APPENDIX 10B

U.S. CUMULATIVE INFRASTRUCTURE NEEDS FOR 2020-2029 BASED ON CURRENT TRENDS

From the 2021 Infrastructure Report Card by the American Society of Civil Engineers (ASCE) at https://www.infrastructurereportcard.org/

All Values in Billions

Infrastructure Systems	Total Needs	Est. Funding	Funding Gap	Score Card	Estimated National Impacts
Surface Transportation (1)	$2,834.0	$1,619.0	$1,215.0		
Bridges				C	42% of all bridges are at least 50 years old, and 46,154, or 7.5% are considered deficient.
Roads				D	Over 40% of the system is now in poor or mediocre condition.
Transit				D-	19% of transit vehicles, and 6% of fixed Elements like tracks are in "poor" condition.
Rail				B	While freight maintains a strong network, passenger rail requires government investment.
(U.S. Department of Transportation)					
Water/Wastewater Infrastructure (2)	$1,045.0	$611.0	$434.0		
Drinking Water				C-	A water main break every 2 min. and an estimated 6 billion gal. of treated water lost each day.
Wastewater				D+	16,000 wastewater treatment plants at 81% of their design capacities, 15% have reached it.
(U.S. Army Corps of Engineers)					
Electricity (Energy) (2)	$637.0	$440.0	$197.0	C-	The "last mile" of the electricity network grew 54% over the past two decades.
(U.S. Department of Energy)					
Airports (Aviation) (2)	$237.0	$126.0	$111.0	D+	Funding from Congress has risen from $11 bil. annually to approx. $15 bil. from 2017 to 2020.
(U.S. Department of Transportation)					
Inland Waterways & Marine Ports (2)	$42.0	$17.0	$25.0		
Inland Waterways				D+	Lock closures totaling 5,000 hours between 2015 and 2019.
Marine Ports				B-	Vessel size doubled over the last 15 yrs, and tonnage at the top 25 ports grew by 4.4% in 4 years.
(U.S. Army Corps of Engineers)					
Dams (3)	$93.6	$12.5	$81.0	D	The number of deficient high-hazard-potential dams now exceeds 2,300.
(U.S. Army Corps of Engineers)					
Hazardous & Solid Waste (4)	$21.0	$14.4	$7.0		
Hazardous Waste				D+	There are approx. 1,300 Superfund sites where cleanup is either incomplete or not yet begun.
Solid Waste				C+	53% of waste is deposited in landfills, 25% is recycled, 10% is composted, and 13% is burned.
(U.S. Environmental Protection Agency (EPA))					
Levees (5)	$80.0	$10.1	$70.0	D	Approx. $21 billion is needed to improve and maintain the known moderate to high-risk levees.
(U.S. Army Corps of Engineers)					
Public Parks & Recreation (6)	$77.5	$9.5	$68.0	D+	State parks and local parks face a $5.6 bil. and $60 bil. deferred maint. backlog, respectively.
(U.S. Department of the Interior)					
Schools (7)	$870.0	$490.0	$380.0	D+	53% of schools need improvements to reach "good" condition.
(U.S. Department of Education)					
TOTALS	$5,937.1	$3,349.5	$2,588.0	C-	

Note 1 - Data taken from ASCE Failure to Act 2021 study + rail funding gap from ASLRRA

Note 2 - Data taken from ASCE Failure to Act 2021 study. www.asce.org/failuretoact

Note 3 - Includes estimates from ASDSO, USACE, U.S. Bureau of Reclamation, and FEMA

Note 4 - Data based on conversations with ASTSWAMO: RCRA Part C; Brownfield analysis; the Superfund funding information does not include DOE's Environmental Management program

Note 5 - Total needs numbers is based on discussions with the National Committee on Levee Safety

Note 6 - Estimates from National Parks Service; National Association of State Park Directors; City Parks, and National Association of State Park Directors

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.