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April 21, 2025

The Honorable Howard Lutnick
Secretary of Commerce
U.S. Department of Commerce
1401 Constitution Avenue, NW
Washington, DC 20230

Dear Secretary Lutnick,

The American Society of Civil Engineers (ASCE) urges continued support and robust funding for the National Oceanic and Atmospheric Administration (NOAA). NOAA is indispensable in protecting public safety and ensuring that limited federal spending is dedicated to building infrastructure that is resilient to increasingly severe weather events.

Across the U.S., disasters of greater intensity, duration, and frequency have wreaked havoc on communities of every size and location. In 2024, a total of 27 extreme weather events caused 568 deaths and over $182 billion in damages; since 1980, the U.S. has experienced 403 events amounting to at least $1 billion in damages with a total cost exceeding $2.9 trillion. In addition to life and property losses, disasters strike assets across the infrastructure network, including buildings, roads, bridges, electrical lines, water resources, and rail. However, every dollar spent on resilience and preparedness saves communities $13 in post-disaster costs.

Founded in 1852, ASCE is the country's oldest civil engineering organization. Representing civil engineers from private practice, government, industry, and academia, it is ASCE's objective to advance the science and profession of engineering to enhance the welfare of humanity. ASCE is a leader in hazard mitigation efforts aimed at protecting public health, safety, and welfare. ASCE develops and maintains standards that provide technical guidelines for promoting safety, reliability, productivity, and efficiency in civil engineering.

ASCE's 2025 Report Card for America's Infrastructure rated 18 categories of the nation's infrastructure with an overall grade of "C," the highest grade ever. But, while significant advancements are made in our interconnected infrastructure systems, we still face a substantial investment gap. The shortfall grows as existing infrastructure systems continue aging and demands on those systems increase. Recent investments have

highlighted the need to prioritize resilience to withstand extreme weather, as these investments can help ensure limited federal dollars are spent wisely on infrastructure systems that are built to withstand shifting conditions over the next 100 years. To build infrastructure more resiliently and help communities prepare for and withstand extreme weather events – from coastal and riverine flooding to hurricanes, tornadoes, and wildfires – the data and expertise of NOAA is vital.

The nation's civil engineers rely on NOAA's scientific information to reduce the impacts of extreme weather on communities. By providing advanced warnings, high-quality data, and expertise on long-term weather trends, NOAA gives engineers and planners the tools to strengthen our communities against these hazards. This partnership between science and engineering is essential, and allows for an investment in safer, more resilient communities nationwide.

Some of the NOAA programs critical for ensuring our nation's infrastructure can be resilient to extreme weather include:

- **Atlas 14 and 15**. NOAA's work on precipitation and flooding informs stormwater design, dam safety, and ensures bridges are the correct height. Atlas 14 and the forthcoming Atlas 15, will guide civil engineers on how to design infrastructure for estimated rainfall, and because much of America's precipitation data is outdated, there are information gaps that can pose serious challenges to public safety, affecting the performance of dams, levees, and stormwater systems protecting our communities. However, NOAA is currently incorporating the latest science and future projections into precipitation data. Atlas 15 will, for the first time, account for projected rainfall trends through 2100, providing forward-looking data to design infrastructure for tomorrow's conditions. Atlas 15 is therefore vital for developing infrastructure that is resilient to future flood risks and can protect the public.

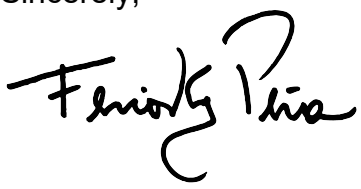
- **National Windstorm Impact Reduction Program**. NOAA's work on windstorms – including hurricanes and tornadoes – has led to significant improvements in forecasting and design practices. Through the National Windstorm Impact Reduction Program (NWIRP), NOAA works to lengthen tornado warning lead times and advance wind mapping for engineering design standards. These advancements directly inform the building codes and standards that keep our structures safe. For example, updated hurricane wind speed maps and tornado risk data from NOAA are used to ensure new buildings, bridges, and towers can withstand extreme winds, directly saving lives and preventing economic losses from windstorms. ASCE urges that NWIRP remain fully funded so NOAA can continue leading in hazard mitigation science.

- **Flooding**. NOAA's coastal data, such as projections of sea level rise, storm surge, and coastal flooding, inform the design of ports, levees, and coastal highways. Furthermore, NOAA's river forecast centers help engineers anticipate riverine flood risks and manage reservoir operations. These efforts support

disaster preparedness and risk reduction in every region of the country, from flash flood warnings in mountain communities to monitoring storm surge along our coasts. By providing publicly accessible tools and expert scientific guidance, NOAA enables data-driven decision-making at all levels of government to prevent future flooding.

In conclusion, maintaining NOAA's robust funding and operations is critical. By fully funding NOAA's programs, we can regularly update crucial design data, improve predictive models, and develop innovative tools — all of which will directly inform smarter engineering and land-use decisions. In turn, this will make our infrastructure more resilient to disasters, ultimately saving lives and reducing recovery time and costs when storms strike. ASCE asks that the Department of Commerce continue to prioritize the vital work NOAA does to keep American families and businesses safe. From providing the rainfall estimates that determine bridge heights and storm sewer capacity, to characterizing the wind speeds that new buildings must endure, to forecasting the floods and hurricanes that test our infrastructure – NOAA's services are woven into the very fabric of our national resilience. The nation's engineers stand ready to ensure American communities are safe and resilient, but we rely on NOAA's expertise and data as a foundation for our work. Please do not hesitate to contact me for any further information or collaboration.

Sincerely,



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