

CIRT News

A force for positive change in the design / construction

2/21/13 - New Study May Prove Useful in Debate Over Transportation Infrastructure Needs (RESOURCE)

During President Obama's February 12th *State of the Union* address, he called upon Congress to adopt a one-time \$50 billion infrastructure "Fix-it-First" program to deal with America's "crumbling" highways and bridges, something he has repeatedly called for during his tenure as a jobs creating vehicle. Just a week before, outgoing Secretary of Transportation Ray LaHood said that "America is one big pothole right now." While the language is colorful and the needs are real, the design/construction community has learned (the hard way) that being the "poster child" for federal spending has not always been advantageous (think "bridge to nowhere" and the 2009 stimulus package that over promised and under delivered). CIRT has been an advocate for enhanced infrastructure spending, but also for a better return on the dollars expended with smarter and more targeted efficient processes that get the "best bang for the buck."

A new study just made available by the Reason Foundation provides some historic dimension to the debate with facts and figures over a period dating from 1989 to 2008. While not coming to the conclusion the infrastructure is about to fall down around us, it does provide useful information that can be used to make sound, coherent, compelling arguments that investments are in fact needed to continue to keep-up with and maintain the progress already achieved by former expenditures. The new quantitative study tries to balance the "wiser" investments in transportation infrastructure argument with the reality that past spending has resulted in some improvement. In "Are Highways Crumbling? State and U.S. Highway Performance Trends, 1989-2008," Prof. David T. Hartgen and two coauthors review 20 years of federal highway and bridge data on seven key indicators of conditions and performance. Overall, the data show substantial improvement on all seven measures (though performance varies considerably by state).

Here is the national summary, showing the percentage change in the indicators over this 20-year period, as well as the level of each indicator in the last year, 2008:

<u>Measure</u>	Percent Change	2008 Condition
Rural Interstates in poor condition	-70.8%	1.93%
Urban Interstates in poor condition	-18.0%	5.37%
Rural arterials in poor condition	-79.5%	0.53%
Urban Interstates, percent congested	-7.6%	48.61%
Bridges, percent deficient	-37.2%	23.72%
Fatality rate per 100 million miles	-42.1%	1.25
Rural primary roads, percent narrow lanes	-25.4%	9.62%

There are some dramatic differences in performance among the 50 states. Eleven states posted gains on all seven indicators (including Florida, Missouri, and Virginia). Numerous states showed gains on five or six of the indicators. Five states achieved gains in only three of the measures (Hawaii, Mississippi, New York, Utah, and Vermont). And bringing up the rear was California, whose performance improved only on two indicators: urban congestion down 2.1% and narrow rural lanes improved by nearly 48%. What appears important for this debate: after adjusting for inflation, spending per mile on Interstates increased by 60% in real terms over this period which helped drive the improvements. Per-mile spending increased at even faster rates in high-growth states such as Florida and Texas, where serious use of toll financing to supplement funds available from federal and state fuel taxes was used.

As for bridges: Table 6 in Hartgen's report compares the deficient bridge (combined totals) performance of all 50 states. The ones that made the greatest reductions in their backlogs during the 20-year period were, in order, Mississippi, Nebraska, North Dakota, Missouri, and Alabama. But 10 states, at the bottom of the list, actually showed worse bridge conditions at the end of those 20 years: this roll consists of OR, SC, OH, UT, AZ, ID, RI, MA, AK, and (bringing up the rear) HI. In terms of the fraction of all bridges listed as deficient in 2008, the worst state is Rhode Island (53.4%), followed by PA (38.7%), HI (38%), and NY (37.1%).

The wealth of information that can be gleaned from the complete Hartgen report is available at: http://reason.org/news/show/20-years-of-highway-bridge-performa