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INFRASTRUCTURE FINANCE

Awaiting Promised Trump Fix, Assets Slide More, Says ASCE

hen the Trump administration finally reveals the details and timing of its much-touted infrastructure investment program, the American Society of Civil Engineers has a good idea of what needs to be done. The ASCE's latest "report card" of U.S. fixed assets rated the nation's roads, bridges, water systems and other infrastructure as a D+ overall, a grade no better than its last evaluation, in 2013.

Transit is at the bottom of the group, falling to a D- score (see chart), said Greg DiLoreto, chair of ASCE's committee on America's infrastructure, at the report's March 9 release in Washington, D.C. He said public transit systems have been "chronically underfunded" and have a \$90-billion maintenance backlog. Freight appears to be having a more comfortable ride than people, scoring a B—the highest grade among infrastructure categories—thanks to private-sector railroads' strong capital investment.

ASCE says more funding and other investment is key to raising the scores. It estimates there is a \$2.06-trillion gap over 10 years between current infrastructure spending levels and what is needed to pay for upgrades. The 2013 report card pegged the shortfall at \$1.6 trillion, measured over eight years. The largest gap is in surface transportation, with an estimated \$1.1 trillion, more than half the total shortfall.

The report calls for increased infrastructure funding—to 3.5% of the gross domestic product by 2025, up from 2.5% currently—from federal, state and local government and the private sector.

In a key recommendation, ASCE calls for a 25¢-per-gallon boost in the federal motor-fuels tax, said DiLoreto, retired CEO of the Tualatin Valley Water District, in Oregon. Norma Jean Mattei, ASCE's 2017 president and a University of New

Orleans professor in the department of civil and environmental engineering, added that the recommendation also includes indexing the fuels tax for inflation. Referring to the overall infrastructure investment gap, she said, "There's no magic wand to address this, no infrastructure money tree, no infrastructure private-sector angel."

Other transportation grades include D grades for aviation and roads and C+scores for bridges and ports. Among environmental and flood-control infrastructure assets, dams, drinking-water facilities and levees each rated a D.

"From Flint, Michigan, to Los Angeles and hundreds, possibly thousands, of other communities, the cascading effects of the nation's crumbling water infrastructure is a clear and present threat," said Michael Deane, executive director of the National Association of Water Companies. "The water challenges facing this nation and affirmed by ASCE's 2017 report make it clear that communities need to consider multiple solutions."

Media reports have speculated that the administration's potential \$1-trillion investment takes a backseat to other priorities, such as the Obamacare healthplan replacement and tax reform, and may not be unveiled until 2018. In a March 14 report, The Hill newspaper says, "States have submitted hundreds of transportation proposals for the administration to

CATEGORY	2017	2013	Highlights
AVIATION	D	D	With a federal cap on passenger facility charges, airports struggle o investment, creating a \$42-billion funding gap through 2025.
BRIDGES ↔	C+	C+	About 40% of 614,387 U.S. bridges are 50+ years old, and 9% are structurally deficient; the backlog of bridge rehab needs is \$123 billion
DAMS ↔	D	D	There are an estimated 2,170 aging, deficient or potentially high- hazard U.S. dams; an estimated \$45 billion is needed for repair.
DRINKING WATER ↔	D	D	The American Water Works Association says \$1 trillion is needed to maintain and expand service to meet demand over the next 25 year
ENERGY	D+	D+	More than 640,000 miles of high-voltage transmission lines in powe grids in the Lower 48 states are at full capacity.
HAZARDOUS WASTE	D+	D	Much-improved waste recycling and remediation have kept waste infrastructure capacity generally adequate.
INLAND WATERWAYS	D	D-	Most locks and dams are well beyond their 50-year design life; investment has increased, but upgrades still take decades.
LEVEES	D	D-	An estimated \$80 billion is needed in the next decade to maintain and improve the U.S. system; a new safety program is not yet funde
PARKS & RECREATION	D+	C-	Facilities maintained by entities at all levels of government regularl serve 70% of Americans and filter water for 180 million people.
PORTS 1	C+	С	To remain competitive in the U.S. and globally as ship size grows, investment in infrastructure expansion, modernizing and repair is u
RAIL †	В	C+	Private freight-rail investment is up, totaling \$27.1 billion in 2015, bu passenger rail struggles for funding to fix aging infrastructure.
ROADS ↔	D	D	One of every five miles of highway pavement is in poor condition; there is a significant and increasing backlog of rehabilitation needs.
SCHOOLS	D+	D	There is continued underinvestment in public school facilities, with \$38-billion annual gap and 24% of buildings in fair or poor shape.
SOLID WASTE	C+	B-	With mostly private funding and management, infrastructure is sufficient; landfill levels have plateaued in recent years.
TRANSIT	D-	D	Transit in the U.S. continues to grow, but the symptoms of overdue maintenance and underinvestment have never been clearer.
WASTEWATER †	D+	D	More than 56 million new users will connect to treatment systems over the next 20 years, and \$271 billion is needed to meet demand.
OVERALI	D+	D+	

SOURCE: ASCE

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