



April 14, 2025

The Honorable Michael Bennet United States Senator

The Honorable Diana DeGette Member of Congress

The Honorable Joe Neguse Member of Congress

The Honorable Lauren Boebert Member of Congress

The Honorable Jeff Crank Member of Congress The Honorable John Hickenlooper United States Senator

The Honorable Jason Crow Member of Congress

The Honorable Brittany Pettersen Member of Congress

The Honorable Gabe Evans Member of Congress

The Honorable Jeff Hurd Member of Congress

Dear Colorado Congressional Delegation,

We are writing this joint letter because the potential elimination of NOAA's 16 Cooperative Institutes (CIs) – including one at each of our universities – could have profound negative consequences for people and property in communities across Colorado and the country. The CIs do the detection, monitoring and prediction for hurricanes, severe weather and wildfires so forecasters can alert the public in real time, first responders know where to focus their efforts, and emergency managers can issue timely and precise evacuation orders. They provide the weather impact information that lets airlines know the safest and most economic routes to fly. Farmers rely on their data to manage crops and livestock, including advance preparations for cold snaps and heat waves. The Department of Defense uses their modeling and data for critical operations supporting force projection and ensuring safe operations in-theater for the warfighter.

But here is the challenge: Most of the people who rely on the data produced by the CIs don't know where the information comes from or how scientific research enables it. They have access to real-time weather data and modeling, and they trust it will always be there. But if funding for NOAA and the CIs (which conduct more than half the NOAA research activity) is eliminated, it won't be – and the consequences could be immediate, catastrophic, and difficult if not impossible to recover from for many years to come.

We need your help to keep the data flowing. Specifically, we need you to champion continued healthy budgets for NOAA, and specifically for their ability to continue supporting the Cooperative Institutes so they can keep doing the essential work needed to ensure the safety of lives, property and resources across the U.S. We are also asking for your direct engagement with the Department of Commerce and Office of Management and Budget-- to ask them to adequately fund the CIs in their FY25 operating plans (at levels similar to those Congress directed in FY24) and approve all CI projects and renewals currently stuck in the approval pipeline.





University of Colorado Boulder | Colorado Springs | Denver | Anschutz Medical Campus

Colorado is the only state in the country that is home to two NOAA Cooperative Institutes. Combined they employ nearly 1,000 people. However, without continued, expedient funding these jobs, and the broad benefits of this work to society, will be lost. For example:

- Currently, the Cooperative Institute for Research in the Atmosphere at Colorado State University has \$12.4 million of projects and renewals stuck in the review queue at the Department of Commerce. If CIRA does not receive this funding, they will have to begin layoffs for the critical aviation-support activities at the end of June, support to the National Weather Service and National Hurricane Center shortly thereafter, and then at irregular intervals for various other activities (satellite imagery, fire detection and prediction, and Artificial Intelligence/Machine Learning research for myriad stakeholders, including NOAA interactions with the U.S. Navy) as activities run out of money in months to follow. Long-term, \$46 million in total federal funds a year to CIRA are at risk for CSU.
- CIRES in Boulder has \$11.3 million of projects and renewals stuck in the review queue at the Department of Commerce. Layoffs will begin in late June and early July of about 120 people, with more to come in the following months. Among the capabilities that would be irretrievably impacted are our abilities to: Predict fires and mitigate their effects, safeguard the recovery of the Earth's ozone layer, provide space weather forecasts to protect the U.S. electric grid and communications infrastructure from solar storm-induced issues, which could cost billions a day in national productivity and assess and manage water availability through accurate atmospheric river forecasts in support of farmers and ranchers. These are just a few of many the capabilities and national needs that would be severely compromised in the near term. More than \$70 million annually is at risk, which would have even more profound impacts on our ability to provide vital information and capabilities to protect lives and property.

Below is some background on each of the Colorado institutes, and we would be happy to provide any additional information that is useful.

Thank you for listening to our concerns and for your continued leadership on behalf of Colorado.

Sincerely,

Tony Frank, Chancellor Colorado State University

Any L. Porsas

Amy Parsons President, Colorado State University

Todd Saliman, President University of Colorado

Justin Schwartz, Chancellor University of Colorado Boulder





## CIRES at CU Boulder

The Cooperative Institute for Research in Environmental Sciences (CIRES) housed at the University of Colorado Boulder is the oldest and largest CI, established in 1967. CIRES is focused on research into drought, wildfire, space weather, among other important issues. It employs more than 800 people who are working each day to improve our understanding of Earth systems, benefitting people across Colorado and the nation. Water managers around the country rely on CIRES water and drought analyses to support farming and ranching practices as well as water management and the recreation industry.

Its rapid-response fire analyses have saved homes and lives for thousands of people in Colorado alone and provide critical information on indoor and outdoor air-quality, as well as soil-contamination following the burning of toxic debris (car batteries, appliances, etc.). CIRES provides informed guidance on the risks associated with returning to homes and neighborhoods, and the research done in this area has informed responses and management of subsequent fires, such as the ones on Los Angeles.

CIRES' work in space weather prediction and associated research provides critical information on the interactions between the Sun and Earth, serving to protect communications systems, the energy grid, passenger safety on aircraft, astronaut safety on space missions, and military interests. As such, it is a critical part of our national infrastructure.

In addition, CIRES carries out societally important work such as: (1) pioneering the physics and processes that improve weather models and weather prediction capabilities; (2) understanding changes in the Earth's Arctic ice cover, and what those changes mean for economic opportunities, national security interests, and changes in weather; and (3) observing and exploring the chemistry of the atmosphere to understand the chemistry of air we breather the variability of ozone, etc. These are just a few practical examples. There are many more.

Finally, the investments at CIRES are heavily leveraged, as its intellectual infrastructure provides efficient and cost-effective opportunities to build on the work supported by NOAA. CIRES scientists amplify their impact through complementary research supported by the National Science Foundation, NASA, the Department of Energy. and more. In so doing, investments in NOAA are amplified, and investments by these other agencies benefit from the underlying foundation and the springboard opportunity that NOAA provides.

## CIRA CSU Fort Collins

Housed at Colorado State University since 1980, the NOAA Cooperative Institute for Research in the Atmosphere (CIRA) works on problems related to real-time weather impacts to the safety of lives, property, and transportation. CIRA employs 195 people, 131 of whom live in Colorado.

CIRA's research team at the Aviation Weather Center in Kansas City sits on the front lines of commercial aviation safety, both domestic and international. From charting courses around bad weather, to avoiding flying through clouds that can build up ice on the wings, to selecting flight levels for fuel economy, shorter flight time, and avoiding severe turbulence, CIRA's team integrates research-based tools into display systems that help keep our country's travelers safe every day.

The dangers of wildland fire have become a topic of national interest over the past two decades, with recordbreaking disasters piling on in recent years—the Eaton and Paradise fires in Los Angeles being the most recent examples. CIRA works with NOAA, NASA, and its sister CIs to develop new satellite-based fire detection and fire modeling tools, under NOAA's Next Generation Fire System program, and are standing up a <u>Fire Weather Testbed</u> to consolidate the firefighting community.





CIRA has also served as the primary liaison between NOAA activities and the Department of Defense, particularly the Navy, to provide modeling and data in support of their activities. Currently in development is a new global, 3D cloud analysis based on high-resolution near-real-time satellite datasets, model fusion, and machine learning stands to benefit DoD operations as well as the Federal Aviation Administration for flight planning. For more brief examples of CIRA impact, please see <u>CIRA Science Stories</u>.

In short, the cooperative institutes, and their work with NOAA, provide a tremendous benefit to national interests through a cost-effective research enterprise that draws on the stable mission focus of NOAA and the agility and innovation of its partner universities at the CIs. The result is tremendous benefit to local, regional, and national, interests in a cost-effective, highly leveraged manner, providing knowledge, value, and great returns to the American taxpayer.