

Opening Statement of Chairman Sheldon Whitehouse
Senate Committee on the Budget
“Beyond the Breaking Point: The Fiscal Consequences of Climate Change on
Infrastructure”
July 26, 2023

Ranking Member Grassley, members of the committee, witnesses, and guests, welcome to the tenth in our series on the enormous economic dangers of climate change to the federal budget.

In the last month, we’ve seen the hottest temperatures ever recorded. Phoenix set a record for most consecutive days above 110 degrees; smoke from unprecedented Canadian wildfires blanketed huge swaths of the United States; storms in Vermont, New York, and Pennsylvania triggered deadly floods; and the worst drought in the Midwest in over a decade is threatening corn and soybean production—and pushing up consumer prices.

Climate change brings climate danger, climate risk and climate inflation — and it is only the beginning.

Today, we examine the climate costs to infrastructure. Infrastructure is the foundation for our economy: drinking water and sewage systems, roads, bridges, railways, irrigation, flood levees, waterways, power plants, dams and transmission lines — all enable our society to run.

In addition to development and financing costs, each of these systems has regular maintenance and operating costs. Increased temperatures, higher sea levels, and greater variability in precipitation translate into shorter asset lifespans and higher ongoing expenses.

In Texas, Oregon, and Utah, intense heat is buckling roadways. In Chicago, Seattle, and other major cities, bridges are being doused with water to keep heat from warping the metal. Coastal areas suffer more erosion, saltwater intrusion, and flooding. 7,500 miles of East Coast roadway is in high tide flood zones, and more than 60,000 miles of roads and bridges are vulnerable to extreme storm damage. Just the direct damage to roads is estimated to cost nearly \$20 billion each year, not counting the depression of economic activity.

Our power grids are seeing record-breaking demand and reduced power efficiency; as well as added sea level rise risks where infrastructure, especially thermal power plants, is located on the coast. Extreme weather is responsible for 78% of the major disruptions to the power system. Since 2015, the frequency of major blackouts has doubled. In an average year, power outages caused by extreme weather events have cost the U.S. up to \$44 billion; in years with record-breaking storms, like 2008’s Hurricane Ike, power outage costs soared to \$99 billion.

And last year, extreme drought in the Midwest dropped water levels in the Mississippi River so low that barges got stuck. Nearly all U.S. agricultural exports and more than 75% of the world’s exports of feed grains and soybeans come from the Mississippi River Basin, and the lack of water caused shipping delays, higher costs for alternative transport, and reduced local economic activity — more climate inflation.

Both the accumulating shifts in ‘normal’ weather and the sudden catastrophes are putting economic stress on states, counties, municipalities, the federal government, as well as ratepayers and taxpayers. Economists find that major hurricanes, for instance, reduce local governments’ revenues by 7.2% in the decade following the hurricane and are associated with a 13% drop in public works expenditures.

We have heard repeated testimony that climate hazards intersect; today we will hear that infrastructure systems are also interdependent; that failure in one system will reverberate across other sectors. For instance, Louisiana’s power outages after Hurricane Ian cascaded into wastewater failures at pumping stations, spilling millions of gallons of waste into local bodies of water.

Already, we don’t invest enough in our infrastructure. The power sector is a prime example: congestion in our electricity transmission system cost an estimated \$20.8 billion last year alone.

Before passage of the Bipartisan Infrastructure Law, the American Society of Civil Engineers estimated our infrastructure funding gap would cost us \$10.3 trillion and 3 million jobs by 2039—even without the additional burdens of climate change. Climate change presents two public policy imperatives. First, we must zero out emissions by 2050 to avoid even worse dangers for our planet and way of life. And second, we must withstand the warming and weather we are already experiencing.

A low-carbon economy will require thousands of miles of transmission lines, new zero-carbon sources of power generation, much more high-speed rail, new hydrogen and CO2 pipelines, facilities for critical minerals, and more. I appreciate that Ranking Member Grassley has invited an expert on permitting to testify, as figuring out how to build out this infrastructure quickly and equitably will be a key challenge of the next few decades.

Similarly, if we don’t want to have to keep spending tens of billions of dollars rebuilding and re-building roads, bridges, sewage systems, levees, and other infrastructure damaged by climate-related extreme weather, we are going to have to figure out how to build smarter and better.

The good news is that these investments to bolster our infrastructure create jobs, promote economic growth, and are cost-effective. Many states recognize this value; Louisiana’s legislature passed all four of its coastal master plans unanimously.

Let me close by recognizing Ranking Member Grassley for Iowa’s leadership on wind power. Sixty-four percent of its energy production now comes from wind—a new record for the state.

We will need the kind of leadership of Iowa on wind power or Louisiana on coastal resiliency, if we are to tackle the climate danger before it’s too late. Repeatedly, this committee has heard expert testimony about the massive economic and fiscal costs of dawdling. Those dangers are clear and present. I hope that the message is getting through.