

CONNECTICUT GRADES

Bridges



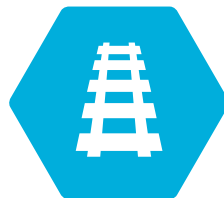
C-

Drinking Water



C-

Rail



B

Roads



D+

Wastewater



D+



About the Grades

Infrastructure is graded based on eight criteria: **capacity, condition, funding, future need, operation and maintenance, public safety, resilience, and innovation**. ASCE grades on the following scale and defines these grades as:



**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

If Connecticut is ready to improve our infrastructure, ASCE in Connecticut offers some suggestions to raise the grade:

- 1 CONNECTICUT SHOULD CONTINUE TO PRIORITIZE INVESTMENT IN INFRASTRUCTURE DURING CHALLENGING BUDGET CYCLES.** In a recent poll, 42% of businesses and industry associations indicated that high traffic volumes and congestions on state roads hamper or limit the growth of their markets, and approximately 15% have considered relocating due to these concerns. We need robust and sustainable investment in our infrastructure to incentivize businesses to relocate or stay in Connecticut, which in turn will strengthen our economy, lessen the impact of challenging budget cycles, and improve our overall quality of life.
- 2 CONNECTICUT MUST READY ITSELF FOR INCREASINGLY SEVERE STORMS BY MODERNIZING ITS INFRASTRUCTURE.** Wastewater and drinking water networks, roadways, bridges and our key infrastructure systems must be resilient against the consequences of climate change. Our infrastructure should not only be able to withstand increasingly severe storms, but support emergency response and facilitate a return to regular order as efficiently as possible.
- 3 THE STATE AND LOCALITIES SHOULD INCREASE INVESTMENT IN INFRASTRUCTURE TO HELP REDUCE COSTS FOR RESIDENTS DOWN THE ROAD.** Drivers in the state pay up to an average of \$2,378 each year in congestion-related delays and vehicle operating costs. Robust investment in our infrastructure not only decreases the amount of money drivers pay on vehicle repairs, but it improves access to better employment and strengthens our quality of life.

About ASCE-CONNECTICUT

The Connecticut Society of Civil Engineers is a professional society dating back to 1884. We are the local branch of the American Society of Civil Engineers. Members are civil engineers working in many different capacities, including designers, contractors, facility managers, town and state engineers, and in many different disciplines, including structural, geotechnical, hydraulic, environmental, survey engineering. We all share a common passion for designing, building and maintaining the structures and systems that allow our society to function. At monthly meetings we discuss topics that cover the gamut of civil engineering. We host day-long seminars to allow members to learn new methods and industry trends. We support the student chapters at the civil engineering schools in the state. We close out our year's activities by honoring the individuals who have distinguished themselves in their profession and firms who have completed projects that have enhanced our state and advanced our profession.

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REPORT CARD FOR CONNECTICUT'S INFRASTRUCTURE

2018

ASCE
AMERICAN SOCIETY OF CIVIL ENGINEERS

Infrastructure Matters

Today, more than ever, the people of Connecticut are concerned about the State's economy and are trying to find solutions that will make Connecticut more attractive to businesses and future residents. A key component of any economy is its infrastructure. This includes transportation networks, energy and clean water distribution systems, and wastewater collection. Infrastructure is the glue that holds our modern-day cities and towns together. Businesses rely on transportation systems to move goods and people, power and water for industry, and communications to reach customers and conduct business transactions. The better these infrastructure systems are, the greater the opportunities for prosperity.

The Connecticut Society of Civil Engineers, in conjunction with the American Society of Civil Engineers, looked at five important infrastructure networks: roads, bridges, rail transportation, drinking water systems and wastewater systems. Grades ranged from a D+ to a B, with an average grade of a C-. Age is a reoccurring challenge across many of the categories. Much of Connecticut's infrastructure is over 50 years old, meaning it is beyond its intended life. While our roadways, bridges and more are still functioning and safe, they are worn out, less reliable, and more congested. Investing in infrastructure will ensure we provide the opportunity for our economy to grow in a sustainable fashion and support ongoing prosperity.

This report looks at the five categories of infrastructure, highlighting the significant problems and identifying several solutions.

How You Can Get Involved

- 1 Get the full story behind this Report Card at www.InfrastructureReportCard.org/Connecticut.**
- 2 Find out the condition of the infrastructure near you on the Save America's Infrastructure app available on iTunes and GooglePlay.**
- 3 Ask your elected leaders what they're doing to make sure your infrastructure is reliable for the future. Use your zip code to find your list of elected officials at www.infrastructurereportcard.org/take-action.**

2018 CONNECTICUT'S INFRASTRUCTURE REPORT CARD

The 2018 Report Card for Connecticut's Infrastructure gave the state an overall GPA of C-. The good news is there are solutions to all of these challenges, and we can raise Connecticut's infrastructure grades. By learning more today about the conditions of the infrastructure you use every day, you too can help raise the grade.

BRIDGES

In Connecticut, there are 79 million bridge crossings each day and 7.8% of bridges in the state are structurally deficient, compared with 8.9% nationwide. Some of the state's largest and most heavily traveled bridges are those with the structurally deficient (otherwise known as a "poor" condition) rating, meaning significant funding will be needed to bring these bridges back to a state of good repair. While the percentage of structurally deficient bridges is small, 62.6% of bridges are in fair condition, which puts them at risk for slipping into the structurally deficient category. Fortunately, funding has been allocated to continue the initial phases of Governor Malloy's \$100 billion, 30-year Let's Go CT! transportation plan through 2020, bolstered by \$250 million in General Obligation Bonds. However, 59% of bridges in the state are over 50 years old and beyond their design life, which will require new sources of funding to ensure our bridge network is properly maintained and improved to meet the future needs of the traveling public.



RAIL

Connecticut has a significant passenger and freight railroad system that provides service within the state and commerce between the major metropolitan areas of Boston and New York. Over 3.6 million tons of freight are moved annually on 10 freight railroads. Over 3.5 million intercity passengers are served on Amtrak's Northeast Corridor. The current Metro-North Railroad system serves approximately 41 million passengers annually and is the busiest railroad line in the country. The Connecticut Department of Transportation has invested nearly \$780 million in the New Haven-Hartford-Springfield Line. While the existing rail and track infrastructure is in generally good condition, there is still a continuing need to invest in rail system modernization and replacement across both the freight and passenger network. Rail is key to sustaining economic development and competitiveness with a focus on increasing the capacity of the rail system to accommodate increased ridership and freight tonnage.



ROADS

Connecticut has over 20,000 miles of public roadways that form an important link, crucial for residents of the state and for connecting important commercial and industrial centers to the east, west and north. However, more than half of the network is more than 55 years old and a majority of the roads are either in poor or fair condition. The condition of the road network is anticipated to further deteriorate if it does not receive significant investment. The combination of poorly maintained roads and congestion costs Connecticut road users approximately \$2.4 billion annually. It is anticipated that approximately \$30 billion will be needed to provide roadway facilities that would meet expectations of roadway users within 30 years. While some funding through bonds have been provided in support of the Let's Go CT! plan, more is needed to maintain the long-term solvency of the Special Transportation Fund, bolster the state's economic competitiveness and improve residents' quality of life.



WASTEWATER

Most of Connecticut is served by sanitary sewer systems; however, Connecticut has a wide variety of wastewater infrastructure. This infrastructure is aging and needs major repairs and rehabilitation. A \$4.6 billion investment is required to eliminate sanitary sewer overflows alone. Robust planning is necessary to ensure that limited funds are used where needed most. Also of significant concern is the impact of increasingly severe storms on the state's wastewater infrastructure. Connecticut is home to almost 50 sewage plants that have been identified as at "high-risk" for flooding during major storms. Due to the tangible effects of climate change, wastewater facilities will need to be more resilient and take steps to address the impacts of increased flooding to maintain operation during extreme events.



DRINKING WATER

Connecticut has high-quality drinking water and generally well-maintained water systems, but these systems are aging and in need of major repair and rehabilitation, estimated at over \$4 billion through 2034. Drinking water system operations, including infrastructure improvements, are funded primarily through a rate-based system. The average Connecticut household pays an average of approximately \$500 per year for clean, potable drinking water. Additional asset management planning will be needed to ensure the limited amount of available funding is used where it is needed most. In addition, as the effects of climate change are increasingly being felt, water systems will need to evaluate their vulnerability and take steps to mitigate the impact while maintaining service to their customers.

