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2025 REPORT CARD FOR AMERICA'S INFRASTRUCTURE

Energy

SUMMARY

As electrification grows, energy demand is rising faster than it has in 20 years. EVs and data centers alone will require 35 GW by 2030, up from 17 GW in 2022. To meet net-zero goals, utilities must double transmission capacity to connect new renewable sources. Transmission investments increased by $5 billion from 2017 to 2022, supported by the IIJA and IRA. Weather has caused 80% of outages since 2000, mostly in the last decade and within distribution systems. Strengthening interregional connections with streamlined reviews, resilient technologies, and strong design standards is key to future reliability.

FAST FACTS

- Data centers require enough energy to power approximately 80,000 U.S. homes. Combined with AI and electrified products such as EVs, American energy demands are surging.
- The IIJA allocated $73 billion through 2026 to modernize the electric grid, however, the sector still faces a $578 billion investment gap.
- Approximately 80% of U.S. power outages steam from severe weather events, but the use of the most up-to-date codes and standards, which could prevent future systems failures is not always required.

SOLUTIONS TO RAISE THE GRADE

- ✓ Adjust electricity rates to keep pace with capital expenditures and resilience initiatives.
- ✓ Design energy infrastructure using life-cycle cost analysis and expand transmission to efficiently deliver power to high-demand regions.
- ✓ Mitigate capacity shortfalls by accompanying major energy projects with sufficient storage infrastructure.
- ✓ Improve grid and pipeline reliability by increasing inspections and strengthening risk mitigation efforts.

To explore more solutions to raise the grades check out infrastructurereportcard.org

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