tennessee	\$98,547	
24	Alaska	\$99,819	
25	Pennsylvania	\$100,558	
26	Texas	\$106,221	
27	Kansas	\$106,844	
28	Georgia	\$109,005	
29	Minnesota	\$110,066	
30	Washington	\$110,094	
31	Alabama	\$111,286	
32	Ohio	\$122,839	
33	Nevada	\$133,381	
34	Colorado	\$135,251	
35	Indiana	\$138,520	
36	Utah	\$142,167	
37	Wisconsin	\$153,700	
38	Illinois	\$192,318	
39	Delaware	\$210,522	
40	Arizona	\$245,197	
41	Michigan	\$252,879	
42	Maryland	\$293,541	
43	California	\$336,954	
44	Connecticut	\$356,230	
45	Rhode Island	\$361,106	
46	Hawaii	\$491,498	
47	New York	\$552,807	
48	Florida	\$570,191	
49	Massachusetts	\$893,236	
50	New Jersey	\$2,360,450	
Mean		\$121,674	

#### **System Performance**

Rural Interstate Condition. In most states road condition is measured using special machines that determine the roughness of road surfaces. (A few states continue to use visual ratings). About 1.73 percent of U.S. rural interstates—532 miles out of 30,802—were reported in poor condition in 2005 (Table 9, Rural Interstate Condition, and Figure 3). This has improved sharply from 2004, when 2.02 percent of rural interstates were rated poor.

The amount of poor mileage varies widely. Twenty-two states reported no poor mileage, and six more reported less than 1 percent poor mileage. But four states reported more than 5 percent poor mileage, and two states (New York and Alabama) reported more than 10 percent poor mileage. Just six states (New York, Alabama, California, Utah, Alaska and Michigan) have 60 percent of the poor rural interstate mileage in the country. On the other hand, several states made great progress: Missouri, Pennsylvania and Louisiana made significant gains.

1	State Arizona Connecticut	% <b>Poor</b> 0.00
	Connecticut	0.00
	Connecticut	
		0.00
1	Florida	0.00
1	Georgia	0.00
	Hawaii	0.00
	Indiana	0.00
	Kansas	0.00
1	Kentucky	0.00
	Massachusetts	0.00
1	North Dakota	0.00
1	New Mexico	0.00
1	Nevada	0.00
1	Oregon	0.00
	Rhode Island	0.00
	South Carolina	0.00
1	Virginia	0.00
	Tennessee	0.00
	South Dakota	0.00
	Ohio	0.00
1	Maine	0.00
	Minnesota	0.00
	New Hampshire	0.00
	Texas	0.09
	Illinois	0.21
	Idaho	0.38
	Montana	0.53
	Maryland	0.55
	Missouri	0.63
	Colorado	1.17
	Oklahoma	1.17
	Wyoming	1.34
	Pennsylvania	1.40
	Vermont	1.43
	Louisiana	1.47
35	Iowa	2.07
36	Nebraska	2.12
37	West Virginia	2.27
38	Mississippi	2.27
39	Wisconsin	2.30
40	Arkansas	2.58
41	North Carolina	2.69
42	Washington	2.78
43	California	3.70
44	Utah	4.17
45	Alaska	4.24
46	Michigan	7.72
47	New Jersey	9.38
48	Alabama	12.52
49	New York	13.32
	Delaware	NA
Mean		1.73

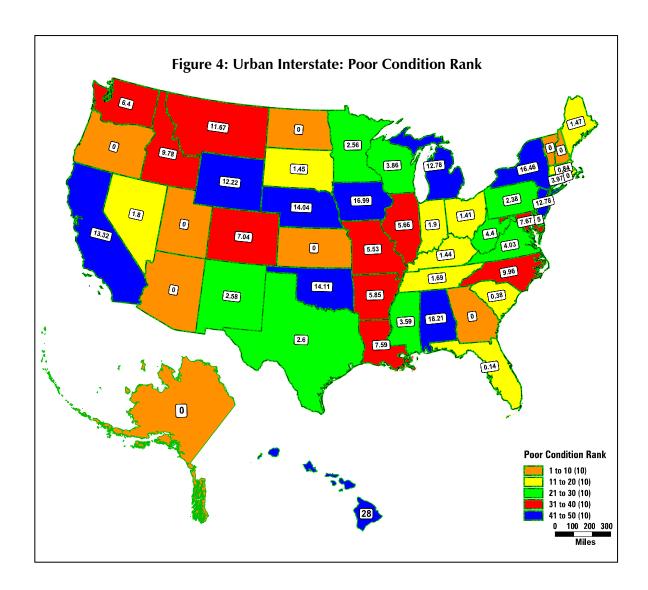


#### **Urban Interstate Condition.**

The urban interstates consist of major multi-lane interstates in and near urban areas. The condition of the urban interstate system also improved sharply in 2005, to 5.97 percent poor from 7.13 percent poor in 2004 (Table 10, Urban Interstate Condition, and Figure 4).

The condition of the urban interstate also varies widely. Ten widely scattered states reported no poor urban interstate mileage, while four states (Iowa, Hawaii, Alabama, and New York) reported more than 15 percent poor mileage. But just five states (California, New York, Michigan, Alabama and North Carolina) have half of the poor-mileage urban interstate in the country. Since 1998, the percentage of poor urban interstate mileage has been reduced about 31 percent.

Table 1	0: Urban Intersta	nte Condition
Rank	State	% Poor
1	Alaska	0.00
1	Arizona	0.00
1	Georgia	0.00
1	Kansas	0.00
1	North Dakota	0.00
1	New Hampshire	0.00
1	Oregon	0.00
1	Rhode Island	0.00
1	Utah	0.00
1	Vermont	0.00
11	Florida	0.14
12	South Carolina	0.14
13	Massachusetts	0.84
14		1.41
15	Ohio	
	Kentucky	1.44
16	South Dakota	1.45
17	Maine	1.47
18	Tennessee	1.69
19	Nevada	1.80
20	Indiana	1.90
21	Pennsylvania	2.38
22	Minnesota	2.56
23	New Mexico	2.58
24	Texas	2.60
25	Mississippi	3.59
26	Wisconsin	3.86
27	Connecticut	3.97
28	Virginia	4.03
29	West Virginia	4.40
30	Delaware	5.00
31	Missouri	5.53
32	Illinois	5.66
33	Arkansas	5.85
34	Washington	6.40
35	Colorado	7.04
36	Louisiana	7.59
37	Maryland	7.67
38	Idaho	9.78
39	North Carolina	9.96
40	Montana	11.67
41	Wyoming	12.22
42	Michigan	12.78
43	New Jersey	12.78
44	California	13.32
45	Nebraska	14.04
46	Oklahoma	14.11
47	New York	16.46
48	lowa	16.99
49	Alabama	18.21
50	Hawaii	28.00
Mean	. 10070011	5.97
1115411		5.07

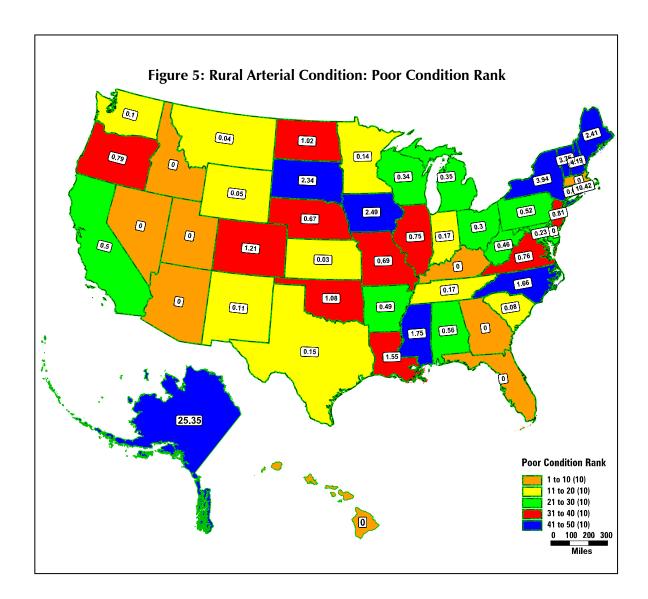


#### **Rural Arterial Pavement Condition.**

The condition of the major rural highways also improved sharply from 2004 to 2005. Overall, about 0.85 percent of the rural other principal arterial system—799 miles out of 94,216 were reported in poor condition (Table 11, Rural Arterial Condition, and Figure 5). This compares with 0.94 percent, or about 892 miles, in 2004. Since 1998, the percentage of poor rural primary mileage has decreased significantly, more than one-third.

The states also vary widely in condition. Ten states reported no poor rural primary mileage in 2005, whereas two states (New Hampshire and Alaska) reported large increases, from about 0 percent to over 10 percent, from 2003 to 2004. Three other states (Vermont, Rhode Island and New York) reported more than 3 percent poor. Just six states (Alaska, Iowa, New York, South Dakota, North Carolina, and Mississippi) account for more than half the poor rural primary mileage in the country.

Table 11: Rural Arterial Condition		
Rank	State	% Poor
1	Arizona	0.00
1	Delaware	0.00
1	Florida	0.00
1	Georgia	0.00
1	Hawaii	0.00
1	Idaho	0.00
1	Kentucky	0.00
1	Massachusetts	0.00
1	Nevada	0.00
1	Utah	0.00
11	Kansas	0.03
12	Montana	0.04
13	Wyoming	0.05
14	South Carolina	0.08
15	Washington	0.10
16	New Mexico	0.11
17	Minnesota	0.14
18	Texas	0.15
19	Tennessee	0.17
20	Indiana	0.17
21	Maryland	0.23
22	Ohio	0.30
23	Wisconsin	0.34
		0.35
24	Michigan	
25	West Virginia	0.46
26	Arkansas	0.49
27	California	0.50
28	Pennsylvania	0.52
29	Alabama	0.56
30	Connecticut	0.61
31	Nebraska	0.67
32	Missouri	0.69
33	Illinois	0.75
34	Virginia	0.76
35	Oregon	0.79
36	New Jersey	0.81
37	North Dakota	1.02
38	Oklahoma	1.08
39	Colorado	1.21
40	Louisiana	1.55
41	North Carolina	1.66
42	Mississippi	1.75
43	South Dakota	2.34
44	Maine	2.41
45	Iowa	2.49
46	Vermont	3.75
47	New York	3.94
48	New Hampshire	4.19
49	Rhode Island	10.42
50	Alaska	25.35
Mean		0.85



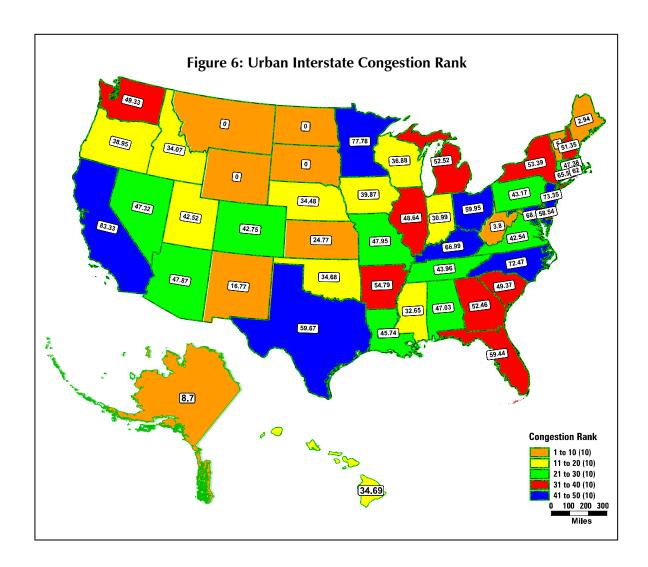
#### **Urban Interstate Congestion.**

There is no generally accepted definition of traffic congestion, but in reporting to the federal government the states use the volume-to-capacity ratios that are determined by Transportation Research Board's Highway Capacity Manual. The congestion measures for 2005 are not totally comparable with earlier years, since most states increased the rated capacities of Urban Interstates based on the 1997 and 2000 Highway Capacity Manuals.

Nevertheless, the overall 2005 statistic—51.85 percent congested—shows just a slight worsening from 2004 (51.60 percent congested) (see Table 12, Urban Interstate Congestion, and Figure 6). For 2005, about 8,051 miles out of 15,528 urban interstate miles were rated as having volume/capacity ratios greater than 0.70, the standard for mild congestion.<sup>2</sup>

The states vary widely in congestion levels. Four rural states report no congested urban interstates. But 17 states report more than half of urban interstates congested, and four states (California 83.3 percent, Minnesota 77.8 percent, New Jersey 73.4 percent and North Carolina 72.5 percent) report more than 70 percent of urban Interstates congested.

Table 12	: Urban Interstate Con	gestion
Rank	State	% Congested
1	Montana	0.00
1	North Dakota	0.00
1	South Dakota	0.00
1	Wyoming	0.00
5	Maine	2.94
6	West Virginia	3.80
7	Vermont	5.00
8	Alaska	8.70
9	New Mexico	16.77
10	Kansas	24.77
11	Indiana	30.99
12	Mississippi	32.65
13	Idaho	34.07
14	Nebraska	34.48
15	Oklahoma	34.68
16	Hawaii	34.69
17	Wisconsin	36.88
18	Oregon	38.95
19	lowa	39.87
20	Utah	42.52
21	Virginia	42.54
22	Colorado	42.75
23	Pennsylvania	43.17
24	Tennessee	43.96
25	Louisiana	45.74
26	Alabama	47.03
27	Nevada	47.32
28	Massachusetts	47.38
29	Arizona	47.87
30	Missouri	47.95
31	Illinois	48.64
32	Washington	49.33
33	South Carolina	49.37
34	New Hampshire	51.35
35	Georgia	52.46
36	Michigan	52.52
37	New York	53.39
38	Arkansas	54.79
39	Delaware	58.54
40	Florida	59.44
41	Texas	59.67
42	Ohio	59.95
43	Rhode Island	62.00
44	Connecticut	65.56
45	Kentucky	66.99
46	Maryland	68.58
47	North Carolina	72.47
48	New Jersey	73.35
49	Minnesota	77.78
50	California	83.33
Mean	3	51.85
MICUII		01.00



#### **Deficient Bridges.**

Federal law mandates the uniform inspection of all bridges for structural and functional adequacy at least every two years; bridges rated 'deficient' are eligible for federal repair dollars.

The condition of the nation's highway bridges continued to improve from 2004 to 2005. Of the 596,980 highway bridges in the current National Bridge Inventory, 147,913—about 24.52 percent—were reported deficient for 2005 (Table 13, Deficient Bridges), a slight improvement from 2004. In 1998 about 29.0 percent were rated deficient. However, progress is slow; at the current rate of improvement, it would take 50 years for the percentage of deficient bridges to be eliminated.

The states vary widely in the percentage of deficient bridges. Nevada reported the lowest percentage of deficient bridges, 3.89 percent, while Rhode Island reported the highest, 53.01 percent.

Table 13:	Deficient Bridges	
Rank	State	% Deficient
1	Nevada	3.89
2	Arizona	5.50
3	Wyoming	12.37
4	Colorado	12.96
5	Minnesota	13.16
6	Wisconsin	15.93
7	Delaware	16.55
8	Utah	17.55
9	Illinois	17.56
10	California	17.59
11	Florida	18.33
12	New Mexico	18.43
13	Idaho	18.91
14	Tennessee	19.26
15	Georgia	20.35
16	Texas	20.56
17	Kansas	21.05
18	Montana	21.20
19	Indiana	21.83
20	Arkansas	22.24
21	Virginia	22.46
22	Alaska	22.84
23	Ohio	23.61
24	South Carolina	23.63
25	North Dakota	24.24
26	Nebraska	24.55
27	Washington	24.55
28	Alabama	24.94
29	Oregon	25.34
30	South Dakota	25.62
31	Mississippi	26.42
32	Maryland	26.93
33	lowa	27.06
34	Michigan	27.60
35	New Jersey	27.91
36	Maine	29.87
37	New Hampshire	30.54
38	Louisiana	30.67
39	North Carolina	30.91
40	Kentucky	31.45
41	Missouri	31.47
42	Oklahoma	33.04
43	Connecticut	34.18
44		
44	Vermont	34.80 36.38
45	Massachusetts Hawaii	36.85
46		
	New York	37.08
48	West Virginia	37.10
49	Pennsylvania	39.00
50	Rhode Island	53.01
Mean		24.52

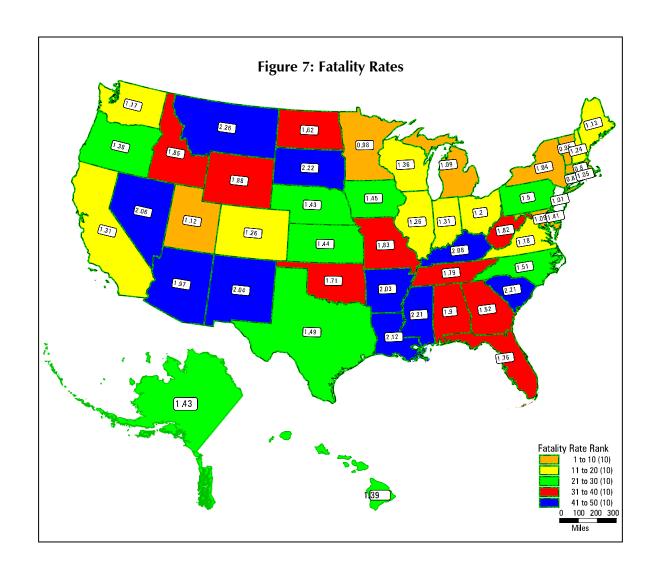
#### **Fatality Rates.**

Even though some highway fatalities occur on other than state-owned roads, overall fatality rates are an important overall measure of each state's road performance.

The nation's highway fatality rate increased slightly (Table 14, Fatality Rates, and Figure 7): for 2005, 43,395 fatalities were reported, higher than 42,593 reported for 2004. And, because travel continued to increase, the overall fatality rate was 1.453 fatalities per 100 million vehicle miles, up 0.9 percent from 1.440 in 2004.

The states also vary widely by fatality rates. For 2005, Massachusetts reported the lowest rate, 0.797, while Montana reported the highest, 2.256.

Table 14:	Fatality Rates	
2005	State	Fatalities per 100 million vehicle miles
1	Massachusetts	0.797
2	Connecticut	0.865
3	Vermont	0.946
4	Minnesota	0.982
5	New Jersey	1.013
6	New York	1.039
7	Rhode Island	1.048
8	Michigan	1.085
9	Maryland	1.090
10	Utah	1.121
11	Maine	1.132
12	Washington	1.166
13	Virginia	1.179
14	Ohio	1.197
15	New Hampshire	1.236
16	Colorado	1.264
17	Illinois	1.264
18	Indiana	1.306
19	California	1.315
20	Wisconsin	1.358
21	Oregon	1.383
22	Hawaii	1.388
23	Delaware	1.409
24	Alaska	1.430
25	Nebraska	1.431
26	Kansas	1.445
27 28	lowa Texas	1.449 1.490
29	Pennsylvania	1.496
30	North Carolina	1.515
31	Georgia	1.523
32	North Dakota	1.625
33	Oklahoma	1.706
34	Florida	1.758
35	Tennessee	1.793
36	West Virginia	1.822
37	Missouri	1.828
38	Idaho	1.850
39	Wyoming	1.877
40	Alabama	1.896
41	Arizona	1.968
42	Arkansas	2.027
43	New Mexico	2.036
44	Nevada	2.055
45	Kentucky	2.075
46	Louisiana	2.123
47	Mississippi	2.207
48	South Carolina	2.211
49	South Dakota	2.215
50	Montana	2.256
Mean		1.453



#### Narrow Lanes.

Narrow lanes on major rural roads are a key indicator of sight visibility and design adequacy. The national design standard for lane width on major rural roads is generally 12 feet, and few, if any, major rural roads would be improved without widening lanes to the standard.

In 2005, about 10.70 percent of rural other principal arterials—10,181 miles out of 95,134—had narrow lanes less than 12 feet wide (Table 15, Rural Narrow Lanes), slightly better than the 10.72 percent reported in 2004.

The states also vary widely by percentage of narrow lanes. Seven states reported no narrow-lane mileage, while West Virginia (41.81 percent) reported the highest percentage of narrow lanes.

Table 15:	<b>Rural Narrow Lanes</b>	
2005	State	% Narrow
1	Arizona	0
1	Delaware	0
1	North Dakota	0
1	New Jersey	0
1	Nevada	0
1	South Dakota	0
1	Utah	0
8	Idaho	0.52
9	Kansas	0.81
10	Montana	1.03
11	Connecticut	1.22
12	Georgia	1.34
13	Nebraska	1.56
14	Wyoming	1.86
15	Oklahoma	2.72
16	Wisconsin	2.79
17	Alaska	3.47
18	New Hampshire	3.63
19	Alabama	3.82
20	Rhode Island	4.17
21	Massachusetts	4.79
22	New Mexico	4.84
23	Minnesota	5.08
24	California	5.31
25	Indiana	6.14
26	Maryland	6.58
27	South Carolina	6.89
28	Oregon	7.07
29	Florida	7.6
30	lowa	8.26
31	Louisiana	9.77
32	Mississippi	10.34
33	North Carolina	12.46
34	Illinois	12.78
35	Colorado	13.24
36	Texas	14.05
37	Ohio	14.51
38	Kentucky	16.32
39	Michigan	19.5
40	Missouri	20.13
41	New York	23.07
42	Vermont	23.99
43	Tennessee	25.23
44	Maine	25.89
45	Arkansas	31.68
46	Virginia	32.18
47	Hawaii	32.43
48	Washington	39.42
49	Pennsylvania	40.58
50 Maan	West Virginia	41.81
Mean		10.70

#### Part 4

## **Individual State Results**

#### **Alabama**

In 2005, Alabama ranked **43<sup>rd</sup>** overall, compared with 11<sup>th</sup> in 2000. Alabama scored best on maintenance disbursements per mile (16<sup>th</sup>) and narrow rural primary arterials (19<sup>th</sup>). Its lowest ratings were for urban interstate in poor condition (49<sup>th</sup>), rural interstate in poor condition (48<sup>th</sup>) and fatality rate (40<sup>th</sup>). The state's system is deteriorating.



#### Alaska

Alaska, with a state-owned highway system of 6,420 miles, ranked **49**<sup>th</sup> in overall performance. The state has worsened in overall performance from 40<sup>th</sup> in 2000. Alaska scored best in urban interstate condition (tie for 1<sup>st</sup>) with no poor urban interstate reported and 8<sup>th</sup> in urban interstate congestion. It is the state with the



worst rural primary pavement condition (50<sup>th</sup>). It also ranked low in rural interstate condition (45<sup>th</sup>) and maintenance disbursements per mile (34<sup>th</sup>). In summary, the state is achieving a relatively good condition system, but at relatively high cost.

#### **Arizona**

Arizona has 6,959 miles of state-owned highway. Overall the state ranked **27**<sup>th</sup> in performance in 2005, compared with 28<sup>th</sup> in 2000. The state reported no rural interstate in poor condition, no rural primary pavement in poor condition, no urban interstate in poor condition and no narrow rural primary arterials. It scored high in bridge condition (2<sup>nd</sup>). The state ranked lowest for maintenance disbursements per mile of responsibility (49<sup>th</sup>), administrative disbursements per r



disbursements per mile of responsibility (49<sup>th</sup>), administrative disbursements per mile of responsibility (45<sup>th</sup>), receipts per mile of responsibility (41<sup>st</sup>), fatality rate (41<sup>st</sup>), capital/bridge disbursements per mile of responsibility (40<sup>th</sup>) and total disbursements per mile of responsibility (40<sup>th</sup>). So, the state's relatively good system performance comes at a relatively high unit cost.

#### **Arkansas**

Arkansas is one of the states that sharply improved in overall ranking from 46<sup>th</sup> in 2000 to **28<sup>th</sup>** in 2005. It scored best in administrative disbursements per mile (2<sup>nd</sup>), receipts per mile of responsibility (9<sup>th</sup>), total disbursements per mile (10<sup>th</sup>), maintenance disbursements per mile (11<sup>th</sup>) and capital/bridge disbursements per mile (15<sup>th</sup>). It scored lowest for percent rural primary arterials narrow (45<sup>th</sup>),



fatality rate (42<sup>nd</sup>), rural interstate pavement condition (40<sup>th</sup>) and urban interstate congestion (38<sup>th</sup>). So while the state has moved up in budget ratings, its system performance needs attention.

#### **California**

California reported 18,230 miles of state-owned highway in 2005. Compared to 2000 the state improved slightly from 45<sup>th</sup> in 2000 to **44<sup>th</sup>** in 2005 in the overall rankings. The state ranked best in bridge condition (10<sup>th</sup>) and fatality rate (19<sup>th</sup>). But California has the worst urban interstate congestion (50<sup>th</sup>). It also scored low in administrative disbursements per mile of responsibility (48<sup>th</sup>), receipts per mile of responsibility (45<sup>th</sup>), capital/bridge disbursements per mile of responsibility (44<sup>th</sup>), maintenance per mile of responsibility (44<sup>th</sup>), urban interstate condition (44<sup>th</sup>), total disbursements per mile of responsibility (43<sup>rd</sup>) and rural interstate condition (43<sup>rd</sup>). Overall, California's relatively high costs

per mile of responsibility are not translating into high performance.

#### **Colorado**

In 2005 Colorado reported a total of 10,343 miles of state-owned highway. The state ranked **29**<sup>th</sup> in the overall performance rankings in 2005, losing ground by ten positions as compared to 19<sup>th</sup> in 2000. Colorado scored best in bridge condition (4<sup>th</sup>) and fatality rate (16<sup>th</sup>). Its lowest ratings were for maintenance per mile of responsibility (40<sup>th</sup>), rural primary pavement condition (39<sup>th</sup>) and receipts per mile of responsibility (37<sup>th</sup>). Its relatively high costs per mile of responsibility are offset by only modest system performance.

#### **Connecticut**

Connecticut has a total of 3,960 miles of state-owned highway. The state ranked 39<sup>th</sup> in overall performance in 2005 as compared to 44<sup>nd</sup> in 2000. The state reported no rural interstate in poor condition. It also ranked high in fatality rate (2<sup>nd</sup>) and narrow rural primary arterials (11<sup>th</sup>). But Connecticut ranked lower for total disbursements per mile of responsibility (44<sup>th</sup>), urban interstate congestion (44<sup>th</sup>), bridge condition (43<sup>rd</sup>), receipts per mile of responsibility (43<sup>rd</sup>), capital/bridge disbursements per mile of

responsibility (42<sup>nd</sup>), maintenance disbursements per mile of responsibility (42<sup>nd</sup>) and administrative disbursements per mile of responsibility (40<sup>th</sup>). Essentially, its relatively high costs are offset by generally superior system performance.

#### **Delaware**

Delaware has 5,243 miles of highway under the state control. The state stood **40**<sup>th</sup> in the overall performance rankings in 2005, slightly up from 41<sup>st</sup> in 2000. Its best ratings were for rural primary pavement condition (1<sup>st</sup>), rural primary pavements narrow (1<sup>st</sup>) and deficient bridges (7<sup>th</sup>). Delaware has no rural interstate. Its lowest rankings were for administrative disbursements per mile of responsibility (41<sup>st</sup>), total disbursements per mile of responsibility (39<sup>th</sup>), urban interstate congestion (39<sup>th</sup>) and receipts per mile of responsibility (38<sup>th</sup>). Overall, its above-average system performance is offset by its relatively high unit costs.



#### **Florida**

The state of Florida has a total of 12,040 miles of state-owned highway. Overall the state ranked **41**<sup>st</sup> in performance in 2005, compared to 38<sup>th</sup> in 2000. The state reported no rural interstate in poor condition and no rural primary pavement in poor condition. Florida also scored well on urban interstate in poor condition (11<sup>th</sup>) and bridge condition (11<sup>th</sup>). But Florida's lowest ratings were for maintenance per mile of responsibility (49<sup>th</sup>), receipts per mile of responsibility (48<sup>th</sup>), capital/bridge disbursements per mile of responsibility (48<sup>th</sup>), administrative disbursements per mile of responsibility (42<sup>nd</sup>) and urban interstate congestion (40<sup>th</sup>). So, its superior condition status is offset by relatively high cost per mile of responsibility.

#### Georgia

Georgia has 18,274 miles of state-owned highway. In the performance ratings
Georgia ranked 6<sup>th</sup> in 2005 among the 50 states, compared to 4<sup>th</sup> in 2000. The state
reported no rural interstate in poor condition, no rural primary pavement in poor
condition and no urban interstate in poor condition. Hence it tied for 1<sup>st</sup> in all the
above categories. Apart from these, its best rankings were for maintenance
disbursements per mile of responsibility (12<sup>th</sup>), rural other primary arterials narrow (12<sup>th</sup>) and
deficient bridges (15<sup>th</sup>). It scored lowest in urban interstate congestion (35<sup>th</sup>) and administrative
disbursements per mile of responsibility (34<sup>th</sup>). Georgia has managed to achieve a good balance of
system condition and expenditures which have yielded consistently good overall ratings over time.

#### Hawaii

Hawaii has the smallest state-owned highway system at 975 miles. Overall, the state ranked 46<sup>th</sup> in the performance rankings in 2005 as compared to 48<sup>th</sup> in 2000. Its best rankings were for rural interstate condition (1<sup>st</sup>), rural primary pavement condition (1<sup>st</sup>), urban interstate congestion (16<sup>th</sup>) and administrative disbursements per mile of responsibility (16<sup>th</sup>). Its lowest ratings were for urban interstate condition (50<sup>th</sup>), capital/bridge disbursements per mile of responsibility (47<sup>th</sup>), rural primary pavements narrow (47<sup>th</sup>), receipts per mile of responsibility (46<sup>th</sup>), total disbursements per mile of responsibility (46<sup>th</sup>) and deficient bridges (46<sup>th</sup>). So, the state has relatively high unit costs which are only partially offset by some good-condition indicators.

#### **Idaho**

In 2005, Idaho reported 4,957 miles of state-owned highway. Overall the state ranked 10<sup>th</sup> in performance in 2005, compared with 9<sup>th</sup> in 2000. Idaho scored best on rural primary pavement condition (1<sup>st</sup>) with none in poor condition reported, rural primary arterials narrow (8<sup>th</sup>), maintenance disbursements per mile of responsibility (13<sup>th</sup>), urban interstate congestion (13<sup>th</sup>), deficient bridges (13<sup>th</sup>) and administrative disbursements per mile of responsibility (15<sup>th</sup>). It scored lowest on urban interstate condition (38<sup>th</sup>) and fatality rate (38<sup>th</sup>). Idaho's relatively good system condition is generally accompanied by relatively low unit costs, resulting in overall sound performance over



#### Illinois

time.

Illinois has 16,521 miles of highway under state control. In 2005, the state ranked 33<sup>rd</sup> in the overall performance ratings, compared with 35<sup>th</sup> in 2000. Its best ratings were for deficient bridges (9<sup>th</sup>), fatality rate (17<sup>th</sup>) and rural interstate condition (24<sup>th</sup>). Its lowest rankings were for receipts per mile of responsibility (40<sup>th</sup>), capital/bridge disbursements per mile of responsibility (39<sup>th</sup>), administrative disbursements per mile of responsibility (39<sup>th</sup>), maintenance disbursements per mile of responsibility (38<sup>th</sup>) and total disbursements per mile of responsibility



(38<sup>th</sup>). Faced with difficult climate and traffic conditions, the state is nevertheless achieving good performance on some indicators at above-average costs.

### **Indiana**

The state-owned highway system of Indiana constitutes 11,183 miles of highway.

Overall, the state ranked **14**<sup>th</sup> in the performance ratings in 2005, compared with 17<sup>th</sup> in 2000. Its best rankings were for rural interstate condition (1<sup>st</sup>) with none in poor condition reported, urban interstate congestion (11<sup>th</sup>), administrative disbursements per mile of responsibility (17<sup>th</sup>), fatality rate (18<sup>th</sup>), deficient bridges (19<sup>th</sup>), rural primary pavement condition (20<sup>th</sup>) and urban interstate condition (20<sup>th</sup>). It scored lowest on maintenance disbursements per mile of responsibility (43<sup>rd</sup>), total disbursements per mile of responsibility (35<sup>th</sup>), capital/bridge disbursements per mile of responsibility (34<sup>th</sup>) and receipts per mile of responsibility (33<sup>rd</sup>). On balance the state is achieving above-average system performance at above-average costs.

#### **lowa**

Iowa with 9,266 miles of state-owned highway stood **35<sup>th</sup>** in the overall performance rankings in 2005. This represents a sharp decline from 23<sup>rd</sup> position in 2000. Iowa scored best on maintenance disbursements per mile of responsibility (15<sup>th</sup>), administrative disbursements per mile of responsibility (16<sup>th</sup>), total disbursements per mile of responsibility (19<sup>th</sup>), urban interstate congestion (19<sup>th</sup>), capital/bridge disbursements per mile of responsibility (20<sup>th</sup>) and receipts per mile of responsibility (22<sup>nd</sup>). Its lowest ratings were for urban interstate condition (48<sup>th</sup>) and rural primary pavement condition (45<sup>th</sup>). So, relatively low unit costs appear insufficient to hold the system at good condition levels.

#### **Kansas**

Kansas has 10,549 miles of state-owned highway. In 2005, the state ranked 3<sup>rd</sup> in the overall performance rankings, compared to 6<sup>th</sup> in 2000. Kansas reported no urban interstate in poor condition and no rural interstate in poor condition. Hence it tied for 1<sup>st</sup> in both these categories. It also scored well on rural primary arterials narrow (9<sup>th</sup>), urban interstate congestion (10<sup>th</sup>) and rural primary pavement condition (11<sup>th</sup>). Its lowest ratings were for capital/bridge disbursements per mile of responsibility (30<sup>th</sup>), total disbursements per mile of responsibility (27<sup>th</sup>) and fatality rate (26<sup>th</sup>). Overall Kansas is achieving superior system condition at lower-than-average costs.

#### **Kentucky**

In 2005, Kentucky with a total of 27,753 miles of state-owned highway ranked 12<sup>th</sup> in the overall performance ratings as compared to 10<sup>th</sup> in 2000. It reported no rural interstate in poor condition and no rural primary pavement in poor condition.



Hence it tied for 1<sup>st</sup> on both these categories. It also scored well on maintenance disbursements per mile of responsibility (7<sup>th</sup>), total disbursements per mile of responsibility (8<sup>th</sup>), capital/bridge disbursements per mile of responsibility (9<sup>th</sup>), administrative disbursements per mile of responsibility (12<sup>th</sup>), receipts per mile of responsibility (15<sup>th</sup>) and urban interstate condition (15<sup>th</sup>). Its lowest ratings were for urban interstate congestion (45<sup>th</sup>), fatality rate (45<sup>th</sup>), deficient bridges (40<sup>th</sup>) and rural primary arterial narrow (38<sup>th</sup>). So, the state's overall rating is based on relatively thin budget and modest system condition.

#### Louisiana

Louisiana has 16,696 miles of highway under state control. Overall the state ranked **30**<sup>th</sup> in performance in 2005 as compared to 42<sup>nd</sup> in 2000. It scored best on administrative disbursements per mile of responsibility (6<sup>th</sup>), receipts per mile of responsibility (16<sup>th</sup>) and total disbursements per mile of responsibility (17<sup>th</sup>). Its lowest ratings were for fatality rate (46<sup>th</sup>), rural primary pavement condition (40<sup>th</sup>),



deficient bridges (38<sup>th</sup>) and urban interstate in poor condition (36<sup>th</sup>). Louisiana's overall rating is based on holding cost down resulting in some system deterioration; Hurricane Katrina, in September 2005, may have contributed somewhat to lower system condition.

#### **Maine**

Maine has 8,684 miles of highway under state control. In 2005, the state ranked 23<sup>rd</sup> on the overall performance ratings as compared to 15<sup>th</sup> in 2000. Its best ratings were for rural interstate condition (1<sup>st</sup>) with none in poor condition reported, urban interstate congestion (5<sup>th</sup>), capital/bridge disbursements per mile of responsibility (8<sup>th</sup>), administrative disbursements per mile of responsibility (8<sup>th</sup>) and fatality rate (11<sup>th</sup>). It scored lowest on rural primary pavement condition (44<sup>th</sup>), rural primary pavement narrow (44<sup>th</sup>) and deficient bridges (36<sup>th</sup>). Maine's overall rating has slipped slightly in recent years as rural primary road conditions have worsened.

# **Maryland**

Maryland has 3,277 miles of state-owned highway. Overall, the state ranked **38<sup>th</sup>** in performance in 2005 as compared to 34<sup>th</sup> in 2000. It scored best on fatality rate (9<sup>th</sup>) and rural primary pavement condition (21<sup>st</sup>). Its lowest ratings were for capital/bridge disbursements per mile of responsibility (46<sup>th</sup>), urban interstate congestion (46<sup>th</sup>), maintenance disbursements per mile of responsibility (45<sup>th</sup>), receipts per mile of responsibility (42<sup>nd</sup>) and total disbursements per mile of responsibility (42<sup>nd</sup>). Maryland's relatively high unit costs offset its good performance on several condition indicators.

#### **Massachusetts**

In 2005, Massachusetts reported a total of 3,257 miles of state-owned highway.

The state ranked **45**<sup>th</sup> in the overall performance ratings in 2005, compared with 49<sup>th</sup> in 2000. Its best ratings were for rural interstate condition (1<sup>st</sup>), rural primary pavement condition (1<sup>st</sup>), fatality rate (1<sup>st</sup>) and urban interstate in poor condition (13<sup>th</sup>). It scored lowest on receipts per mile of responsibility (49<sup>th</sup>), capital/bridge disbursements per mile of responsibility (49<sup>th</sup>), administrative disbursements per mile of responsibility (49<sup>th</sup>), total disbursements per mile of responsibility (49<sup>th</sup>), maintenance per mile of responsibility (46<sup>th</sup>) and deficient bridges (45<sup>th</sup>). Massachusetts has achieved good condition ratings on most condition indicators but at a relatively high unit cost compared with other states.

## Michigan

The state-owned highway system of Michigan consists of 9,735 miles. Overall in 2005 the state ranked **42<sup>nd</sup>** on the performance ratings as compared to 43<sup>rd</sup> in 2000. Its best ratings were for fatality rate (8<sup>th</sup>) and rural primary pavement condition (24<sup>th</sup>). Its lowest ratings were for rural interstate condition (46<sup>th</sup>), urban interstate condition (42<sup>nd</sup>), capital/bridge disbursements per mile of responsibility (41<sup>st</sup>), total disbursements per mile of responsibility (39<sup>th</sup>) and rural primary pavements narrow (39<sup>th</sup>). Challenging climate and traffic circumstances along with relatively high unit costs, have contributed to Michigan's overall rating.

#### **Minnesota**

Minnesota has 13,182 miles of highway under the state control. In 2005, the state ranked **13**<sup>th</sup> on the overall performance ratings. This compares to 12<sup>th</sup> in 2000. It scored best on rural interstate condition (1<sup>st</sup>) with no poor miles reported, fatality rate (4<sup>th</sup>) and deficient bridges (5<sup>th</sup>). Its lowest rankings were for urban interstate congestion (49<sup>th</sup>) and maintenance disbursements per mile of responsibility (35<sup>th</sup>). Minnesota seems to be holding its own despite rising congestion and unit costs.



## Mississippi

Mississippi has a state-owned highway system of 10,948 miles. Overall, the state ranked **25**<sup>th</sup> in the performance ratings in 2005. This compares to 21<sup>st</sup> in 2000. It scored best on maintenance disbursements per mile of responsibility (6<sup>th</sup>), administrative disbursements per mile of responsibility (11<sup>th</sup>), urban interstate congestion (12<sup>th</sup>), total disbursements per mile of responsibility (16<sup>th</sup>), receipts per mile of responsibility (17<sup>th</sup>) and capital/bridge disbursements per mile of



responsibility (19<sup>th</sup>). Its lowest ratings were for fatality rate (47<sup>th</sup>), rural primary pavement condition (42<sup>nd</sup>) and rural interstate condition (38<sup>th</sup>). Otherwise sound performance on the cost side is being offset by under-performance of Interstate and rural primary condition.

#### **Missouri**

In 2005 Missouri reported a total of 32,464 state-owned miles. Missouri is one of the states that sharply improved its ranking of overall performance from 2000, from 39<sup>th</sup> in 2000 to **17<sup>th</sup>** in 2005. Its best ratings were for administrative disbursements per mile of responsibility (3<sup>rd</sup>), receipts per mile of responsibility (6<sup>th</sup>), total disbursements per mile of responsibility (6<sup>th</sup>) and capital/bridge disbursements per mile of responsibility (7<sup>th</sup>). It scored lowest on deficient bridges (41<sup>st</sup>), rural primary pavements narrow (40<sup>th</sup>) and fatality rate (37<sup>th</sup>). So, while holding down and focusing expenditures, Missouri faces continuing challenges but is moving in the right direction.

#### **Montana**

Montana has 10,789 miles of highway under the state control. In 2005, the state ranked **5**<sup>th</sup> in the overall performance rankings, as compared to 5<sup>th</sup> in 2000. Its best rankings were for urban interstate congestion (1<sup>st</sup>) with none reported, maintenance disbursements per mile of responsibility (2<sup>nd</sup>), total disbursements per mile of responsibility (4<sup>th</sup>), receipts per mile of responsibility (5<sup>th</sup>), capital/bridge disbursements per mile of responsibility (10<sup>th</sup>), administrative disbursements per mile of responsibility (10<sup>th</sup>), rural primary pavements narrow (10<sup>th</sup>) and rural primary pavement condition (12<sup>th</sup>). Its worst rankings were for fatality rate (50<sup>th</sup>) and urban interstate condition (40<sup>th</sup>). So, generally light traffic and good system condition combined with relatively low unit costs have enabled Montana to remain near the top on overall rating.

#### **Nebraska**

Nebraska in 2005 reported a total of 10,256 miles under the state control. Overall the state scored **19**<sup>th</sup> in the performance ratings in 2005, compared to 29<sup>th</sup> in 2000. It scored best on maintenance disbursements per mile of responsibility (9<sup>th</sup>), receipts per mile of responsibility (12<sup>th</sup>), total disbursements per mile of responsibility (12<sup>th</sup>), capital/bridge disbursements per mile of responsibility (13<sup>th</sup>), rural primary pavement narrow (13<sup>th</sup>), urban interstate congestion (14<sup>th</sup>) and administrative disbursements per mile of responsibility (14<sup>th</sup>). It scored lowest on urban interstate condition (45<sup>th</sup>) and rural interstate condition (36<sup>th</sup>). Nebraska's relatively low unit costs, combined with sound system performance, contribute to its overall solid rating.

## **Nevada**

Nevada has 5,922 miles of highway under the state-owned system. In 2005, the state ranked 9<sup>th</sup> in the overall performance ratings as compared to 13<sup>th</sup> in 2000. Nevada scored best on rural interstate condition (1<sup>st</sup>), rural primary pavement condition (1<sup>st</sup>), rural primary pavement narrow (1<sup>st</sup>) and deficient bridges (1<sup>st</sup>). It scored lowest on fatality rate (44<sup>th</sup>), capital/bridge disbursements per mile of responsibility (38<sup>th</sup>), receipts per mile of responsibility (35<sup>th</sup>) and total disbursements per mile of responsibility (33<sup>rd</sup>). Relatively low traffic and good system condition are sufficient to offset relatively high costs and accident rates.

## **New Hampshire**

The total state-owned highway system of New Hampshire consists of 4,004 miles of highway. In 2005 the state ranked 34<sup>th</sup> in the overall performance ratings as compared to 26<sup>th</sup> in 2000. Its best ratings were for rural interstate condition (1<sup>st</sup>), urban interstate condition (1st) and capital/bridge disbursements per mile of responsibility (4<sup>th</sup>). It scored lowest on rural primary pavement condition (48<sup>th</sup>), maintenance disbursements per mile of responsibility (41st), deficient bridges (37<sup>th</sup>) and urban interstate congestion (34<sup>th</sup>). Increasing urbanization, a challenging climate and higher unit costs are offsetting otherwise sound performance.



#### **New Jersey**

New Jersey has 2,906 miles of state-owned highway. Overall, the state ranked 50<sup>th</sup> in the overall performance ratings in 2005. This compares to 50<sup>th</sup> in 2000. It scored best on rural primary pavements narrow (1st) and fatality rate (5th). Its lowest rankings were for receipts per mile of responsibility (50<sup>th</sup>), capital/bridge disbursements per mile of responsibility (50<sup>th</sup>), administrative disbursements per mile of responsibility (50<sup>th</sup>), maintenance disbursements per mile of responsibility (50<sup>th</sup>), total disbursements per mile of responsibility (50<sup>th</sup>), urban interstate congestion (48<sup>th</sup>), rural interstate pavement condition (47<sup>th</sup>) and urban interstate condition (43<sup>rd</sup>). Very high unit costs relative to other states, in combination with traffic, more than offset low accident rates and rural pavement condition.



#### **New Mexico**

In 2005, New Mexico reported 12,205 miles under the state control. The state ranked 4<sup>th</sup> in the overall performance ratings in 2005. This represents a sharp improvement from 2000 when the state ranked 27<sup>th</sup>. Its best ratings were for rural interstate condition (1<sup>st</sup>), capital/bridge disbursements per mile of responsibility (5<sup>th</sup>), urban interstate congestion (9<sup>th</sup>), receipts per mile of responsibility (10<sup>th</sup>), deficient bridges (12<sup>th</sup>), total disbursements per mile of responsibility (13<sup>th</sup>) and rural primary pavement condition (16<sup>th</sup>). Its worst ratings were for fatality rate (43<sup>rd</sup>) and administrative disbursements per mile of responsibility (35<sup>th</sup>). New Mexico's solid condition ratings are more than enough to offset its high fatality rate and administrative costs.

#### **New York**

New York in 2005 reported a total of 15,707 miles of highway under the state control. Overall in 2005, the state ranked **48**<sup>th</sup> in the overall performance ratings, as compared to 47<sup>th</sup> in 2000. New York scored best on fatality rate (6<sup>th</sup>). Its lowest rankings were for rural interstate condition (49<sup>th</sup>), receipts per mile of responsibility (47<sup>th</sup>), maintenance disbursements per mile of responsibility (47<sup>th</sup>), total disbursements per mile of responsibility (47<sup>th</sup>), rural primary pavement condition (47<sup>th</sup>), urban interstate condition (47<sup>th</sup>) and deficient bridges (47<sup>th</sup>). New York's high unit costs, combined with challenging climate and traffic circumstances, have resulted in a relatively low overall ranking.

#### **North Carolina**

North Carolina has the largest state-owned highway system, at 79,779 miles, overtaking Texas which has just 128 fewer miles. Overall the state ranked 31<sup>st</sup> in performance in 2005, compared with 25<sup>th</sup> in 2000. North Carolina scored best on receipts per mile of responsibility (4<sup>th</sup>) and capital/bridge disbursements per mile of responsibility (6<sup>th</sup>). Its lowest ratings were for urban interstate congestion (47<sup>th</sup>), rural interstate pavement condition (41<sup>st</sup>), rural primary pavement condition (41<sup>st</sup>) and urban interstate pavement condition (39<sup>th</sup>). The state's low unit cost advantage is being offset by deteriorating system condition.

#### **North Dakota**

North Dakota has a total of 7,405 miles under the state-owned highway system. In 2005, the state ranked **1**<sup>st</sup> in the overall performance ratings, compared to 2<sup>nd</sup> in 2000. Its best rankings were for urban interstate condition (1<sup>st</sup>), urban interstate congestion (1<sup>st</sup>), rural primary pavements narrow (1<sup>st</sup>), rural interstate condition (1<sup>st</sup>), administrative disbursements per mile of responsibility (1<sup>st</sup>), maintenance disbursements per mile of responsibility

(1<sup>st</sup>), receipts per mile of responsibility (2<sup>nd</sup>) and total disbursements per mile of responsibility (5<sup>th</sup>). Its lowest ratings were for rural primary pavement narrow (37<sup>th</sup>) and fatality rate (32<sup>nd</sup>). North Dakota's relatively low traffic volumes and good system condition, combined with relatively low unit costs, have consistently placed it in the top-performing states.

#### **Ohio**

Ohio has 22,461 miles of highway under the state control. Overall, the state ranked **16**<sup>th</sup> in the performance ratings in 2005 as compared to 22<sup>nd</sup> in 2000. The state scored best on rural interstate condition (1<sup>st</sup>), urban interstate condition (14<sup>th</sup>) and fatality rate (14<sup>th</sup>). It scored lowest on urban interstate congestion (42<sup>nd</sup>) and rural primary pavement narrow (37<sup>th</sup>). Ohio shows steady system improvement with attention to

#### Oklahoma

unit costs.

In 2005, Oklahoma reported 13,389 miles of highway under the state control. The state ranked **24**<sup>th</sup> in the overall performance rankings in 2005, as compared to 31<sup>st</sup> in 2000. Oklahoma's best ratings were for capital/bridge disbursements per mile of responsibility (11<sup>th</sup>), receipts per mile of responsibility (14<sup>th</sup>), total disbursements per mile of responsibility (15<sup>th</sup>), urban interstate congestion (15<sup>th</sup>), rural primary pavement narrow (15<sup>th</sup>) and maintenance disbursements per mile of responsibility (17<sup>th</sup>). Its lowest ratings were for urban interstate condition (46<sup>th</sup>), deficient bridges (42<sup>nd</sup>), rural primary pavement condition (38<sup>th</sup>) and fatality rate (33<sup>rd</sup>). Oklahoma's worse-than-average system performance is offset by its relatively low unit costs.

## **Oregon**

The state-owned highway system of Oregon consists of 12,065 miles of highway.

In 2005, the state ranked 8<sup>th</sup> in the overall performance ratings as opposed to 7<sup>th</sup> in 2000. Oregon scored best on urban interstate condition (1<sup>st</sup>), rural interstate condition (1<sup>st</sup>) and maintenance per mile of responsibility (8<sup>th</sup>). The state's lowest ratings were for rural primary pavement condition (35<sup>th</sup>), deficient bridges (29<sup>th</sup>) and rural primary pavement narrow (28<sup>th</sup>). Oregon displays overall steady performance.

## **Pennsylvania**

Pennsylvania has 43,283 miles of highway under the state control. Overall, the state stood **36<sup>nd</sup>** in the performance ratings in 2005, compared with 33<sup>rd</sup> in 2000. Pennsylvania scored best on capital/bridge disbursements per mile of responsibility (18<sup>th</sup>), urban interstate condition (21<sup>st</sup>) and urban interstate congestion (23<sup>rd</sup>). Its lowest rankings were for rural primary pavement narrow (49th), deficient bridges (49th) and maintenance disbursements per mile of responsibility (37<sup>th</sup>). Pennsylvania balances its average total disbursements with average conditions.

#### **Rhode Island**

In 2005, Rhode Island reported 1,102 miles of highway under the state-owned highway system. The state ranked 47<sup>th</sup> in the performance rankings in 2005 as compared to 36<sup>th</sup> in 2000. The state's best ratings were for rural interstate condition (1st), urban interstate condition (1st) and fatality rate (7th). The state scored lowest on deficient bridges (50<sup>th</sup>), rural primary pavement condition (49<sup>th</sup>),



maintenance disbursements per mile of responsibility (48<sup>th</sup>), total disbursements per mile of responsibility (45<sup>th</sup>), capital/bridge disbursements per mile of responsibility (45<sup>th</sup>), receipts per mile of responsibility (44<sup>th</sup>), administrative disbursements per mile of responsibility (44<sup>th</sup>) and urban interstate congestion (43<sup>rd</sup>). Rhode Island has relatively high costs compared to system condition.

#### **South Carolina**

South Carolina, with a total of 41,582 miles of state-owned highway, stood  $2^{nd}$  in the overall performance rankings in 2005. This compares to 3<sup>rd</sup> in 2000. South Carolina scored best on receipts per mile of responsibility (1<sup>st</sup>), capital/bridge disbursements per mile of responsibility (1<sup>st</sup>), total disbursements per mile of responsibility (1<sup>st</sup>), rural interstate condition (1<sup>st</sup>), administrative disbursements per mile of responsibility (4<sup>th</sup>) and maintenance per mile of responsibility (5<sup>th</sup>). The state also rated high (1<sup>st</sup>) for rural interstate pavement condition, 12<sup>th</sup> for urban interstate condition, and 14<sup>th</sup> for rural primary condition. Its lowest rankings were for fatality rate (48th) and urban interstate congestion (33<sup>rd</sup>). South Carolina has consistently solid performance with a relatively thin budget.

#### **South Dakota**

South Dakota in 2005 reported 8,038 miles under the state control. Overall the state ranked 11<sup>th</sup> in the performance rankings in 2005. The state has sharply improved 19 positions from 2000 (30<sup>th</sup>). The state scored best on rural interstate condition (1<sup>st</sup>), urban interstate congestion (1<sup>st</sup>), rural primary pavement narrow (1<sup>st</sup>), maintenance



disbursements per mile of responsibility (4<sup>th</sup>), receipts per mile of responsibility (7<sup>th</sup>) and total disbursements per mile of responsibility (9<sup>th</sup>). Its lowest ratings were for fatality rate (49<sup>th</sup>) and rural primary pavement condition (43<sup>rd</sup>). In spite of a high fatality rate, South Dakota's good system performance and low spending earn it a high overall ranking.

#### **Tennessee**

Tennessee has a total of 14,163 miles of highway in the state-owned system. The state ranked **20**<sup>th</sup> in the overall rankings in 2005 as compared to 20<sup>th</sup> in 2000. Its best rankings were for rural interstate condition (1<sup>st</sup>), deficient bridges (14<sup>th</sup>), urban interstate condition (18<sup>th</sup>) and rural primary pavement condition (19<sup>th</sup>). Tennessee scored lowest on rural primary pavement narrow (43<sup>rd</sup>) and fatality rate (35<sup>th</sup>). Tennessee has consistently solid performance and average spending.

#### **Texas**

Texas has the second largest (behind North Carolina) state-owned highway system at 79,651 miles. Overall, the state ranked **15**<sup>th</sup> in the performance ratings in 2005, as compared to 8<sup>th</sup> in 2000. Its best ratings were for administrative disbursements per mile of responsibility (9<sup>th</sup>), deficient bridges (16<sup>th</sup>) and rural primary pavement condition (18<sup>th</sup>). Texas scored lowest on urban interstate congestion (41<sup>st</sup>) and rural primary pavement narrow (36<sup>th</sup>). For a large state with several major urban areas this is sound performance.

#### Utah

Utah has 5,868 miles of highway under the state control. In 2005 the state stood **21**<sup>st</sup> in the overall performance rankings as compared to 24<sup>th</sup> in 2000. Its best ratings were for rural primary pavement condition (1<sup>st</sup>), urban interstate condition (1<sup>st</sup>), rural primary pavement narrow (1<sup>st</sup>), deficient bridges (8<sup>th</sup>) and fatality rate (10<sup>th</sup>). It scored lowest for rural interstate condition (44<sup>th</sup>), administrative disbursements per mile of responsibility (37<sup>th</sup>), total disbursements per mile of responsibility (36<sup>th</sup>) and receipts per mile of responsibility (34<sup>th</sup>).

#### **Vermont**

The state of Vermont has 2,844 miles of highway under state control. Overall, the state ranked **37**<sup>th</sup> in the performance rankings in 2005, unchanged from 37<sup>th</sup> in 2000. Vermont scored best on urban interstate condition (1<sup>st</sup>), fatality rate (3<sup>rd</sup>) and urban interstate congestion (7<sup>th</sup>). The state scored lowest on rural primary pavement condition (46<sup>th</sup>), deficient bridges (44<sup>th</sup>), rural primary pavements narrow (42<sup>nd</sup>) and administrative disbursements per mile of responsibility (37<sup>th</sup>).



## Virginia

In 2005, Virginia reported 57,884 miles of highway under the state-owned highway system. The state ranked **18**<sup>th</sup> in the overall performance rankings in 2005 as compared with 14<sup>th</sup> in 2000. The state's best scores were for rural interstate condition (1<sup>st</sup>), capital/bridge disbursements per mile of responsibility (2<sup>nd</sup>), administrative disbursements per mile of responsibility (7<sup>th</sup>), total disbursements per mile of responsibility (7<sup>th</sup>), receipts per mile of responsibility (8<sup>th</sup>) and fatality rate (13<sup>th</sup>). It scored lowest on rural primary pavements narrow (46<sup>th</sup>) and rural primary pavement condition (34<sup>th</sup>). Virginia has good system condition managed on a thin budget.

# Washington

Washington stood **32**<sup>th</sup> in overall performance rankings in 2005 with 17,836 miles of state-owned highway. This compares to 18<sup>th</sup> in 2000. The state's best rankings were for fatality rate (12<sup>th</sup>), rural primary pavement condition (15<sup>th</sup>) and administrative disbursements per mile of responsibility (20<sup>th</sup>). Washington scored lowest on rural primary pavements narrow (48<sup>th</sup>) and rural interstate condition (42<sup>nd</sup>).

# **West Virginia**

West Virginia in 2005 reported a total of 34,051 miles of state-controlled highway.

Overall, the state ranked **26**<sup>th</sup> in 2005 in the performance rankings as compared to 32<sup>nd</sup> in 2000. Its best rankings were for total disbursements per mile of responsibility (3<sup>nd</sup>), maintenance disbursements per mile of responsibility (3<sup>rd</sup>), capital/bridge disbursements per mile of responsibility (3<sup>rd</sup>), receipts per mile of responsibility (3<sup>rd</sup>), administrative disbursements per mile of responsibility (5<sup>th</sup>) and urban interstate congestion (6<sup>th</sup>). Its lowest rankings were for rural primary pavements narrow (50<sup>th</sup>), deficient bridges (48<sup>th</sup>), rural interstate condition (37<sup>th</sup>) and fatality rate (36<sup>th</sup>). Low system performance rankings balance low spending for a mid-range overall performance rank.

### **Wisconsin**

Wisconsin has 11,794 miles of highway under the state control. In 2005, the state stood **22<sup>nd</sup>** in the overall performance rankings as compared to 16<sup>th</sup> in 2000. Wisconsin scored best on deficient bridges (6<sup>th</sup>), rural primary pavements narrow (16<sup>th</sup>), urban interstate congestion (17<sup>th</sup>), fatality rate (20<sup>th</sup>) and maintenance disbursements per mile of responsibility (20<sup>th</sup>). The state scored lowest on rural interstate condition (39<sup>th</sup>), administrative disbursements per mile of responsibility (38<sup>th</sup>), total disbursements per mile of responsibility (37<sup>th</sup>), receipts per mile of responsibility (36<sup>th</sup>) and capital/bridge disbursements per mile of responsibility (36<sup>th</sup>).

## **Wyoming**

Wyoming has 7,404 miles of highway under state control. In 2005 the state ranked 7<sup>th</sup> in the overall performance rankings as compared to 1<sup>st</sup> in 2000. Wyoming's best ratings were for urban interstate congestion (1<sup>st</sup>), deficient bridges (3<sup>rd</sup>), receipts per mile of responsibility (11<sup>th</sup>), total disbursements per mile of responsibility (12<sup>th</sup>), rural primary pavement condition (13<sup>th</sup>), rural primary pavement narrow (14<sup>th</sup>) and maintenance disbursements per mile of responsibility (14<sup>th</sup>). Wyoming's only low ranking is 41<sup>st</sup> in urban interstate condition. The state's overall performance is good.

# **About the Authors**

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# **Related Reason Studies**

Peter Samuel, *Leasing State Toll Roads: Frequently Asked Questions*, Reason Foundation Policy Brief No.60, March 2007, http://www.reason.org/pb60\_leasing\_state\_toll\_roads.pdf

Leonard C. Gilroy, Robert W. Poole, Jr., Peter Samuel, and Geoffrey Segal, *Building New Roads Through Public-Private Partnerships: Frequently Asked Questions*, Reason Foundation Policy Brief No.58, March 2007, http://www.reason.org/pb58\_building\_new\_roads.pdf

Peter Samuel, *Innovative Roadway Design: Making Highways More Likeable*, Reason Foundation Policy Study No.348, September 2006, http://www.reason.org/ps348.pdf

David T. Hartgen, Ph.D., P.E., and M. Gregory Fields, *Building Roads to Reduce Traffic Congestion in America 's Cities: How Much and at What Cost?*, Policy Study No. 346, August 2006

Robert W. Poole, Jr. and Kevin Soucie, *Adding FAST Lanes to Milwaukee's Freeways: Congestion Relief, Improved Transit, and Help with Funding Reconstruction*, Reason Foundation Policy Study No.342, February 2006, http://www.reason.org/ps342\_FASTlanes.pdf

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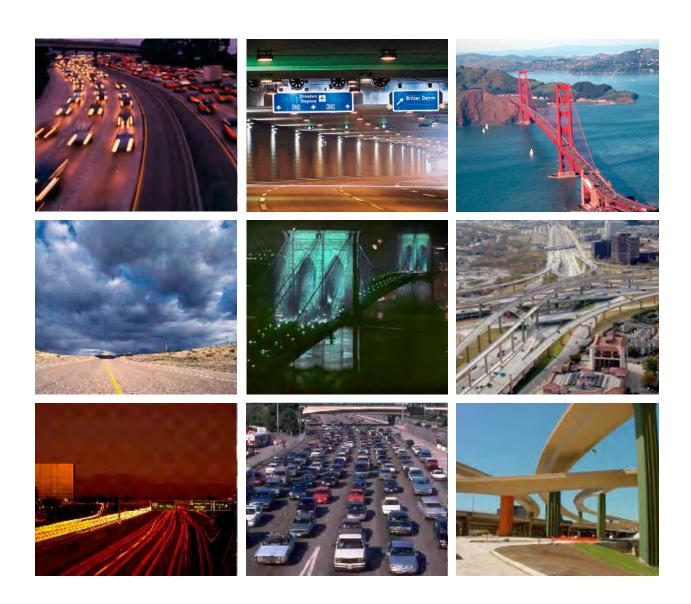
Robert W. Poole, Jr., and Peter Samuel, *Corridors for Toll Truckways: Suggested Locations for Pilot Projects*, Reason Foundation Policy Study No.316, February 2004, http://www.reason.org/ps316.pdf

Robert W. Poole, Jr. and C. Kenneth Orski, *HOT Networks: A New Plan for Congestion Relief and Better Transit*, Reason Foundation Policy Study No.305, February 2003, http://www.reason.org/ps305.pdf

# **Endnotes**

Cost effectiveness for each state is computed by averaging its 12 performance ratios (ratio of each state's statistic to the national average, for 5 financial measures and 7 condition measures). Financial ratios are weighted inversely by relative road widths lane miles per mile per U.S. avg. Ratios less than 1.0 mean that the state is better than average, ratios greater than 1.0 mean the state is worse than average.

FHWA uses 0.80 as the cutoff for 'congestion', but this ignores mild congestion in some rural states.





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