

News Release

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Civil Engineers: Texas Infrastructure Grade Remains a 'C'

Grades across 16 categories range from 'B' for Aviation to 'D-' for Levees, Wastewater

Austin, TX — The <u>Texas Section</u> of the <u>American Society of Civil Engineers</u> (ASCE) today released the <u>2025 Texas Infrastructure Report Card</u>, assigning 16 categories of infrastructure a cumulative grade of 'C', which is one notch ahead of the national average of 'C-' from the <u>2021 Report Card for America's Infrastructure</u>. This is the same grade Texas received in its last report in 2021, citing significant population growth, surging energy demands, and increasingly severe weather events putting strain on an aging infrastructure network. However, these stressors have been balanced out by record investments at the federal level and proactive state and local measures.

Of the 16 categories, two (aviation and roads) saw grade increases, while six (drinking water, energy, levees, solid waste, transit and wastewater) saw grade decreases compared to the 2021 report. Four new chapters were added to this year's report (broadband, hazardous waste, ports, and rail).

The grades for each category are below:

Grade	Categories
B	Aviation
B-	Bridges
C+	Hazardous Waste, Ports, Solid Waste
С	Energy, Rail
C-	Public Parks, Roads, Stormwater
D+	Broadband, Dams, Drinking Water, Transit
D-	Levees, Wastewater

"Infrastructure is the backbone of our communities, the safety of our families, and the strength of our communities, and it connects everyone across our state," said Austin Messerli PE, co-chair, Texas Infrastructure Report Card Committee, ASCE Texas Section. "The Texas Infrastructure Report Card not only helps us recognize the progress we've made, but it also serves as a call to action. By investing in and improving our infrastructure today, we are laying the groundwork for a stronger, more resilient future that will benefit future generations."



The report notes that surging population growth and business activity is putting strain on transportation, water and energy infrastructure needed to sustain this growth. An influx of funding from the federal Infrastructure Investment and Jobs Act (IIJA) and state and local initiatives have helped improve or maintain conditions in the transportation sector, as aviation (B) and roads (C-) were the only two grades to improve, while bridges (B-) remains one of the highest-performing categories. Each of Texas' major airports is undergoing expansion projects and 98% of commercial runway pavement is in fair or good condition. TxDOT's \$100 billion Texas Clear Lanes Initiative has led to 18 fully completed projects, 25 that are under construction, and another 62 that are planned to improve roadway efficiency.

Only 1.2% of bridges are listed in poor condition, which is the third lowest rate in the nation. Texas' 56,000 bridges, twice the number of any other state, carry approximately 616 million vehicles per day, which underscores the necessity of these three sectors to be performing adequately if Texas wishes to sustain its population and economic growth and promote public safety. Posted load restrictions on aging bridges, bottlenecks on poorly-designed roads, and cargo delays at airports all dramatically slow economic activity and the movement of goods and services. American households and businesses benefit when these systems are in a state of good repair, and our report finds that Texas has prioritized these categories in recent years.

As new residents and businesses flood the state, a rise in electrification and energyconsuming data centers has led to a sharp rise in energy demands, as needs have risen by a projected 50,000 Megawatts (MW) in the past year. The 2025 report added generation infrastructure to its energy assessment, as opposed to strictly focusing on transmission and distribution lines, to better encapsulate all of Texas' robust energy network. This change, plus rising demands and vulnerabilities exposed by winter storms caused the grade to drop from a "B+" in 2021 to a "C" in 2025. Texas has the largest gas pipeline network in the nation and is the largest wind and second-largest solar producer in the nation. Resilient, efficient pipelines and transmission and distribution networks are essential for both Texas and the United States' energy needs, as Texas' energy system is responsible for producing, transporting, and delivering approximately 25% of the energy needs of the U.S.

Drinking water (D+, down from C- in 2021), stormwater (C-), and wastewater (D-, down from D in 2021) are struggling to meet demands as systems age and funding fails to match current and future needs. Winter storms in early 2021 caused 40% of water utilities to issue boil water notices. While there is not an inventory of water main breaks across the state, each water connection loses roughly 30 gallons of treated water per day due to leaking pipelines. As wastewater and stormwater systems are overwhelmed by precipitation levels they weren't originally designed for in most cases – along with



aging, leaking assets – the result is approximately 470 rivers in Texas impaired with pollutants, a problem shared with Texas beaches. Most Texas stormwater and wastewater infrastructure were built in the 1970s, meaning they have either reached or surpassed their intended 50-100 year design lives.

Texas agencies and departments have taken action to address these issues, such as the Texas Commission on Environmental Quality (TCEQ) requiring all water utilities to have emergency preparation plans in response to outage events; the state developed its first comprehensive State Flood Plan to identify risks and solutions for stormwater infrastructure; and between 2020 and 2024, the Texas Water Development Board (TWDB) has provided close to \$2.19B in funding for nearly 165 projects throughout the state. These are some examples of progress addressing drinking water, stormwater and wastewater infrastructure needs, but far more investment is necessary.

President of ASCE Texas Section and past chair of the Texas Infrastructure Report Card Committee, Mark K. Boyd, PhD, PE, reflects on the latest Report Card, "Texas is growing rapidly, fueling a pressing need for resilient, modern infrastructure. Passionate and accomplished civil engineering experts once again dedicated their time to developing this valuable Report Card. While Aviation and Roads showed progress, critical areas like Wastewater and Levees declined from the previous grades, yet there is something to be said for the State's overall GPA holding steady. Our report empathizes Texas' need to prioritize bold, strategic investment. Now is the time to act; fortifying the State's infrastructure to thrive in a vibrant, growing Texas future."

The 2025 Texas Infrastructure *Report Card* recommendations to raise the grades, include:

- Continue investments in Texas infrastructure by appropriating funding and revenues to their respective source, injecting additional funding through grant programs, adopting appropriate rate fees to support maintenance, and investing in research and advancement of technology for efficiency and safety.
- Update policies and regulations to ensure safety, efficiency, and reliability for projects across all categories. The framework of sound policy fosters design innovation, enhancing infrastructure systems' functionality and resilience. Furthermore, well-crafted policies and regulations can facilitate public-private partnerships, attracting investment and expertise from various sectors to accelerate infrastructure development.
- **Continue reviews and modernization of engineering standards** that incorporate innovation and minimize risks and vulnerabilities to our infrastructure



networks. Incorporating resilience in the design and maintenance of infrastructure systems to account for environmental impacts, such as sea level rise, increased heat, extended drought, and more intense rainfall ensures return on investment and public safety.

• **Prioritize asset management and planning,** which allows owners to plan, manage, optimize investments, and allocate resources effectively. The proactive approach to managing infrastructure also facilitates strategic planning and supports risk mitigation to extend asset life and service delivery.

The report card was created as a public service to citizens and policymakers to inform them of the infrastructure needs in Texas. Civil engineers use their expertise and school report card-style letter grades to condense complicated data into an easy-to-understand analysis of Texas's infrastructure network. ASCE State Report Cards are modeled after the national *Report Card for America's Infrastructure*, which gave America's infrastructure an overall grade of 'C-' in 2021. Following its quadrennial cycle, the next national report card – the *2025 Report Card for America's Infrastructure* – will be released March 25, 2025.

ABOUT TEXAS SECTION OF AMERICAN SOCIETY OF CIVIL ENGINEERS

The ASCE Texas Section is one of the largest and most active sections of the American Society of Civil Engineers with more than 11,000 members. Established in 1913, the Texas Section is headquartered in Austin and comprises 15 Branches throughout Texas and 24 Student Chapters at the state's leading universities. Committed to promoting, encouraging, and recognizing civil engineering excellence and professional growth, the ASCE Texas Section holds an annual Texas Civil Engineering Conference (CECON) in the fall, as well as technical webinars, and other educational, advocacy, & networking events throughout the year. For more information, visit <u>www.TexASCE.org</u> and follow us on LinkedIn at ASCE - Texas Section.

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