COMMITTEE ON
SCIENCE, SPACE, AND TECHNOLOGY
REPUBLICANS Frank Lucas, Ranking Member

Statement of Ranking Member Frank Lucas

Full Committee Hearing

Understanding, Forecasting, and Communicating Extreme Weather in a Changing Climate

September 26, 2019

Thank you, Chairwoman Johnson, for holding today's hearing on extreme weather and how we can better forecast and respond to it.

Extreme weather events are of concern to us all, regardless of which part of the country we represent. These events represent threats to lives and property and often occur with little warning. They also take a significant toll on our economy. The most recent National Climate Assessment cited 241 incidents with more than a billion dollars of economic damage since 1980, including 14 events in 2018 alone.

I want to make my position clear: the climate is changing, and global industrial activity has played a role in this. The complex relationship between climate and weather is in need of continued research. This Committee has a responsibility to prioritize that research so we can continue to mitigate storm damage, grow our economy, and provide certainty for businesses that depend on accurate forecasts.

This research should be the focus of today's hearing, because it's research that actually provides answers to the challenges we face.

As we examine how best to research and respond to extreme weather, there are a variety of factors to consider, including how we help communities prepare for these events, how we improve our weather forecasts, and how we communicate the possibility of an extreme weather event to our citizens.

This committee has taken steps to help address these issues. The Weather Act, signed into law in 2017, directed NOAA to improve its tornado warning capabilities and hurricane forecasting capacity – two of the most destructive types of extreme weather events. Additionally, the legislation required NOAA to perform an assessment of its practices on communicating extreme weather events to the public. NOAA has made progress in implementing these provisions in the last two years, but much work remains.

A Weather Act reauthorization was signed into law in January which authorized NOAA's Earth Prediction Innovation Center – more commonly known as EPIC. This initiative will make the National Weather Service's numerical prediction models available to the academic community

to crowdsource forecasting on a larger scale – which in turn will help improve our national forecasting ability.

Oklahoma is no stranger to extreme weather events. Whether it is an outbreak of tornadoes, severe droughts affecting our farmers and ranchers, or extended cold weather – we have seen it all.

Thankfully, Oklahoma is home to some of the world's most renowned experts in the field of weather research and forecasting. The National Weather Center is located on the University of Oklahoma campus in Norman and houses federal, state, and university researchers in a collaborative environment. Among the federal offices in the Weather Center are NOAA's National Severe Storms Laboratory and Storm Prediction Center. These offices are at the leading edge of researching and forecasting the outbreak of extreme weather events across the country.

Additionally, Oklahoma is home to the nation's premier weather mesonet. A mesonet is a series of small weather stations spread across a large area which help monitor real-time conditions on the ground and provide citizens and forecasters with vital data. This data helps farmers determine the optimal time to plant and can alert emergency responders if conditions are ripe for a developing tornado. As this Committee considers possible legislative initiatives based on today's hearing, we should look to the Oklahoma mesonet as a model for how we can improve the forecasting and communication of severe weather events.

Our panel of witnesses today brings diverse perspectives on researching all aspects of extreme weather events. I thank them for taking the time to be here and look forward to a productive conversation on this important topic.