Massachusetts Grades

Bridges	Dams	Drinking Water
D+	D+	D

Roads	Stormwater	Transit
D+	D+	C-

Wastewater
D

D+ OVERALL GPA

About BSCES

BSCES is the oldest ASCE section in the nation and represents thousands of civil engineering professionals who live and work in Massachusetts. We believe discussing the issues detailed in this Report Card will lead to a greater public understanding and encourage community leaders, the state legislature, and our congressional delegation to formulate policies to address these critical needs.

About the Grades

The 2026 Report Card for Massachusetts's Infrastructure was written by a committee of more than 50 civil engineers across Massachusetts 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 Establish Sustainable, Long-Term Funding Mechanisms

- **Stabilize Transportation Funds:** Transition Chapter 90 program increases to predictable, long-term investment and index funds to construction cost inflation. Permanently dedicate a consistent share of Fair Share Amendment revenues to address municipal, MassDOT and MBTA asset backlog.
- **Expand Local User-Fee Structures:** Mandate public drinking water and wastewater systems to implement full-cost pricing structures where local user rates directly cover operations, maintenance, and future capital needs. Concurrently, expand municipal stormwater utilities beyond the current 28 communities to tie revenue to runoff generation.
- **Maximize Federal Funding:** Advocate for sustained State Revolving Fund (SRF) allocations and state grants to maintain 0% interest loans for PFAS mitigation, lead line replacements, and cybersecurity preparedness. Leverage federal discretionary awards to secure maximum matching funds, restore cut FEMA Dam Safety grants, and expand rebates for nitrogen-reducing septic upgrades.

2 Modernize Regulatory Standards, Project Development, and Performance Metrics

- **Streamline Environmental Permitting:** Establish uniform criteria across the federal, state and local authorities to accelerate the regulatory approval process for municipality-owned culverts, small bridges, and dam projects. Concurrently, update the Massachusetts Stormwater Handbook and related municipal design criteria to reflect current NOAA Atlas rainfall data, replacing legacy 2008 standards.
- **Adopt Standardized Performance Metrics:** Mandate a statewide framework to track municipal stormwater asset inventories, document annual nutrient loading reductions, and establish an updated, online state-managed dam safety database. Adopt innovative, risk-based dam safety evaluations as a regulatory requirement to predict failures.
- **Prioritize Climate Resilience and Safety Improvements:** Mandate climate resilience design criteria across highway and transit programs. Prioritize asset electrification, depot modernization, and foundation armor for low-lying coastal spans or scour-critical bridges. Concurrently, lower capital costs by integrating stormwater, utility, complete streets, and safety retrofits directly into routine preservation projects.

3 Proactively Invest in Workforce Recruitment and Retention

- **Launch Specialized Training Programs:** Prioritize establishing a dedicated Water and Wastewater Sector Workforce Development Fund to reverse the critical shortage of licensed treatment plant and system operators across the Commonwealth.
- **Restore Agency Staffing Baselines:** Provide competitive, cost-of-living-adjusted wages for municipal and state departments to fill high-vacancy roles. Concurrently, restore technical assistance staffing levels at MassDEP and increase the number of Dam Safety Program personnel.
- **Mitigate Cost-of-Living and Housing Pressures:** Address public sector recruitment and retention bottlenecks by exploring commuter benefits, municipal housing partnerships, and localized workforce incentives to allow essential personnel to live and work within the high-cost communities they serve.

Contact Us

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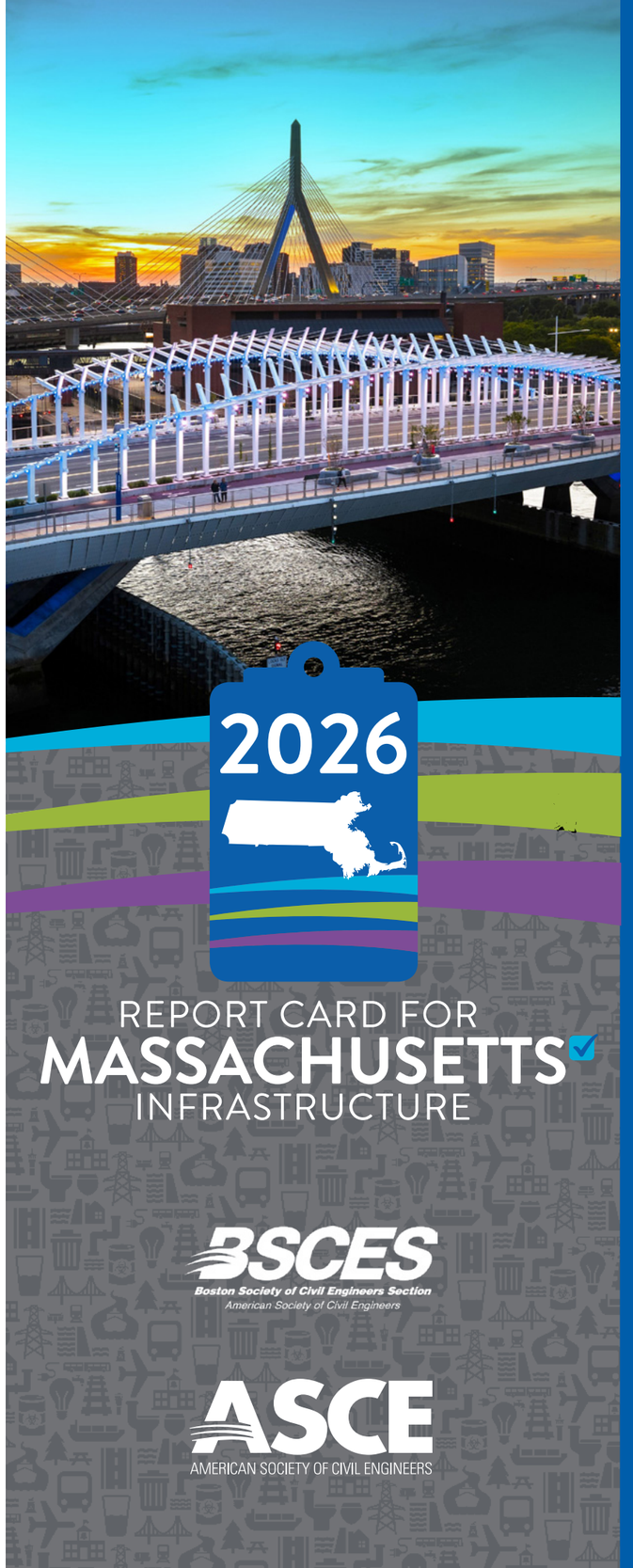

2026

REPORT CARD FOR MASSACHUSETTS INFRASTRUCTURE

BSCES
Boston Society of Civil Engineers Section
American Society of Civil Engineers

ASCE
AMERICAN SOCIETY OF CIVIL ENGINEERS

INFRASTRUCTURE MATTERS

The Boston Society of Civil Engineers Section (BSCES) of the American Society of Civil Engineers (ASCE) released its inaugural Infrastructure Report Card in 2026, delivering data-driven evaluation of statewide physical systems. Civil engineers, academia and industry experts volunteered countless hours to analyze publicly available data to evaluate our infrastructure against the nationally standardized ASCE grading rubric in seven core categories. Massachusetts' infrastructure is approaching a critical turning point as aging assets, decades of underfunding, and increasingly extreme weather are increasingly straining systems, notwithstanding the exceptional expertise, maintenance efforts, and recent funding achievements of public agencies.

The Commonwealth benefits from a robust tax base and a highly-educated populace, yet it's one of the oldest built and most challenging maintenance environments in the United States. The findings across this report reflect a structural funding deficit and assets performing well past the engineered lifespan. Massachusetts possesses the oldest bridge inventory in the nation and an estimated $1 billion annual funding gap over the next decade. Similarly, nearly half of the Commonwealth's monitored dams have exceeded their 75-year design life, while municipal roads, stormwater systems, drinking water networks, and wastewater systems face chronic capital shortfalls and workforce shortages.

Furthermore, climate change is an active operational disruptor and compounds maintenance challenges. Intense precipitation events, rising sea levels, and severe winter weather are actively overwhelming undersized municipal culverts, legacy combined sewer systems, and vulnerable coastal transit lines. Stormwater runoff now stands as the leading cause of surface-water impairment statewide, while the Massachusetts Bay Transportation Authority (MBTA) navigates a staggering $24.5 billion State of Good Repair backlog for transit related projects alongside federal safety oversight.

The Report Card for Massachusetts Infrastructure aims to raise public awareness of the importance of modern and well-maintained infrastructure. To improve the infrastructure grade and safeguard public health, equity and economic vitality, Massachusetts must move past temporary funding supplements to establish predictable and sustainable funding structures. Maintaining our shared infrastructure is an inherent civic responsibility of our Commonwealth.

How You Can Get Involved

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

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.orgtake-action.

The 2026 Report Card on Massachusetts' Infrastructure

gave the state an overall G.P.A. of D+. Massachusetts's civil engineers studied seven infrastructure categories. Of those seven, one infrastructure category is in mediocre condition, and six categories are in poor condition.

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

Bridges
D+

Massachusetts' 5,311 bridges are critical for mobility and freight movement in the Commonwealth. However, these vital links are aging and now average 65 years old. While most bridges remain serviceable, the Commonwealth faces growing maintenance and safety challenges: 24.3% of bridges are in good condition, 66.3% are in fair condition, and 9.4% are in poor condition. Another 459 bridges have posted load restrictions, and 44 are closed. As of 2024, Massachusetts had the oldest bridge inventory nationally and ranked third-worst for poor bridge area on the National Highway System. Over the past decade, bridge closures increased by 27%, while weight postings rose by 4%, underscoring the urgency of sustained investment. Recent federal funding through the Infrastructure Investment and Jobs Act (IIJA) and state support through Chapter 90 have provided important resources. However, MassDOT estimates that $1 billion in annual bridge funding will be needed for the next 7 to 10 years to address the growing backlog.

Dams
D+

Massachusetts dams provide water supply, enable flood control, produce hydropower, and support fire safety and recreation. There are 2,829 dams along 8,000 miles of river; 45% publicly owned and 55% privately owned. About 50% are regulated by Massachusetts, while Approximately 47% of smaller dams are not regulated, which are now aging in place, and creating a higher risk for failure.

Among the state regulated dams, 297 dams are classified as high-hazard potential, 12% are in poor condition, and 3% are in unsatisfactory condition. Of dams listed in the National Inventory of Dams (NID), 49% (658) dams have exceeded their 75-year design life. Despite these risks, Massachusetts has a strong oversight program for compliance including emergency action planning; 98% for high-hazard dams and 84% significant-hazard dams.

Given the rise of more floods and intense precipitation events, aging and obsolete dams pose higher safety risks, reinforcing the need for increased funding for dam safety and removal projects and resilience programs.

Drinking Water
D

Massachusetts has over 1,700 public water systems supplied by over 3,700 public drinking water wells and 250 surface water supplies that serve over 90% of the state's population. Drinking water system capacity and aging water mains are primary concerns for communities facing supply limitations due to contamination or other impacts. Massachusetts' water supplies are also vulnerable to climate change, which can impact supply capacity and quality. Limited funding prevents most water suppliers from keeping up with water main replacement, which can cause pipe failures, leakage, and reduced capacity for fire flow. Lead service lines also exist in older, urban communities, as well as in some suburban communities. Sustained funding for drinking water is needed to ensure reliable and safe drinking water for residents and businesses into the future. Therefore, the state legislature should prioritize establishing the Water Sector Workforce Development Fund to address the shortage of licensed water system operators in the state.

Roads
D+

Massachusetts has one of the oldest roadway systems in the United States. Of the Commonwealth's 76,829 lane-miles, the Massachusetts Department of Transportation (MassDOT) owns and maintains 9,526 lane miles, about 12.4%, of the total public lane miles. The remaining lane-miles in Massachusetts are owned and maintained by the municipalities, by government agencies such as the Massachusetts Department of Conservation & Recreation (DCR), the National Park Service, or are privately owned and maintained. State agencies take a data-based approach to managing its roadway systems and MassDOT facilitates a series of policy-targeted funding programs to invest in capital and maintenance projects. However, the Commonwealth faces historic levels of aging assets, funding shortages, and harsh winter weather conditions. Decades of inadequate funding, increased vehicle miles traveled (VMT), accelerated storm damage from climate change, workforce shortages, increases in construction costs, and maintenance backlogs have led to the degradation of road conditions and slowed delivery of planned transportation improvement projects.

Photo: Ashley Reservoir, Holyoke, Massachusetts; Tighe & Bond

Stormwater
D+

The Massachusetts' stormwater system remains functional but continues to be increasingly strained. Much of the infrastructure was built to outdated standards that do not account for current development, regulatory requirements, or more intense rainfall. Aging assets, undersized culverts, and legacy combined sewer systems contribute to flooding, infrastructure damage, and pollutant discharges—challenges compounded by climate change. Stormwater runoff is the leading cause of surface-water impairment statewide, degrading rivers, lakes, and coastal waters and contributing to beach closures and public health risks. Many older developed areas lack modern stormwater controls, allowing unmanaged runoff to persist. Operation, maintenance, and funding vary widely across communities, and regulatory demands continue to expand without a dedicated statewide funding source. Massachusetts faces an estimated $20 billion stormwater investment gap over the next 20 years. Without sustained investment, updated standards, and coordinated action, risks to public safety, water quality, and resilience will continue to grow.

Transit
C-

Transit in Massachusetts is defined by statewide coverage provided by the Regional Transit Authorities (RTAs), and Massachusetts Bay Transportation Authority (MBTA) subway, bus and commuter rail system. Transit is a major priority in Massachusetts, with recent progress including the elimination of MBTA subway slow zones, safety culture improvements, Green Line and Commuter Rail expansions, real-time transit tools, and bike-share growth to improve first- and last-mile connections. However, public transit systems in Massachusetts face significant challenges due to aging infrastructure, historic underfunding, and altered post pandemic ridership patterns. The MBTA continues to face major maintenance, staffing, and financial challenges, facing a $24.5 billion State of Good Repair backlog. While state funding has supported fare-free service at several RTAs, capital constraints have forced some agencies to operate paratransit and demand-response vehicles beyond their useful life. The Commonwealth must transition away from temporary funding measures and establish permanent, sustainable funding mechanisms that accelerate modernization, expand workforce, adapt to our changing climate and provide regional equity.

Wastewater
D

Like many other states with older cities and towns, wastewater system capacity is a concern in Massachusetts due to aging sewer system infrastructure. Failing pipes and deteriorating structures allow excessive infiltration and inflow that can compromise capacity leading to backups and overflows. The Commonwealth's sewer systems are also vulnerable to climate change, which can exacerbate these conditions and threaten public health and water quality. Investment needs continue to grow as communities struggle to keep up with sewer system maintenance needs. Massachusetts has 19 communities with combined sewer systems that have federal requirements to reduce combined sewer overflows (CSOs). Unfortunately, CSO reduction projects can be very costly. Similarly, wastewater treatment plant discharge permit renewals require reductions in pollutant concentrations to improve the quality of receiving waters, and the associated projects to improve treatment are just as costly. Sustained funding is needed in Massachusetts to allow system owners to maintain reliable wastewater systems that continue to protect public health and the environment.

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