

## ASCE 2013 Report Card for America's Infrastructure

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During his 38 years at Hardesty & Hanover, LLP, Herrmann has held many positions including structural detailer, structural engineer, project engineer, and associate engineer before becoming managing partner and then a principal. His experience includes design, inspection, rehabilitation, and construction along with managing some of the firm's major fixed and movable bridge projects.

### Summary

On March 19, the American Society of Civil Engineers will be releasing the 2013 Report Card for America's Infrastructure. The purpose of the 2013 Report Card for America's Infrastructure is to provide a comprehensive assessment of the current condition of America's infrastructure and to deliver the information in a concise and easily accessible manner. In fact, to make our report even more all-encompassing, we decided to add a new category this year, evaluating Ports for the first time. Using an easily understood school report card format, each of the 16 categories of infrastructure covered in the Report Card is assessed using rigorous grading criteria and the most recent aggregate data sources to provide a comprehensive assessment of America's infrastructure.

To date, the ASCE Report Card has seen tremendous success. President Obama has mentioned our work in his State of the Union address, media coverage in high profile publications such as the New York Times and the Wall Street Journal continues to this day, and local leaders and decision makers across the country use the Report Card as the basis for talking about infrastructure investment. We fully expect that the 2013 Report Card for America's Infrastructure will be the most successful Report Card to date, bringing with it renewed attention to the infrastructure debate.

The concept of a report card to grade the nation's infrastructure originated in 1988 with the congressionally chartered National Council on Public Works Improvement report, *Fragile Foundations: A Report on America's Public Works*. When the federal government indicated they would not be updating the report after a decade, ASCE used the approach and methodology to publish the first Report Card on America's Infrastructure in 1998. With each new report in 2001, 2005, 2009, and now 2013, the methodology of the Report Card has been rigorously assessed so as to take into consideration all of the changing elements that affect America's infrastructure.

In 1988, when *Fragile Foundations* was released, the nation's infrastructure earned a "C," representing an average grade based on the performance and capacity of existing public works. Among the problems identified within *Fragile Foundations* were increasing congestion and deferred maintenance and age of the system; the authors of the report worried that fiscal investment was inadequate to meet the current operations costs and future demands on the system. Since 1998 ASCE has released five Report Cards and found each time that these same problems persist.

*Table 1: Previous Report Card Grades*

Subject	1988*	1998	2001	2005	2009
Aviation	B-	C-	D	D+	D
Bridges	-	C-	C	C	C
Dams	-	D	D	D+	D
Drinking Water	B-	D	D	D-	D-
Energy	-	-	D+	D	D+
Hazardous Waste	D	D-	D+	D	D
Inland Waterways	B-	-	D+	D-	D-
Levees	-	-	-	-	D-
Public Parks and Recreation	-	-	-	C-	C-



Rail	-	-	-	C-	C-
Roads	C+	D-	D+	D	D-
Schools	D	F	D-	D	D
Solid Waste	C-	C-	C+	C+	C+
Transit	C-	C-	C-	D+	D
Wastewater	C	D+	D	D-	D-
<b>America's Infrastructure GPA</b>	C	D	D+	D	D
<b>Cost to Improve</b>	C	-	\$1.3 trillion	\$1.6 trillion	\$2.2 trillion

ASCE's Report Card Advisory Council oversees the data analysis and development of the Report Card with the support of the ASCE Infrastructure Initiatives staff. The Advisory Council is made up of over 30 civil engineers with substantial experience in various types of infrastructure who volunteer their time and expertise for over a year to complete the Report Card. The Council members review and assess all relevant data and reports, consult with technical and industry experts, and assign grades according to the following eight criteria:

- Capacity– Evaluate the infrastructure's capacity to meet current and future demands.
- Condition– Evaluate the infrastructure's existing or near future physical condition.
- Funding– Evaluate the current level of funding (from all levels of government) for the infrastructure category and compare it to the estimated funding need.
- Future Need– Evaluate the cost to improve the infrastructure and determine if future funding prospects will be able to meet the need.
- Operation and Maintenance– Evaluate the owners' ability to operate and maintain the infrastructure properly and determine that the infrastructure is in compliance with government regulations.
- Public Safety– Evaluate to what extent the public's safety is jeopardized by the condition of the infrastructure and what the consequences of failure may be.
- Resilience– Evaluate the infrastructure system's capability to prevent or protect against significant multihazard threats and incidents and the ability to expeditiously recover and reconstitute critical services with minimum damage to public safety and health, the economy, and national security.
- Innovation– Evaluate the implementation and strategic use of innovative techniques and delivery methods

In our efforts to make the Report Card more accessible and impactful, this year, the Report Card will be an interactive app. On March 19, anyone with a smartphone or tablet will be able to download the Report Card on either the iTunes or Google Play store. Having a digital app has allowed us to have new functionality, with numerous interactive elements to show data in new and interesting ways. For example, users will be able to find deficient bridges in their area via an interactive nationwide map.

This new format means the Report Card is always available to you – you can read it on the go and reference it whenever your phone or tablet is with you. It also makes sharing of any of piece of the Report Card simple and easy – you can share any of the infrastructure category pages or charts on LinkedIn, Facebook or simply email them. And of course, it will also be available on the web at [www.infrastructurereportcard.org](http://www.infrastructurereportcard.org).

Four years ago ASCE urged lawmakers, families, and businesses to act on infrastructure issues. While we know our total investment need has not been met, the question is to what extent have we moved forward?

Our leadership, our staff, and civil engineers nationwide will be engaged on how to maximize the Report Card's effectiveness, sharing information and creating an ongoing campaign on infrastructure issues for the next four years.