2017 Infrastructure Report Card

Tuesday, April 4, 2 p.m. EDT | FREE CSG eCademy Webinar
Agenda

• The 2017 grades
• The methodology
• The investment gaps
• The solutions
• ASCE resources
Your Questions & Comments

2017 ASCE Infrastructure Report Card
Committing to Infrastructure Today for America’s Tomorrow
What the Grades Mean

**A**
**EXCEPTIONAL**
Fit for the future

**B**
**GOOD**
Adequate for now

**C**
**MEDIocre**
Requires attention

**D**
**POOR**
At risk

**F**
**FAILING/Critical**
Unfit for purpose
Report Card Methodology

- Capacity
- Condition
- Funding
- Future Need
- Operation and Maintenance
- Public Safety
- Resilience
- Innovation
## 2017 Infrastructure Grades

<table>
<thead>
<tr>
<th>Category</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aviation</td>
<td>D</td>
</tr>
<tr>
<td>Bridges</td>
<td>C+</td>
</tr>
<tr>
<td>Dams</td>
<td>D</td>
</tr>
<tr>
<td>Drinking Water</td>
<td>D</td>
</tr>
<tr>
<td>Energy</td>
<td>D+</td>
</tr>
<tr>
<td>Hazardous Waste</td>
<td>D+</td>
</tr>
<tr>
<td>Inland Waterways</td>
<td>D</td>
</tr>
<tr>
<td>Levees</td>
<td>D</td>
</tr>
<tr>
<td>Parks and Recreation</td>
<td>D+</td>
</tr>
<tr>
<td>Ports</td>
<td>C+</td>
</tr>
<tr>
<td>Rail</td>
<td>B</td>
</tr>
<tr>
<td>Roads</td>
<td>D</td>
</tr>
<tr>
<td>Schools</td>
<td>D+</td>
</tr>
<tr>
<td>Solid Waste</td>
<td>C+</td>
</tr>
<tr>
<td>Transit</td>
<td>D-</td>
</tr>
<tr>
<td>Wastewater</td>
<td>D+</td>
</tr>
</tbody>
</table>
Your Questions & Comments

2017 ASCE Infrastructure Report Card
## Investment Gap

<table>
<thead>
<tr>
<th>Infrastructure Systems</th>
<th>2016–2025 (10 years)</th>
<th></th>
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<tbody>
<tr>
<td></td>
<td>TOTAL NEEDS</td>
<td>ESTIMATED FUNDING</td>
<td>FUNDING GAP</td>
<td></td>
</tr>
<tr>
<td>SURFACE TRANSPORTATION</td>
<td>$2,042</td>
<td>$941</td>
<td>$1,101</td>
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</tr>
<tr>
<td>WATER/WASTEWATER INFRASTRUCTURE</td>
<td>$150</td>
<td>$45</td>
<td>$105</td>
<td></td>
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<tr>
<td>ELECTRICITY</td>
<td>$934</td>
<td>$757</td>
<td>$177</td>
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<tr>
<td>AIRPORTS</td>
<td>$157</td>
<td>$115</td>
<td>$42</td>
<td></td>
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<tr>
<td>INLAND WATERWAYS &amp; MARINE PORTS</td>
<td>$37</td>
<td>$22</td>
<td>$15</td>
<td></td>
</tr>
<tr>
<td>DAMS</td>
<td>$45</td>
<td>$5.6</td>
<td>$39.4</td>
<td></td>
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<tr>
<td>HAZARDOUS &amp; SOLID WASTE</td>
<td>$7</td>
<td>$4</td>
<td>$3</td>
<td></td>
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<tr>
<td>LEVEES</td>
<td>$80</td>
<td>$10</td>
<td>$70</td>
<td></td>
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<tr>
<td>PUBLIC PARKS &amp; RECREATION</td>
<td>$114.4</td>
<td>$12.1</td>
<td>$102.3</td>
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<tr>
<td>RAIL</td>
<td>$154.1</td>
<td>$124.7</td>
<td>$29.4</td>
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<tr>
<td>SCHOOLS</td>
<td>$870</td>
<td>$490</td>
<td>$380</td>
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<tr>
<td><strong>TOTALS</strong></td>
<td><strong>$4,590</strong></td>
<td><strong>$2,526</strong></td>
<td><strong>$2,064</strong></td>
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</tr>
</tbody>
</table>

$2.0 trillion needed
FAILURE TO ACT
CLOSING THE INFRASTRUCTURE INVESTMENT GAP FOR AMERICA'S ECONOMIC FUTURE

COST TO THE ECONOMY: $3.9 TRILLION
COST TO BUSINESS: $7 TRILLION
COST TO WORKERS: 2.5 MILLION JOBS
COST TO FAMILIES: $3,400 PER YEAR
Investment

Increase investment from all levels of government and the private sector from 2.5 percent to 3.5 percent of U.S. Gross Domestic Product (GDP) by 2025.

Put the “trust” back into “trust funds.”

Fix the Highway Trust Fund by raising the federal motor fuel tax

Authorize programs to improve specific categories of deficient infrastructure

Infrastructure owners and operators must charge, and Americans must be willing to pay, rates and fees that reflect the true cost of using, maintaining, and improving all infrastructure.
Leaders from all levels of government, business, labor, and nonprofit organizations must come together to ensure

**all investments are spent wisely**

Require all projects greater than $5 million that receive federal funding use **life cycle cost analysis**

**Create incentives** for maintenance

**Develop tools** to prioritize projects

Streamline the **project permitting process**

Identify projects attractive to **private sector investment** and **public-private partnership**
SOLUTIONS

Preparation for the future

**RE·SIL·IEN·CY n.**
To more quickly recover from significant weather and other hazard events

**SUS·TAIN·A·BIL·I·TY n.**
Improving the “triple bottom line” with clear economic, social, and environmental benefits

Develop active **community resilience programs**

Consider **emerging technologies and shifting social and economic trends** when building new infrastructure

Improve **land use planning** at the local level

Support **research and development** into innovative new materials, technologies, and processes
Your Questions & Comments

2017 ASCE Infrastructure Report Card
Help Restore America’s Infrastructure
Visit InfrastructureReportCard.org and download the Infrastructure Report Card app
STATE RESOURCES

Infrastructure Super Map

Key Facts about Virginia's Infrastructure

Virginia Infrastructure Grades

2015 Virginia Infrastructure Report Card

Virginia Infrastructure is aging and affects Virginia’s quality of life, the safety of its citizens and its economic well-being. Lacking publicly available data, the Virginia Section of the American Society of Civil Engineers (ASCE) graded the condition of the state’s infrastructure assets. After filling the need for reliable information and funding, grades were assigned to 13 primary categories based on the modeled condition of existing assets, expected service life, current funding levels, and level of service, future growth needs, and anticipated level of funding requested to maintain Virginia’s infrastructure.
Your Questions & Comments

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