2009 Report Card for America’s Infrastructure

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Chairman, Report Card Advisory Council
America’s Infrastructure: Where Are We Headed?

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2009 REPORT CARD

for

americA's INFRASTRUCTURE

A = Exceptional
B = Good
C = Mediocre
D = Poor
F = Failing

Each category was evaluated on the basis of condition and performance, quality vs. need, and funding vs. need.

Aviation
Bridges
Dams
Drinking Water
Energy
Hazardous Waste
Inland Waterways
Levees
Public Parks and Recreation
Rail
Roads
Schools
Solid Waste
Transit
Wastewater

americA's INFRASTRUCTURE G.P.A.

$2.2 trillion

ESTIMATED 5 YEAR INVESTMENT NEED
Water & Environment
Drinking Water
Wastewater
Drinking Water
Wastewater

Leaking pipes lose an estimated 7 billion gallons of clean drinking water a day
America’s drinking water systems face an annual shortfall of at least $11 billion
Aging systems discharge billions of gallons of untreated wastewater into U.S. surface waters each year.
Solid Waste
Hazardous Waste
In 2007, the U.S. produced 254 million tons of solid waste.
In 2008, there were 188 U.S. cities with brownfields sites awaiting cleanup and redevelopment.
Levees

Dams
More than 85% of the Nation’s Levees are locally owned and maintained.
There are more than 85,000 dams in the U.S.
Transportation
Aviation
The FAA predicts a 3% annual growth in air travel
Travelers face increasing delays and inadequate conditions
Note: Highly congested segments are stop-and-go conditions with volume/service flow ratios greater than 0.95. Congested segments have reduced traffic speeds with volume/service flow ratios between 0.75 and 0.95.

Peak-Period Congestion on the National Highway System: 2035

Note: Highly congested segments are stop-and-go conditions with volume/service flow ratios greater than 0.95. Congested segments have reduced traffic speeds with volume/service flow ratios between 0.75 and 0.95.

Americans spend 4.2 billion hours a year stuck in traffic at a cost to the economy of $78.2 billion.
Nearly half of American households do not have access to bus or rail transit.
One in four of the nation’s bridges are structurally deficient or functionally obsolete.
While some progress has been made in recent years to reduce the number of deficient and obsolete bridges in rural areas, the number in urban areas is rising.
Inland Waterways
Rail

D-
C-
Of the 257 locks still in use on the nation’s inland waterways, 30 were built in the 1800s and another 92 are more than 60 years old.
Growth and changes in rail demand create bottlenecks that constrain traffic in critical areas.
Public Facilities
Public Parks
Schools

C-D
The acreage of parkland per resident in urban areas is declining.
No comprehensive, authoritative data on the condition of America’s school buildings has been collected in a decade.
Energy
Energy D+
Demand for electricity has grown by 25% since 1990.
Projected electric utility investment needs could be as much as $1.5 trillion by 2030
100 years ago...

- 14% of homes had a bathtub
- 8% of homes had a telephone
- There were 8,000 cars in the U.S.
- There were 144 miles of paved roads
100 years ago...

- The average wage was $0.22/hour
- Less than 6% of Americans graduated from high school
- The population of Las Vegas was 30 people
- California was the 21st most populous state
100 years ago…

- Average life expectancy was 47 years

- The leading causes of death were:
  - Pneumonia and influenza
  - Tuberculosis
  - Diarrhea
  - Heart disease
  - Stroke
“Put money under the rubber…”

• “We do not have great highways because we are a great nation, we are a great nation because we have great highways.”
  – Dewitt C. Greer (1902-1986)

Texas Highway Commission
5 Year Investment Need

- Roads and Bridges: $930 billion
- Aviation: $87 billion
- Inland Waterways: $50 billion
- Rail: $63 billion
- Transit: $265 billion
- Drinking Water and Wastewater: $255 billion
- Energy: $75 billion
Estimated Investment Needs
Consider what we’re already spending…

Americans spend 4.2 billion hours a year stuck in traffic at a cost to the economy of $78 billion, or $710 per motorist.
Consider what we’re already spending…

In the U.S., 1,000 gallons of bottled water costs about $4,000.

1,000 gallons of tap water costs $1.
$1 in maintenance = $16 in savings
ASCE’s Five Key Solutions

1. Increase federal leadership
Increase Federal Leadership

National Levee Safety Commission
ASCE’s Five Key Solutions

1. Increase federal leadership
2. Promote sustainability & resilience
Promote Sustainability and Resilience

North City Water Reclamation Plant
San Diego, California
ASCE’s Five Key Solutions

1. Increase federal leadership
2. Promote sustainability & resilience
3. Develop national, regional and state infrastructure plans
Develop National, Regional and State Infrastructure Plans

Regional Transportation District
Denver
ASCE’s Five Key Solutions

1. Increase federal leadership
2. Promote sustainability & resilience
3. Develop national, regional and state infrastructure plans
4. Address life-cycle costs
ASCE’s Five Key Solutions

1. Increase federal leadership
2. Promote sustainability & resilience
3. Develop national, regional and state infrastructure plans
4. Address life-cycle costs
5. Increase & improve investment from all stakeholders
Increase and Improve Investment From All Stakeholders

Martinez Creek Dam No. 5
Bexar County, Texas
Infrastructure Improvement Depends on YOU

- Learn more
- Join online community
  - Our Failing Infrastructure blog
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  - Twitter
- Contact elected officials
- Recruit Key Contacts
- Letter to the editor

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Solid Waste Success
Success Story

Cited in 2005 Report Card

Fixed by 2008