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City Administrator's Office

**MEMORANDUM**

**TO:** HONORABLE MAYOR &  
CITY COUNCIL

**FROM:** Vitaly B. Troyan, P.E.

**SUBJECT:** 2012 California Infrastructure Report Card **DATE:** April 18, 2012

City Administrator  
Approval

Date

4/20/12

**INFORMATION**

Last month the American Society of Civil Engineers (ASCE) issued a report card describing the condition of California's infrastructure, including transportation, ports, aviation, wastewater, and solid waste; all systems that are present in the City of Oakland. Long term disinvestment in our State's infrastructure is having a negative impact on California's competitive advantage in promoting economic development, as well as maintaining existing facilities. The minimal funding that exists is not enough to maintain the infrastructure that supports major industries as well as small businesses and residents, much less attract or contribute to new development.

The State's Report Card grades for each infrastructure component are as follows:

California State Report Card Grades 2012		
Infrastructure	Description	Grade
Transportation	Streets, highways, bridges, rail systems and transit operations	C -
Solid Waste	Public and private facilities: collection, processing, recycling, and sanitary landfills	B
Wastewater	Sewers, treatment plants, effluent disposal	C +
Urban Runoff	Underground pipes, culverts, concrete channels, inlets, and other drainage structures, natural creeks, and flood control facilities	D
Ports	Seaports: linkages from ship to shore	B -
Aviation	Airports: Commercial, foreign and domestic travel and air cargo	C +
Levees/Flood Control	Channels, levees, retarding basins, dams, and pump stations	D
Water	Collection, storage, treatment, delivery, and security systems	C

A pamphlet summarizing the condition of each infrastructure element is enclosed. The electronic link to the full document is here:

[http://www.ascecareportcard.org/citizen\\_guides/Citizen's%20guide%202012\\_Revised.pdf](http://www.ascecareportcard.org/citizen_guides/Citizen's%20guide%202012_Revised.pdf).

The Public Works Agency is preparing a similar report on the status of Oakland's infrastructure, which will be coming to you for discussion shortly.

Respectfully submitted,



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VITALY B. TROYAN, P.E.  
Director, Public Works Agency

For questions please contact IRIS STARR, INFRASTRUCTURE PLANS AND PROGRAMMING DIVISION MANAGER at 510-238-6229.

Attachments

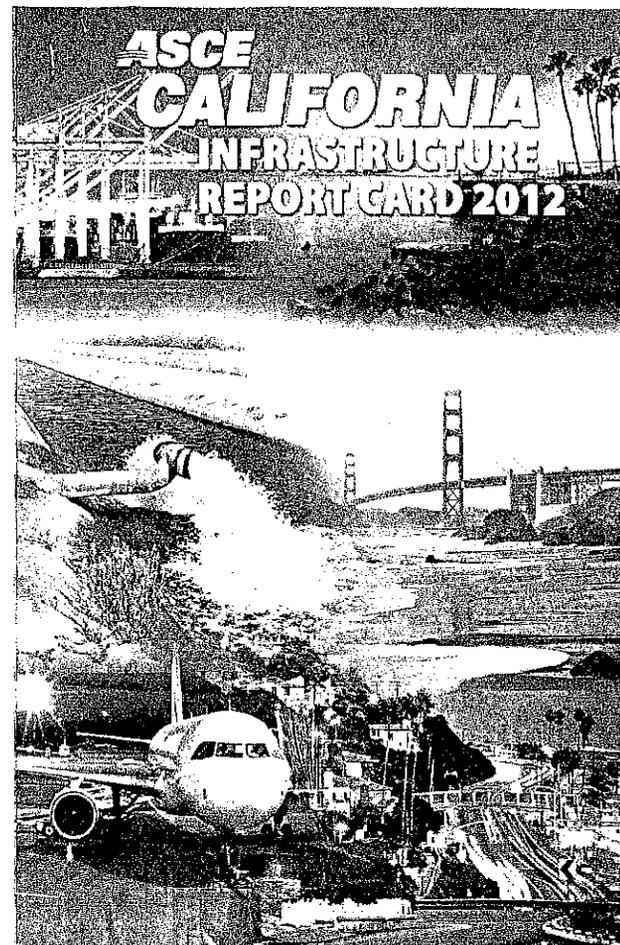
--ASCE Report Card Pamphlet for the State of California.

# ASCE CALIFORNIA INFRASTRUCTURE REPORT CARD 2012

2012 Report Card on California's Infrastructure

	2006	2012
Aviation	C-	C+
Levees / Flood Control	F	D
Ports	C+	B-
Solid Waste	B	B
Transportation	D+	C-
Urban Runoff	D+	D+
Wastewater	C+	C+
Water	C+	C
<b>California's Infrastructure GPA</b>	<b>C-</b>	<b>C</b>

*Annual Investment Needs (Billions)* \$37 \$65



## C+ Aviation

The State of California is experiencing massive growth with a projected population in excess of 54,000,000 by the year 2040. Significant actions must be taken to meet the anticipated population demand requirements for air transportation, particularly commercial, foreign and domestic travel, and air cargo and to maintain the significant economic development provided by this industry. This demand is a result of consistent growth within the state as well as limited capacity and increasing restrictions on aviation infrastructure growth within regions. California must ensure efficient air travel and cargo transport by expanding airports and building regional airports to distribute the influx of passengers and cargo or risk losing its competitive edge. Estimated annual capital investment needed to move to a "B" grade is \$300 million per year over the next ten years.

## D Levees / Flood Control

The backbone flood control and drainage systems serving California cities including channels, levees, retarding basins, dams and pump stations vary widely in condition and capacity to prevent flooding from major storms. In California's Central Valley, there is a real potential for catastrophic disaster to life and property from the failure of fragile levee systems. These levees protect thousands of homes, businesses and critical community infrastructure. Current flood control funding shortfalls across the state, based upon available budget estimates for regional flood control facilities alone are in excess, of \$2.8 billion per year over the next 10 years.

## B+ Ports

The California sea ports provide a vital link for goods movement from ship to shore, and connection to the National Highway System and the transcontinental railroad network. With the cooperation of city, county, state, and federal agencies, the California sea ports own and operate an extensive infrastructure system that facilitates the movement of cargo from ship to shore and vice-versa. The California sea ports consist of eleven large to moderate-sized maritime facilities. There are more than 20 other smaller craft harbors and navigable landings, but they are not included in this assessment. The report card includes an infrastructure assessment using existing records and documents. The overall grade for the California sea ports based on a weighted factor is "B+" with total investments of \$1.7 billion per year for the next 10 years for a total investment of \$10.7 billion.

## B Solid Waste

Solid waste management systems in California are operated by a combination of private and public facilities, which include collection, processing, and sanitary landfills. Nearly 65 percent of solid waste generated is diverted from landfills due to recycling and diversion programs. Current statewide landfill capacity is 25 years, giving California sufficient capacity through the year 2037. The California Solid Waste Management infrastructure is assigned a "B" grade based on a thorough review of its facilities' condition, capacity, operations and security. Solid waste management systems require continued current annual funding levels of \$8 billion per year for the next 10 years to maintain the current grade.

## C Transportation

California's transportation infrastructure, consisting of streets, highways, bridges, rail system and transit operations, is suffering from a lack of sufficient investment for the operations and maintenance of existing facilities and dedicated funding sources for new improvements to the system. The economy and growth of California have long been associated with an advanced transportation system, and continued public investment is needed. The overall grade for transportation infrastructure in California has been determined to be a low "C-" due to existing conditions and the lack of adequate funding. There is a need for \$10 billion per year more to be spent for ongoing maintenance of existing facilities and an investment of \$36.5 billion in order to raise Transportation to a "B" grade.

## D+ Urban Runoff

Funding for urban stormwater infrastructure has failed to keep pace with the requirements of state and federal regulation for surface water, and surface water pollution persists over 20 year after regulation has been in force. Improvements to urban runoff programs and infrastructure have been substantial over the past decade, but these improvements have been overshadowed and outpaced by additional regulatory requirements in NPDES permits and by obligation placed on permit holders under the total maximum daily loads (TMDL) program. Simply put urban runoff stormwater programs are underfunded. Improving the urban runoff infrastructure grade from "D+" will take a substantial new investment, estimated at \$6.7 billion per year for the next 10 years. Investment in key program areas include infrastructure, regulation, and the control of sources of pollutants in our environment.

## C+ Wastewater

Significant wastewater infrastructure investments are needed to address renewal and replacement, maintenance, security and reliability funding. These investments would increase the reliability and sustainability of infrastructure and protect our coastal and inland water resources into the future. The annual investment needed to raise our Wastewater infrastructure grade from a "C+" to a "B" is \$4.5 billion annually for the next 10 years. California's 100,000 miles of sewers and over 900 wastewater treatment plants generally perform adequately to protect the water resources of the state by managing the approximately 4 billion gallons of wastewater generated every day by California's citizens and businesses. Nevertheless, the condition and performance of California wastewater infrastructure (sewers, treatment plant and effluent disposal) vary significantly across the state and from agency to agency. The wastewater collection systems continue to require significant investments to be in compliance with the state-wide Waste Discharge Requirements adopted in 2006.

## C Water

California's water infrastructure is vital to the economic well-being, environmental integrity and overall quality of life of all Californians. Water received a grade of "C", which is a reduction from the 2006 grade of "C+". The ability to meet the water needs of existing and future Californians is not only dependent on our available supplies, but also on the condition of the numerous facilities required to collect, store, treat, and deliver that water to customer. Significant investments are still needed to address renewal and replacement, maintenance security and reliability for the State's water infrastructure. These investments will move water supply and related infrastructure closer to a path of sustainability. The annual investment needed for the next 10 years is estimated to be \$4.6 billion.