

Challenges of our nation's aging infrastructure

The U.S. infrastructure is outdated, costing both the government and private industry millions in repairs, business interruption and supply chain risks.



America's transportation network plays a vital role in our economy. Under-investing in our transportation infrastructure has led to ever-increasing congestion and increased risks due to disrepair.



\$20.2 billion

Annual spending on the nation's Interstate Highway system is estimated to be \$20.2 billion...



which is approximately

61%

of the amount needed annually to make needed repairs and improvements.¹



1 in 9

bridges in the U.S. is rated structurally deficient...



and the average age of the nation's 614,387 bridges is

over 50 years old.²

There are more than **4 million miles** of public roadways in the United States.³



Powering our nation's businesses

The U.S. energy infrastructure consists of three interrelated segments: electricity, oil and natural gas.



In 2016, U.S. primary energy consumption was about

97.5 quadrillion Btu,
equal to 17%

of the world's total primary energy consumption.⁴



As of 2016, there was a reported gap of an estimated

\$177 billion

in needed funds to fully maintain the energy infrastructure.⁵

The average cost of a one-hour power outage is **just over \$1,000 for a commercial business in the U.S.,** but even a short interruption of a second or two can cost over **\$733.⁶**



Water is a fundamental health and economic resource.

America's water systems support the country's trade, domestic use and public amenities.

The U.S. uses about **80%** of the nation's entire water consumption for crop irrigation. That number rises to **90%** in the West.⁷



There are an estimated **1.2 million miles** of water main pipes in the U.S. and **240,000** water main breaks per year.⁸



By 2025, **70%** of dams in the U.S. will be over **50 years** old.⁹



The inland waterways system in the U.S. **has not been updated since the 1950s,** and the majority of the 239 locks are well past their 50-year design life.¹⁰



Communication infrastructure helps support our fundamental way of life.

The communications sector includes landline, wireless, satellite, cable and broadcasting, internet content and routing, and information services and networks.

- A number of large-scale power outages, including the 2003 Northeast region blackout, Hurricane Katrina in 2005 and the recent power outages in Puerto Rico and many Caribbean islands following the storms of 2017, have highlighted the strong interdependencies of the power and communications sectors.
- Breakdown in service can create vulnerabilities to the network from potential cyberattacks.¹¹
- Aging infrastructure concerns relating to electric power supply and distribution and water infrastructure have the potential to directly impact the communications sector.



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