



U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON
SCIENCE, SPACE, & TECHNOLOGY

Opening Statement

Chair Lizzie Fletcher (D-TX)
of the Subcommittee on Environment

Subcommittee on Environment Hearing:
The Future of Forecasting: Building a Stronger U.S. Weather Enterprise
May 16, 2019

Good afternoon. I would like to welcome and thank all of our witnesses for being here today to discuss the important topic of the U.S. Weather Enterprise and how we can leverage the partnerships between the sectors to improve U.S. weather forecasting and modeling capabilities.

The U.S. Weather Enterprise is one of the most robust globally, with NOAA estimating the value of weather data across all industries in the U.S. at approximately \$13 billion in 2012. This Enterprise is built upon open communication and collaboration between its public, private, and academic sectors.

Americans across the country rely on the data and services NOAA and the National Weather Service provide every single day. This freely available data serves as the basis of many of the consumer-facing weather products we regularly interact with, ranging from weather apps on our phones to the local forecasts on our TV news. This is a prime example of the strong existing partnerships between the public and private sectors of the Enterprise. This freely available data is also the foundation of much of the research conducted in the academic sector that feeds into operations at the Weather Service.

We have spoken in this Committee about the increased frequency of severe weather events that are impacting every part of the country. In fact, NOAA has found that, since 1980, the U.S. has experienced almost 250 weather and climate disasters in which the overall cost and damages have reached or exceeded \$1 billion.

A little over two weeks we ago, Dr. Jacobs testified before this Committee on the NOAA Fiscal Year 2020 Proposed Budget, where he informed the Committee that the U.S. was not the global leader in weather forecasting. This is something that should concern all Americans—given the need for accurate forecasts due to the wide range of severe weather events we experience as a nation and the increasing frequency of severe weather events due to climate change.

We have also discussed the need to accelerate research to operations at NOAA, but in no place is that more crucial than at the Weather Service as it relates to improving U.S. weather models and

forecasts. However, NOAA's budget request does not reflect this critical need, with a more than 40% reduction in funding for the Office of Oceanic and Atmospheric Research where much of NOAA's internal research is conducted, and extramural research is funded. I hope to better understand how NOAA and the Weather Service plan to address this significant research to operations challenge in light of the priorities articulated in this most recent budget request.

I'm looking forward to this hearing starting the conversation about strengthening the Enterprise and am pleased to have representatives of all three sectors here today. While the private sector is perhaps the most diverse of the three, we are fortunate to have Mr. Rich Sorkin, CEO of Jupiter Intelligence, testifying from the commercial perspective. Jupiter provides climate and weather risk analysis based on NOAA and other federal and private sources of data. I would also like to welcome Dr. Shuyi Chen, whose research at the University of Washington is focused on understanding extreme weather events, like hurricanes, and depends on federal grants from agencies like NOAA. With the Atlantic hurricane season starting on June 1st, I am glad that she is here to answer any questions about hurricane forecast improvement.

I am also glad to have the opportunity to discuss an issue facing the Enterprise, particularly NOAA, regarding the potential loss of our nation's valuable weather data from interference from 5G operations at the 24 gigahertz band. I look forward to asking Dr. Jacobs for more clear-cut answers to what these impacts will be, the cost to the American public, and how NOAA is working to mitigate these impacts.

I am entering into the record a letter from the Aerospace Industries Association in support of this hearing and the importance of addressing the 24 gigahertz issue.

The Weather Enterprise is a dynamic entity that continues to evolve. Given how rapidly our technological capabilities are advancing, it is clear that we need to revisit the interaction between the sectors of the Enterprise and understand how to best utilize these scientific and technological advancements for public good.

That's why today's hearing should be a good opportunity to not only understand the current state of our Weather Enterprise, but how the three sectors of that enterprise can work toward a common goal.

Thank you.