WHAT CAN WE DO TO RAISE THE GRADES?

To raise California’s infrastructure grade, ASCE developed the following four recommendations:

1. **Promote Effective and Collaborative Leadership**
   - ASCE encourages all levels of government, business, labor, and nonprofits to collaborate to address challenges associated with California’s aging infrastructure. Effective leadership within agencies is critical, and those individuals should be empowered with applicable decision-making authority. Streamlining the project permitting process across infrastructure is also necessary, with safeguards to protect the national environment.

2. **Develop Smart Plans to Better Identify Funding Needs**
   - Asset management plans enable state and local agencies to make informed decisions on where—and when—to spend limited public funds. Policies should be enacted that require high quality data gathering and regularly scheduled maintenance. Further, life cycle cost analysis and risk analysis, which are valuable strategies to extending the lifespan of an asset and saving the taxpayer money in the long run, should be employed for projects costing greater than $5 million.

3. **Increase State and Local Funding**
   - Each category evaluated in this report indicates currently available funding to state and local agencies is not adequate to maintain sustainable and safe California infrastructure systems. Long-term funding strategies should be established, based on new and sustained revenue sources, including local and state revenue. Incentives may be appropriate, and adequate funding for innovative new materials, technologies, and processes is imperative.

4. **Inform the Public and Raise Awareness**
   - There is a need for additional consumer education on the current funding needs and the negative impacts of delaying action to fund infrastructure improvements statewide. The education needs to also extend to the local and state legislators, locally elected boards and commissions, as well as to the media.

**ABOUT THE GRADES**

Across the country, budget issues and deferred maintenance are taking their toll on critical infrastructure systems constructed by the generations before us and which now must be maintained and modernized. The analysis in this report card and associated grades are intended to increase understanding by the public and the state and local legislators of the importance and value of long-term consistent infrastructure investments, the role of leadership and planning, and the need to prepare for the future. The grades reflect the condition of the infrastructure, and not the diligent local agency personnel who are doing their best to manage, repair, renew, and replace aging systems, with the limited available resources. This Report Card is intended to reflect current infrastructure conditions and be a tool to help agencies request and receive the resources they need.

The 2019 Report Card for California’s Infrastructure was completed by a committee of over 100 professionals and experts from California who dedicated their valuable time to collect and evaluate existing data, assess the infrastructure, document their findings, and develop recommendations. The committee worked with staff from ASCE National and ASCE’s Committee on America’s Infrastructure to provide a snapshot of our infrastructure, as it relates to us at home, and on a national basis.

**WHY IS INFRASTRUCTURE IMPORTANT TO US?**

Californians use infrastructure every day. Our roads, bridges, and transit networks allow us access to our iconic coastlines, lakes, and vineyards. Water systems deliver clean drinking water to our homes, communities, and businesses. School buildings provide a safe place for our children to learn. Wastewater collection and treatment systems protect our lakes, rivers, and beaches from raw sewage, E. coli and other toxins.

Our infrastructure systems play a critical role in continued economic prosperity and the preservation of our quality of life. Unfortunately, our state’s infrastructure renewal and replacement programs have been significantly underfunded for a long time. While the state Legislature, municipalities, and California voters have made strides in recent years to raise additional revenue for our infrastructure, we have a lot of catch-up to do, and large funding gaps remain.

Additionally, we’re facing significant new challenges. In May 2018, California’s economy surpassed that of the United Kingdom to become the world’s fifth largest. Over the next 20 years, California’s population is expected to grow by another 25% by over 10 million people. This economic activity and new population requires additional supporting infrastructure. Meanwhile, the climate is changing. California is already grappling with precipitation whiplash – extreme periods of drought followed by extreme periods of rainfall – and sea level rise and increasingly severe storms are also expected.

As the stewards of our infrastructure, California’s civil engineers have a moral duty to advocate for sustainable infrastructure capable of supporting our state’s robust economy, while maintaining public safety and our quality of life. Join us in our mission to increase infrastructure investment to repair our existing networks and plan for California’s future.

**THE FULL STORY**

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

Find out the condition of the infrastructure near you on the Save America’s Infrastructure app available on the Apple App store and Google Play.
The 2019 Report Card for California’s Infrastructure gave the state an overall GPA of C-. The good news is there are solutions to these challenges and we can raise California’s infrastructure grades.

AVIATION
California has 26 commercial service airports and 217 general aviation airports. Based on the report, Airports Administrators has A+ ranking nationally within the top 100 Commercial Service Airports, with Los Angeles International Airport ranked fifth. The budget for California Airports Administration increased over 16%, while other factors have also impacted airport operations: the need to protect the environment, social equity, and accessibility; the need to reduce greenhouse gas emissions; and new demands for security and emergency management, tighter regulatory requirements including air quality regulations, and modernization to incorporate new technologies to maintain competitiveness. California ports are in satisfactory condition for the time being, but require significant improvements to maintain existing conditions and meet new demands. The funding goal, to reduce the number of major maintenance and repair projects over the next 10 years, and available revenue has been insufficient to fill the gap as needs to outpace available funds.

ENERGY
California ports play a vital role in maintaining waterborne trade essential to the nation’s economy. In 2017, California’s ports handled 40% of all containers entering the U.S. They are responsible for handling over 100 million TEUs (Twenty-foot Equivalent Units) per year. In 2019, federal, state, and local governments, and many private organizations have been working to ensure California’s ports meet the sustainability standards of today and the future. Additional requirements for energy system improvements, including air quality regulations, and modernization to incorporate new technologies to maintain competitiveness. California ports are in satisfactory condition for the time being, but require significant improvements to maintain existing conditions and meet new demands. The funding goal, to reduce the number of major maintenance and repair projects over the next 10 years, and available revenue has been insufficient to fill the gap as needs to outpace available funds.

REVENGE
California’s waste disposal infrastructure principally consists of the management of generated hazardous waste and the cleanup of contaminated sites. In 2017, California generated 3.8 million tons of hazardous waste and cleaned up 1,800 contaminated sites. It is estimated that 90,000 properties in California are contaminated with some form of toxic substances. The cost of operating California’s existing hazardous waste infrastructure is around $34 billion per year, with most of the treatment costs occurring outside of the state due to the complexity of managing hazardous waste. 

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