Infrastructure is no joke
## Investment Gap

### Infrastructure Systems

<table>
<thead>
<tr>
<th>Infrastructure Systems</th>
<th>Total Needs</th>
<th>Estimated Funding</th>
<th>Funding Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface Transportation</td>
<td>$2,042</td>
<td>$941</td>
<td>$1,101</td>
</tr>
<tr>
<td>Water/Wastewater Infrastructure</td>
<td>$150</td>
<td>$45</td>
<td>$105</td>
</tr>
<tr>
<td>Electricity</td>
<td>$934</td>
<td>$757</td>
<td>$177</td>
</tr>
<tr>
<td>Airports</td>
<td>$157</td>
<td>$115</td>
<td>$42</td>
</tr>
<tr>
<td>Inland Waterways &amp; Marine Ports</td>
<td>$37</td>
<td>$22</td>
<td>$15</td>
</tr>
<tr>
<td>Dams</td>
<td>$45</td>
<td>$5.6</td>
<td>$39.4</td>
</tr>
<tr>
<td>Hazardous &amp; Solid Waste</td>
<td>$7</td>
<td>$4</td>
<td>$3</td>
</tr>
<tr>
<td>Levees</td>
<td>$80</td>
<td>$10</td>
<td>$70</td>
</tr>
<tr>
<td>Public Parks &amp; Recreation</td>
<td>$114.4</td>
<td>$12.1</td>
<td>$102.3</td>
</tr>
<tr>
<td>Rail</td>
<td>$154.1</td>
<td>$124.7</td>
<td>$29.4</td>
</tr>
<tr>
<td>Schools</td>
<td>$870</td>
<td>$490</td>
<td>$380</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>$4,590</strong></td>
<td><strong>$2,526</strong></td>
<td><strong>$2,064</strong></td>
</tr>
</tbody>
</table>

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**$2.0 trillion needed**
America's Infrastructure Scores a D+
# 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>
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<tr>
<td>ENERGY</td>
<td>D+</td>
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<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>

**America's Cumulative Infrastructure Grade**

- **A**: Exceptional
- **B**: Good
- **C**: Mediocre
- **D**: Poor
- **F**: Failing
Report Card Process

1. Literature Review
2. Agency Interviews
3. Chapter Drafts
4. Peer Review
5. Review by CAI
6. Agency Pre-Briefings
7. Report Card
2019 REPORT CARD FOR WASHINGTON'S INFRASTRUCTURE

GPA: C

Drinking Water: C-
Roads: C-
Aviation: C
Bridges: C+
Dams: B-
Transit: C-
Stormwater: D+
Wastewater: C-
Schools: C+
Solutions to Raise the Grade

1. Leverage sustainable loan programs to finance necessary infrastructure projects around Washington.

2. Balance the needs of urban and rural communities.

3. Meet the demands of a growing population.

4. Lead in environmental sustainability and resilience to natural disasters.
Aviation

- 60% operation capacity in 2014 - capacity planning needed at 60%.
- $3.6 billion needed to grow and sustain the 134 public airports.
- 87% airport funding came from federal sources.

- 71% of the pavement area was in need of preventative maintenance, 18% was in need of significant rehabilitation, and 11% was in need of reconstruction.
1. Prioritize legislation that increases funding.
2. Support regular reauthorization of the FAA.
3. Continue to fund and maintain airport pavement.
4. Recognize airports that partner with industry, associations, and academia.
5. Update statewide airport condition assessment.
Washington is home to 7,410 vehicular bridges. 321 bridges were in “poor” condition, approximately 5% of bridges are structurally deficient.

As of June 2017, there was a bridge maintenance backlog of 1,589 bridge repairs. WSDOT is implementing bridge construction innovations including accelerated techniques.
1. Increase funding at all levels of government.

2. Provide additional federal funding sources for the Highway Trust Fund and pass the Federal Highway Reauthorization bill.

3. Consider the use of alternative local funding.

4. Budget for lifecycle cost rather than focus on initial construction to fully understand the long-term financial implications of bridge projects.
There are 1,130 dams in Washington, 39% of which are categorized as significant- or high-hazard dams.

A lack of a funding program for the repair of private dams.

Need to meet new seismic codes and standards.

The State’s dam safety office budget has dropped by about $200K annually over the past eight years.
Drinking Water

- Public water systems serve 6.28 million of Washington’s 7.31 million residents.
- Clear divide between the large- to medium-sized PWS versus the small to very small PWS.
- $11.73 billion needed over the next 20 years to keep up
- Deferred capital reinvestment and emerging infrastructure resiliency demands contribute to growing funding needs.
There was a 3.11% growth in population between 2015 and 2016.

173% increase in traffic delays between 2014 and 2016.

92% of the WSDOT’s pavements are in a fair and better condition.

Local agencies are greatly benefited by the Washington State Transportation Improvement Board grant program.

A lack of funding from federal sources.
1. Evaluate options for reducing congestion.
2. Increase use of public transit.
3. Build the right project by considering the triple bottom line for the life of the project.
4. Fund pavement preservation to avoid more costly repairs in the future.
5. Implement resilience recommendations.
Schools

- Total prekindergarten through 12th-grade student enrollment of 1.12 million in 2018.
- State allocates 145.3 sq. ft. of class space per student, below the national average of 170.6 sq. ft. per student.

- Increased funding to reduce class sizes to meet constitutional requirements, but local districts now face a shortage of physical classroom space.
• $262M Georgetown Wet Weather Treatment Station.
• $2.5M innovative Point Defiance regional stormwater treatment.
• $570M Ship Canal Water Quality Project by King County and Seattle.

• Much of the state’s stormwater infrastructure is in need of repair or replacement.
• Asset management practices, along with study and preparation for a changing climate are critical.
Transit

• 33 transit agencies provide bus, ferry, and light rail service to more than 7 million residents.

• Metro reported a record 122.2 million riders used transit in 2017.

• Voters approved $53.8B for Sound Transit 3

C-

• Rural areas challenged to support adequate funding and quality service.

• Population growth, transit safety, limited funding, and equitable access continue to be a challenge.
1. Massive growth and congestion call for innovative practices.
2. Improve accountability by making asset management and safety program information available and easily accessible to the public.
3. Develop sustainable funding sources.
4. Implement triple bottom line life cycle costing in planning, design, and construction of transit system.
5. Develop a comprehensive Resilience Program.
Wastewater

- 250 wastewater treatment facilities serve 6 million residents.
- Wastewater utilities estimate an increase of 40% in population served by treatment works by the year 2032.
- Most wastewater systems are beyond their design life and the conveyance networks as a whole are in poor condition.
- As densification occurs, older parts of the system struggle to accommodate higher flows.
REPORT CARD FOR WASHINGTON’S INFRASTRUCTURE

2019

GPA

C

Drinking Water

C-

Roads

C-

Aviation

C

Bridges

C+

Dams

B-

Transit

C-

Stormwater

D+

Wastewater

C-

Schools

C+
Where Do We Go From Here

• Seek other individuals & agencies for advocacy presentations

• Engage in discussion with regard to the current state budget

• Collaborate

• Innovate