Colorado Grades

Aviation **B-**	Bridges **C+**	Dams **B-**	Drinking Water **C-**
Energy **C**	Levees **D+**	Parks **C**	Rail **B-**
Roads **D+**	Schools **D+**	Solid Waste **C-**	Stormwater **C-**
Transit **C-**	Wastewater **C**	**C- OVERALL GPA**	

About the Grades

The 2025 Report Card for Colorado's Infrastructure was written by a committee of more than 50 civil engineers across Colorado who volunteered their time to collect and analyze data, prepare and review their findings and present their conclusions. The committee worked with staff from ASCE National and ASCE's Committee on America's Infrastructure to provide a snapshot of our state's infrastructure, as it relates to us locally and on a national level. The Report Card Sections are graded based on the following eight criteria: capacity, condition, funding, future need, operation and maintenance, public safety, resilience and innovation. ASCE defines these grades as follows:

A	B	C	D	F
Exceptional, Fit for the Future	Good, Adequate for Now	Mediocre, Requires Attention	Poor, At Risk	Failing/ Critical, Unfit for Purpose

Solutions to Raise the Grade

1. **Invest in asset management:** Plan for the full life cycle of infrastructure projects at inception to mitigate potential failures and protect the public health, safety, and well-being of communities. Maintenance needs, water use, and potential co-benefits are integral in the planning for infrastructure projects. Infrastructure owners should clearly establish responsibility and procedures for regularly assessing conditions and upkeeping data as a first step to asset management. Infrastructure budgets and strategic plans must also consider maintenance needs in conjunction with capital projects. Data-based decisions can then help prioritize projects when budgets are tight.

2. **Prioritize resilience:** Undertake regional partnerships in infrastructure planning for a holistic approach to intertwined needs and challenges. For water systems, planners should also consider a "One Water" approach during design to incorporate all aspects of water life-cycle - such as stormwater, wastewater, drinking water, dams, and levees - and protect this critical resource. Up-to-date design codes can ensure infrastructure projects are more resilient to the challenges of modern-day usage and climate as well. Diversity and redundancies in systems contribute to overall resiliency as well as innovative technologies, materials, and construction methods. Further, agencies should adopt the Envision Sustainable Infrastructure framework to promote resiliency in their work.

3. **Strengthen intergovernmental partnerships:** Partnerships are essential across all levels of government both within Colorado and at the national level. Both promoting and regulating safety at state and national levels protect communities across Colorado, especially those in historically underrepresented, rural, and climate-vulnerable areas.

4. **Engage communities as infrastructure stakeholders:** Recognize the public as active stakeholders in infrastructure, as they are the primary users. Meaningful engagement with communities affected by infrastructure projects can significantly enhance project outcomes. In Colorado, where TABOR limits public funding decisions, clear communication with residents is especially critical. Education and outreach efforts should aim to build mutual trust between government entities and the public.

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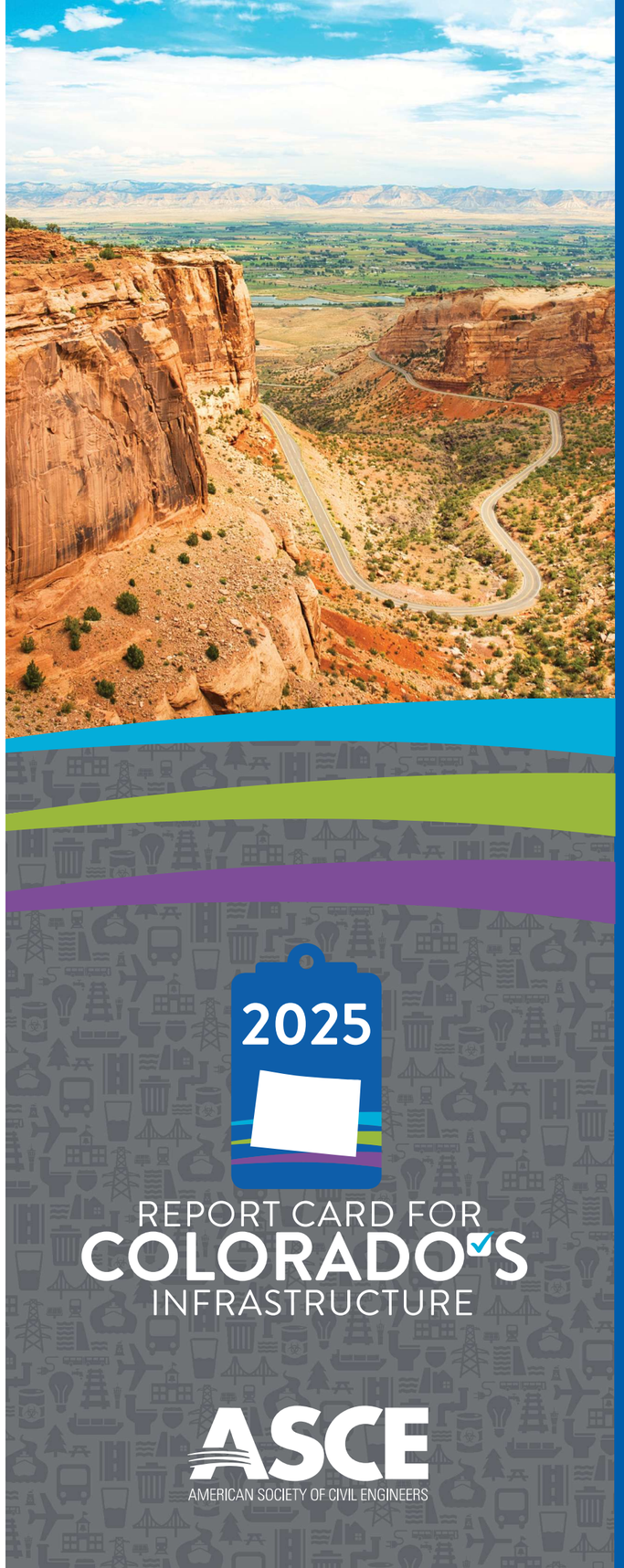

2025

REPORT CARD FOR COLORADO'S INFRASTRUCTURE

ASCE
AMERICAN SOCIETY OF CIVIL ENGINEERS

INFRASTRUCTURE MATTERS

Infrastructure is the foundation of everyday life in Colorado. Whether you're turning on the tap, commuting to work, charging your phone, or enjoying a local park, you are depending on systems that keep our communities running safely and efficiently.

Growing challenges abound in the state. Aging systems, climate-related disruptions, and a rapidly increasing population are placing significant strain on our roads, water supplies, energy networks, and more. While some areas, such as dams and wastewater, have improved thanks to targeted investments, others continue to fall behind due to outdated systems and limited funding.

Infrastructure is not just about convenience. It supports our economy, enables businesses to operate, and helps communities thrive. When infrastructure is neglected, the impacts are felt across the state, from higher costs for drivers to reduced access to clean water and reliable transit.

The Colorado Section of the American Society of Civil Engineers (ASCE) publishes this report card to help residents, business owners, and decision-makers understand the condition of our infrastructure and what actions are needed to improve it. If you drive, fly, use water, or rely on electricity, this report card is for you.

The future of Colorado depends on the choices we make today. Investing in infrastructure is investing in the safety, prosperity, and resilience of our state.

How You Can Get Involved

Get the full story behind this Report Card at www.infrastructurereportcard.org/Colorado.

Ask your elected leaders what they're doing to keep up with your neighborhood's infrastructure. Use your zip code to get your list of elected officials' at www.infrastructurereportcard.org/take-action.

About ASCE-Colorado

The Colorado Section of the American Society of Civil Engineers (ASCE) was formed in 1909 and today represents almost 3,500 civil engineer members across the great state of Colorado. Since its founding, the Section has been actively involved in the advancement of the science and profession of civil engineering in Colorado.

With our commitment to serve and protect the public in mind, the Report Card released by the ASCE Colorado Section is a public, voluntary service to citizens and policymakers to inform them of infrastructure needs in their communities.

The 2025 Report Card on Colorado's Infrastructure

gave the state an overall GPA of C-. Colorado's civil engineers studied fourteen infrastructure categories. Of those fourteen, three infrastructure categories are in good condition, eight are in mediocre condition, and three categories are in poor condition.

The good news is there are solutions to all these challenges, and we can raise the grades of Colorado's infrastructure. By learning more today about the conditions of the infrastructure you use every day, you too can help raise the grade.

Aviation
B-

Colorado has 66 public-use airports, consisting of 13 commercial service airports and 53 general aviation airports, which are essential to the state's economy and infrastructure. These airports generate $71.2 billion in annual business revenue, support 358,293 jobs, and contribute $25.5 billion in payroll. Denver International Airport (DEN) alone accounts for $45.3 billion in revenue and over 240,000 jobs. Although federal funding through the Infrastructure Investment and Jobs Act (IIJA) has supported many Capital Improvement Programs, increasing demand is straining airport capacity. For instance, DEN was designed for 40 to 50 million passengers but served 82 million in 2024. This surge, despite post-pandemic growth, has contributed to a grade drop from 2021 to 2025. Continued investment is critical to maintain economic resilience, ensure public access, and improve intermodal connectivity as Colorado's population and travel needs expand.

Bridges
C+

Colorado's 8,965 bridges play a vital role in transporting people and goods and spurring economic activities. Currently, 4.8% of these bridges are in poor condition, which means they need substantial maintenance and rehabilitation, and in some cases, replacement. In total, the state has identified 1,254 bridges that are in need of repair, with an estimated cost of $1.1 billion. Recent legislative measures, such as the Statewide Bridge and Tunnel Enterprise, which will increase funding through new bridge and tunnel impact fees, are anticipated to generate over $500 million over the next decade. Bridges are essential to Colorado's transportation network, supporting over 88 million daily crossings that facilitate both commuting and economic activity across the state. To ensure the safety, reliability, and longevity of Colorado's bridge infrastructure, investments in innovative design, construction methods, and resilience measures are necessary to meet the demands of the state's growing population and economic activities.

Dams
B-

Colorado is in an arid environment and at the headwater of the Colorado river that provides water for much of the western United States. Colorado has 1,938 dams, and they have grown increasingly important due to the state's rising population, their role in supporting downstream water needs in other states, and their contribution to in-state irrigation. Colorado has a total of 42 high-hazard dams, with some of the state's largest infrastructure projects currently undergoing construction of new dams. An estimated $20 billion in investments are needed in the state for water supply, infrastructure, and storage capacity. While the reservoir storage capacity for the state continues to increase, increased permitting requirements, growing construction costs, increased maintenance needs, and other restrictions pose challenges to maintaining and building these important assets.

Drinking Water
C-

Colorado's drinking water infrastructure faces mounting challenges from aging systems, population growth, and climate-related stress. As a headwaters state, Colorado supplies water to 19 states and Mexico, yet retains only 40% of its water. Competing demands from irrigation and municipal use, especially east of the Continental Divide, strain resources. The Colorado Water Plan projects a supply gap by 2050 equivalent to 250,000 households. Over 2,000 public water systems—many over 50 years old—require significant upgrades, with the EPA estimating over $10 billion needed in the next decade. Additional funding of $1.5 billion is required to meet future capacity. Workforce shortages and reliance on ratepayer funding further complicate progress. While the state has responded to threats like per- and polyfluoroalkyl substances (PFAS), lead service lines, and natural contaminants, small and rural communities remain vulnerable. Ensuring a sustainable drinking water future will require stable funding, skilled workforce, and resilient infrastructure planning.

Energy
C

Colorado's energy infrastructure faces mounting pressures due to aging assets, climate-driven disruptions, and a rapidly transforming energy mix. While renewables now contribute 41% of the state's electricity, outdated coal plants and insufficient energy storage capacity threaten reliability. Severe weather events—such as the Marshall Fire, linked to electrical infrastructure failures, and major storms that impacted over 150,000 residents—underscore the urgent need for resilience investments like microgrids, advanced smart grid technologies, and pipeline modernization. Utilities are proactively investing billions of dollars into transmission upgrades, wildfire mitigation, and renewable integration, yet significant additional resources and strategic planning are essential to safeguard Colorado's energy future.

Levees
D+

Colorado's levee systems continue to lack consistent standards or regulations for evaluating or inspecting performance. As extreme weather events become more frequent, the importance of levees in protecting communities continues to grow. Nationally, efforts are underway to improve levee safety, including a one-time nationwide inspection, consolidation of data in the National Levee Database (NLD), and the development of model state programs and national guidelines. Colorado's levees, located in FEMA Region 8, are maintained by a range of public and private entities. However, over 70% of permitted levees were built before 1988, prior to the adoption of state design standards. At least 15 levee systems in the state have unknown ownership, and many unpermitted levees exist, especially in rural areas. A comprehensive statewide inventory is needed to assess risks and guide future investment in levee infrastructure.

Public Parks
C

Colorado proudly maintains 13 national parks and monuments, 11 national forests, two national grasslands, 43 state parks, and numerous open areas, recreation areas, city parks, and trails across the state. Parks are crucial to Colorado's economy, contributing approximately $65.8 billion annually to the state and supporting over 400,000 jobs. Despite their importance, many park agencies lack the financial resources to adequately maintain trails, restrooms, and more, especially as usage rates rise. The National Park Service (NPS) identified $558 million in deferred maintenance in the 13 parks and monuments managed in Colorado. In 2023, National Parks in Colorado had approximately 7.8 million visitors, a slight decrease since 2021, largely due to new timed entry systems and shuttles to accommodate the increasing number of visitors to Colorado parks. Meanwhile, park managers throughout the state are finding ways to adapt to extreme weather and make their parks more resilient.

Rail
B-

Colorado's rail system moves 400,000 tons of goods daily, including coal, crude oil, lumber, cement, and grain, while Amtrak provides over 228,000 annual boardings. Class I freight railroads handle most freight, with Class II and III lines connecting rural towns and key agricultural and resource-producing areas. Two year-round passenger rail services link Colorado communities and neighboring states. While the system meets acceptable standards overall, challenges persist. Short line railroads often lack funding to maintain the infrastructure needed for Class I connectivity, and passenger rail requires investment to expand service to underserved regions. Nearly all rail infrastructure is privately owned and funded, limiting public investment opportunities. As Colorado's population grows, strategic investment across both freight and passenger rail is essential to improve safety, efficiency, and connectivity. A well-financed, modern rail network will support economic growth and ensure long-term mobility for residents and industries across the state.

Roads
D+

Colorado's roads continue to face challenges due to mountainous terrain and poor funding. In Colorado, only 34% of roads are in good condition compared to 45% nationally. Additionally, the natural beauty and economic growth that draws new residents to the state has also led to roadway congestion. Colorado has some of the costliest maintenance challenges in the country as well inhibiting the necessary upkeep of roads. Lower investment levels across operation, maintenance, capacity, and innovation are borne by drivers. Colorado's cost per motorist due to deteriorated and congested roads is almost $1,900, about 35% higher than the national average. Additionally, even with the 6-cent increase in the state gas tax, effective July 2025, Colorado's transportation infrastructure remains underfunded, particularly as more trips are made by hybrid and electric vehicles.

Schools
D+

Schools in Colorado are aging, with an average age of 41 years, requiring significant repairs and retrofits. The estimated cost to address these deficiencies is over $13.5 billion, projected to rise to $17.5 billion by 2030. Declining birth rates and school enrollments have led to closures in some districts, while new schools are needed in others. Funding remains a significant challenge, with Colorado ranking 33rd in per-pupil spending. House Bill 24-1448, which will take effect in the 2025- 2026 school year, and be gradually implemented over 6 years, aims to increase funding for K-12 education, focusing on at-risk students and rural districts. Further, community involvement in funding decisions and increased state support is vital for improving school conditions and operations.

Solid Waste
C-

Solid waste refers to any discarded material, ranging from compostable items and industrial byproducts to everyday household trash. Colorado generates about 6.87 million tons of municipal solid waste (MSW) annually, which has decreased by 30,000 tons in the last four years. This waste is then transported to one of the 76 landfills in the state. Despite increased funding, the state continues to struggle with a declining share of waste being recycled or composted (known as diversion rates), limited reporting on closed landfills, and the resulting environmental impacts. Additional attention is needed to improve overall solid waste management, including through the promotion of recycling innovations, targeted initiatives, and supportive programs. If Coloradans begin to see their waste as a resource—such as nutrients or fuel—it can be transformed into something useful, benefiting the state both environmentally and economically.

Stormwater
C-

Colorado's stormwater infrastructure consisting of pipes, channels, and green infrastructure is essential for public safety, environmental protection, and economic resilience. However, the network is increasingly strained by urban growth, aging systems, limited funding, and climate-related threats. The 2013 floods, which caused over $2 billion in damage, exposed critical vulnerabilities in system capacity and resilience. Urbanization compounds the issue, with Denver reporting over 51% impervious land cover in 2025, projected to rise by 5% per decade. This expansion increases runoff and flood risks, especially in older areas with undersized or deteriorating infrastructure. Many systems lack the capacity to manage high-volume precipitation events, as seen in both localized flooding and statewide emergencies. Strategic investment is needed to modernize and expand stormwater infrastructure across Colorado.

Transit
C-

Colorado's transit agencies continue innovating in response to challenges in urban, rural, and resort transit systems. The state is served by approximately 60 transit agencies providing diverse transit options such as bus, light rail, commuter rail, demand-response services, and vanpools. Agencies throughout the state use both state and local policies, alternative transit operations models, technology, and regional collaboration to meet evolving needs. There has been an increased focus on transit and active transportation at state and local levels, helping to address funding gaps and improve first/last mile connectivity – key barriers that can make using transit difficult in some areas. However, the state's transit system has not yet fully recovered from the effects of the COVID-19 pandemic, when the state experienced nearly a 50% drop in unliked passenger trips. Continuing efforts by state and local policymakers, along with strong support from Colorado's voters, are expected to keep the state on track to surpass pre-pandemic service levels and increase conditions and access for Coloradans.

Wastewater
C

Colorado's wastewater infrastructure is challenged by aging systems, limited capacity, evolving regulations, and workforce shortages. Many facilities operate with infrastructure at or beyond its intended lifespan, requiring frequent maintenance and costly upgrades. Population growth adds further strain. The state estimates $6.2 billion in need for systems serving over 10,000 people. While funding comes from state, federal, and local sources, rate-based revenues often fall short, delaying critical projects and requiring rate increases. Emerging contaminants like per- and polyfluoroalkyl substances (PFAS) and the push for advanced technologies, including wastewater reuse, highlight the need for strategic investment. The Colorado Wastewater Utility Council (CWWUC), in collaboration with ASCE, identified aging infrastructure and slow permitting as major barriers to timely upgrades and funding access. To protect public health, meet regulatory standards, and build climate resilience, Colorado must prioritize infrastructure investment, streamline permitting, and support workforce development and innovation to ensure long-term system sustainability.

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