

APPENDIX 10A

U.S. CUMULATIVE INFRASTRUCTURE NEEDS FOR 2016-2025 BASED ON 2015 TRENDS

From the 2017 Infrastructure Report Card by the American Society of Civil Engineers (ASCE) at <https://www.infrastructurereportcard.org/>
All Values in Billions of Constant 2015 Dollars

Infrastructure Systems	Total Needs	Est. Funding	Funding Gap	Score Card	Estimated National Impacts
Surface Transportation (1)	\$2,042.0	\$941.0	\$1,101.0		
Bridges				C+	56,007 (9.1%) of nation's bridges were structurally deficient in 2016.
Roads				D	21% of highways in poor condition. 2 of 5 miles of interstates are congested.
Transit				D-	81% of citizens live in urban areas but only 51% can use public transit for groceries.
(U.S. Department of Transportation)					
Water/Wastewater Infrastructure (1)	\$150.0	\$45.0	\$105.0		
Drinking Water				D	6 billion gallons of treated water lost every day due to water main breaks.
Wastewater				D+	Demand on treatment plants will grow more than 23% by 2032.
(U.S. Army Corps of Engineers)					
Electricity (Energy) (1)	\$934.0	\$757.0	\$177.0	D+	3,571 total power outages reported in one year.
(U.S. Department of Energy)					
Airports (Aviation) (1)	\$157.0	\$115.0	\$42.0	D	U.S. Airports serve 2 million passengers per day.
(U.S. Department of Transportation)					
Inland Waterways & Marine Ports (1)	\$37.0	\$22.0	\$15.0		
Inland Waterways				D	49% of vessels experience delays across the inland waterway system.
Marine Ports				C+	99% of America's overseas trade passes through ports.
(U.S. Army Corps of Engineers)					
Dams (2)	\$45.0	\$5.6	\$39.4	D	15,498 (17%) of dams identified as high-hazard potential.
(U.S. Army Corps of Engineers)					
Hazardous & Solid Waste (3)	\$7.0	\$4.0	\$3.0		
Hazardous Waste				D+	53% of Americans live within 3 miles of a hazardous waste site.
Solid Waste				C+	258 million tons of municipal solid waste generated in one year.
(U.S. Environmental Protection Agency (EPA))					
Levees (4)	\$80.0	\$10.0	\$70.0	D	Over \$1.3 trillion in property value located behind levees.
(U.S. Army Corps of Engineers)					
Public Parks & Recreation (5)	\$114.4	\$12.1	\$102.3	D+	\$11.9 billion in National Park Service deferred maintenance.
(U.S. Department of the Interior)					
Rail (6)	\$154.1	\$124.7	\$29.4	B+	\$27 billion in improvements in one year by the freight railroads.
(U.S. Department of Transportation)					
Schools (7)	\$870.0	\$490.0	\$380.0	D+	53% of schools need improvements to reach "good" condition.
(U.S. Department of Education)					
TOTALS	\$4,590.5	\$2,526.4	\$2,064.1	D+	

Note 1 - Data taken from ASCE's Failure to Act: Closing the Infrastructure Investment Gap for America's Economic Future (2016)

Note 2 - Total needs are federal and non-federal high-hazard dams.

Note 3 - Funding only includes publicly funded remediation, not funds from private sector.

Note 4 - Total needs number based on discussions with the National Committee on Levee Safety.

Note 5 - Does not include backlog and estimated spending for U.S. Army Corps of Engineers and city parks.

Note 6 - Needs and funding estimates based on market projections and current investment trends.

Note 7 - Data from State of Our Schools: America's K-12 Facilities (2016). 21st Century School Fund, Inc., U.S. Green Building Council, Inc., and the National Council on School Facilities.