Civil engineers' report details decrepit state of US infrastructure

Matthew Taylor 5 April 2017

The American Society of Civil Engineers (ASCE) released its quadrennial "Report Card" last month on the condition of infrastructure in the United States. Once again, the association gave the country an overall grade of D+, the same as in 2013.

The report is a damning appraisal of the state of American society under capitalism, and the Obama years, which saw essential social needs starved of funding while the stock market tripled in value and vast public resources were squandered on war. This will only accelerate under Trump.

The ASCE report assesses the state of sixteen different categories of infrastructure: aviation, bridges, dams, drinking water, energy, hazardous waste, inland waterways, levees, parks and recreation, ports, rail, roads, schools, solid waste, transit and wastewater.

Twelve of the sixteen sections evaluated earned a D grade. The report defines a D grade as "The infrastructure is in poor to fair condition and mostly below standard, with many elements approaching the end of their service life. A large portion of the system exhibits significant deterioration. Condition and capacity are of serious concern with strong risk of failure."

According to ASCE, the total costs to bring all US infrastructure into an adequate condition would exceed two trillion dollars.

The highest grade for any section of the report was earned by rail, which got a B. The reports notes that the nation's railways are largely privately owned and that major companies generally invest significant resources for rail maintenance. The lowest grade was earned by transit, a D-. This includes buses, subway, and light rail systems. The report estimates the backlog maintenance costs to be \$90 billion.

In the categories of dams and levees, upon whose maintenance millions of lives depend, the report states that an estimated \$125 billion will be required to upgrade them to a safe standard. The average age for all dams in the US is 56 years. There are 15,500 dams classified as "high hazard potential" with 2,170 of those considered "deficient high hazard potential." In other words, there are over two thousand dams in the US ready to burst.

Last month in California 188,000 people were evacuated due to the threat of flooding from the damaged spillway of the 770-foot Oroville dam, the nation's tallest. State officials are currently scrambling to complete necessary repairs before the next storm season begins.

The nation's drinking water systems—whose woeful state has been exposed by lead contamination in Flint, Michigan; Fresno, California; and other cities over the past several years—require an estimated \$1 trillion over the next 25 years to maintain and expand a safe and adequate supply for the country's growing population. Many of the over one million pipes that carry the nation's fresh water were laid in the early and mid-twentieth century, with an operational lifespan of 75-100 years. The report estimates that there are 240,000 water main breaks in the US each year.

The section of the report on bridges and roads, which earned grades of C+ and D respectively, details the frightening state of decay American commuters face daily. The average age of bridges in the US is 56 years. An estimated 9.1 percent of the nation's bridges—56,007 total—are deemed to be structurally deficient. Some 188 million trips are made across dangerous bridges daily in the US. Since 2000, there have been bridge collapses in a dozen different states, the most recent of which occurred in Atlanta on March 30 when a section of I-85 failed due to fire. There have been over 200 casualties due to the bridge collapses since 2000, with 40 killed and 163 injured. The report assesses an estimated cost of \$123 billion to rehabilitate the nation's bridges.

One out of every five miles of highway pavement is deemed to be in poor condition in the US. Accidents

claimed the lives of 35,092 people on America's roads in 2015. This represents an increase of seven percent over the previous year, after having consistently been in decline for previous years.

Public schools, which have been targeted for defunding by both Democrats and Republicans for decades, are given a grade of D+. The report estimates schools are underfunded by approximately \$38 billion. Of the nearly 100,000 public school buildings in the US, 24 percent were classified as being in a state of "fair to poor" condition.

This will only worsen as the Trump administration starves the public schools of desperately needed funds and diverts public money towards private, parochial and charter schools.

In the containment and disposal of hazardous waste, which can impact the health of tens of millions, the report gives a grade of D+. With more than half of the population of the US living within three miles of a hazardous waste site, the potential for disaster is enormous.

ASCE's answer to this crisis is not only inadequate but downright reactionary. Accepting as given the squandering of trillions of dollars on war, corporate tax cuts and other subsidies to the super-rich, the report proposes a series of measures to make working people foot the bill for decaying infrastructure.

In the section of the report titled "solutions to raise the grade" the authors suggest that "Infrastructure owners and operators must charge, and Americans must be willing to pay, rates and fees that reflect the true cost of using, maintaining, and improving infrastructure." Other sections advocate "user generated fees," hiking the gasoline tax, and other regressive proposals that would disproportionately affect the country's poorest citizens. The report also calls for more "public-private" partnerships, along with the streamlining of approval for private investment in public infrastructure projects.

Such free-market measures would only create an evergreater class-based infrastructure system, where only those who could afford to will be able to drive on high toll expressways and bridges, send their children to quality schools, drink clean water and live in areas not threatened with constant flooding or environmental disasters.

The further privatization of public resources is one of the main tenets of President Trump's fraudulent infrastructure plan. Under the plan proposed by Trump, hundreds of billions of dollars would be channeled into the pockets of the construction industry, banks and real estate speculators through a series of tax breaks and incentives. With substantial support from both the Democratic Party and the leaders of the trade unions, Trump's plan would be a boondoggle for the ruling class.

The \$2 trillion price tag, which ASCE estimates would bring all infrastructure to an adequate condition, must be viewed in the context of overall US spending.

Since 2001, the US has spent over \$2.2 trillion prosecuting the imperialist wars in Iraq and Afghanistan combined. When adjusted to include the cost of ongoing health care for injured veterans, debt payments and other factors that figure rises to an estimated \$4.4 trillion. In 2015, the US spent over \$600 billion on Pentagon spending, more than the next seven largest militaries combined. Trump has pledged to increase this figure by tens of billions more to finance Washington's predatory wars and enrich defense contractors.

At the outset of the 2008 financial crisis, the government spent \$700 billion bailing out the big Wall Street banks under the Troubled Asset Relief Program (TARP). In subsequent years, that figure has grown dramatically. A 2015 report from the inspector general for the TARP program states that the government's total cost to keep the banks afloat was \$16.8 trillion, with \$4.6 trillion of that sum already spent.

At the same time that Washington spends trillions on the military and Wall Street, social programs are being slashed. Trump's proposed budget for 2018 would cut the Environmental Protection Agency's budget by 31 percent, spending on Health and Human Services would be reduced by 16 percent while Housing and Urban Development would see its budget reduced by 12 percent.

There exist ample resources, both human and material, to rebuild the nation's infrastructure and create millions of new good-paying jobs. But these resources cannot be marshaled under a system that subordinates social needs and human life itself to the ever-greater enrichment of a modern-day aristocracy.



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