Mississippi floods highlight decay of US infrastructure

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As floodwaters swell past record levels in the Mississippi River and its tributaries, the US Army Corps of Engineers is preparing to throw open a floodway north of Baton Rouge. The opening of the Morganza Floodway, planned for as soon as this weekend, will impact 25,000 mainly poor rural residents and flood three million acres of prime Louisiana farmland.

The action is a bid to prevent catastrophic flooding of the capital Baton Rouge and the state's largest city, New Orleans. Some levees, particularly in New Orleans, are at risk of collapsing if the water pressure is not relieved upriver. The city's levees are designed to withstand a 20-foot crest, but the force of the water may undermine the earthen barriers at their base, causing the levees to slide into the river. Entire parishes in the below-sea-level city, especially those devastated by Hurricane Katrina in 2005, would again be submerged.

Thousands of residents in Illinois, Missouri, Kentucky, Tennessee, Arkansas, and Mississippi have been flooded, including low-lying neighborhoods in Memphis and entire small towns further south. (See, "Mississippi towns submerged in floodwaters.")

While the Army Corps has repeatedly asserted that the flood management system is sound, disaster response has been chaotic and borne primarily by state and local agencies. Louisiana Governor Bobby Jindal has dispatched a regiment of the state's National Guard to hastily construct a f lood barrier at the confluence of the Atchafalaya and Mississippi rivers. The regiment has been ordered to work around the clock. Impoverished municipalities in the Delta region have struggled to sandbag against newly developed sand boils, or seepages at the bases of levees, along the Yazoo River.

The historic flooding in the Mississippi watershed casts a spotlight on the crumbling and patchwork state of America's physical infrastructure. An aged and unsound levee system is the only defense against disaster for hundreds of thousands of people.

The Army Corps of Engineers has reported that nine percent of the levees it maintains are expected to fail in a flood event.

In a recent report on the state of US infrastructure, the American Society of Civil Engineers (ASCE) found that "there is no definitive record of how many levees there are in the US, nor is there an assessment of the current conditions and performance of those levees." Grading the nation's levee system a "D-," or on the brink of total failure, the ASCE warned that "43 percent of the US population lives in counties with levees."

The federal government does not oversee all of the levees, and there is no assessment of the many privately-maintained floodwalls along the Mississippi. Similarly, the Army Corps regulates only one-tenth of the county's dams, many of which are considered at high risk of collapse by the ASCE.

In addition to the flood management system, the country's roads, bridges, water and sewage systems are all increasingly dilapidated and under-funded. Overall, the ASCE report gave US physical infrastructure a grade of D.

American roads were given a D-. The ASCE graded US bridges at a C, concluding that "more than 26 percent, or one in four of the nation's bridges, are either structurally deficient or functionally obsolete."

The resources required to address the nation's burgeoning inventory of deteriorating bridges have far outstripped the stagnant levels of funding made

available. The Federal Highway Administration (FHWA) estimated in 2009, the last time such an estimate was made, that it would require $70.9 billion to address the nation's deteriorating bridges. Congress appropriated only $5.2 billion that year to the Federal Highway Bridge Program, which is tasked with repairing and replacing deficient bridges throughout the country.

Five states have more than one in five of their bridges in need of significant maintenance. Pennsylvania ranked worst with 26.5 percent of its bridges considered structurally deficient. The situation is only expected to worsen as a greater proportion of the federal bridge inventory exceeds the typical expected 50-year lifespan. At present the average lifespan of an American bridge is 42 years. As of last year, nearly one in three of the nation's bridges was over 50 years old.

The sheer recklessness of the neglect of infrastructure is evident in the fact that every day, an average of 282,672,680 vehicles pass over one of the nation's 69,223 deficient bridges.

Last week marked the bicentennial of the National Road—the first federally funded road in the US. The National Road linked Cumberland, Maryland, across the Appalachian Mountains into the heartland of Illinois, ending initially at the city of Vandalia, the state capitol at the time. Conceived of as a means of unifying the young and expanding country, the National Road was established through congressional legislation signed by President Thomas Jefferson in 1806.

Public works projects of the 20th Century transformed the US into a modern, mass society by connecting far-flung cities, electrifying rural regions, and mitigating the dangers of the environment. Half a century ago, the government undertook "the greatest public works project in history"—the Interstate Highway System, declared by President Eisenhower to be "essential to the national interest."

In however limited a form, the ruling class of this earlier period viewed infrastructure as essential for economic development. The ruling elite of today shares no such commitment. On the contrary, in the midst of mass unemployment and tattered social conditions, the Obama administration has explicitly refused to undertake any public works program to mitigate the crisis. Instead, the political establishment has starved the country's infrastructure, like every other social resource including education, health care, libraries and cultural institutions.

The attack finds its expression in the refusal to upgrade life-saving levees around New Orleans, the drive to "right-size" industrial cities such as Detroit, and many other aspects of social conditions affecting the day-to-day lives of millions of people.

A recent report in the Minneapolis/St. Paul *Star Tribune* entitled "Making a Rural Comeback: The Old Gravel Road," for example, details the growing practice of tearing up paved roads in rural America, especially the Midwest, for lack of resources to maintain them. In Michigan, 100 miles have already been converted back to gravel, while South Dakota has torn up 120 miles. The practice is spreading throughout the Midwest, including Iowa, North Dakota, and Minnesota, where communities have seen 40-year-old roadways ripped out.

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