

## Prospectus for Cooperative Institutes in the 21st Century

NOAA's Cooperative Institute (CI) Program is a unique and powerful tool addressing the cutting edge research & development needs of the NOAA Line Offices and the missions they are required to meet. In July 2014, NOAA Administrator Dr. Kathryn Sullivan charged the Office of the Chief Scientist to work with the directors of NOAA's Cooperative Institutes (CIs) to prepare the CI program for the challenges they will face in the 21st century.

In order to examine ways to redefine NOAA CI research, the Chief Scientist convened the 21st Century (CI21) Summit on June 17, 2015 in Silver Spring, MD. The 68 participants, including CI Directors/staff and NOAA employees, focused on the following objectives:

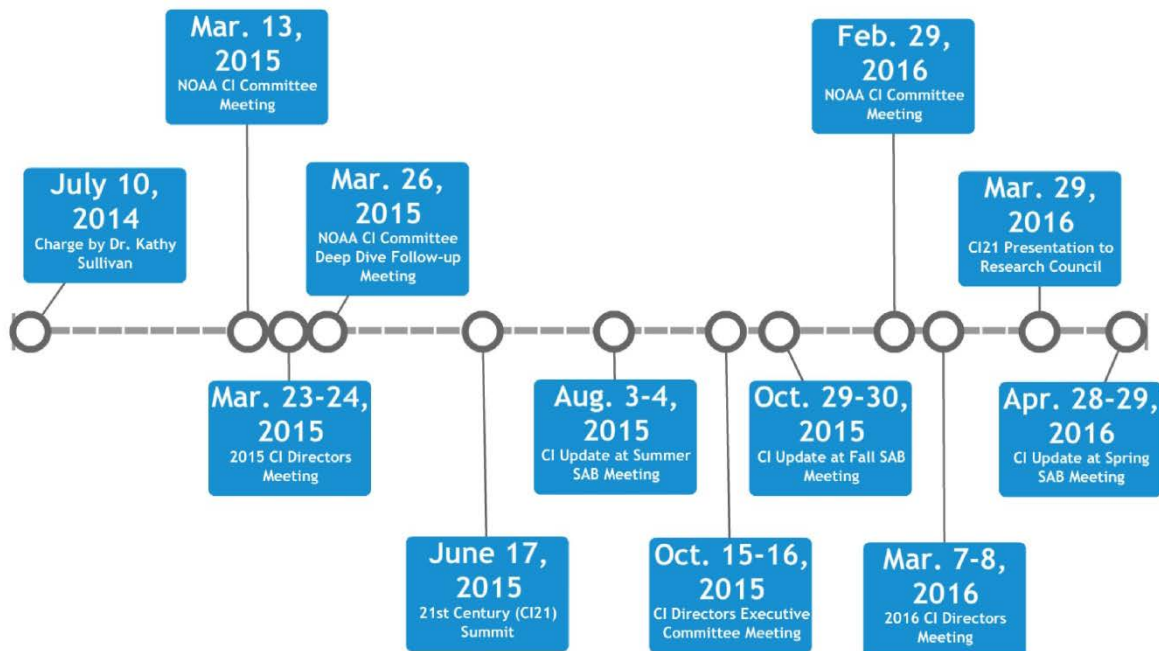
1. To clarify mutual expectations towards a joint vision for NOAA cooperative research, and
2. To document key findings and draft recommendations (short, mid, and long-term) to describe NOAA's aspirational future for CIs.

In addition to the Summit, multiple conversations took place with the NOAA CI Committee, as well as the CI Directors Executive Committee, to continue the formulation of the draft recommendations. A majority of staff support for this entire effort came from three LCDP candidates.

As a result of these discussions, the "Prospectus for Cooperative Institutes in the 21<sup>st</sup> Century" is being developed and highlights the following vision:

1. Serving **NOAA's mission** of science, service, and stewardship by contributing to research priorities; (a) to understand and predict changes in climate, weather, oceans, and coasts; (b) to share that knowledge and information with others; and (c) to conserve and manage coastal and marine ecosystems and resources, and providing NOAA with future research recommendations.
2. Increasing the nimbleness and flexibility of CI programs and establishing clear and well-defined roles between NOAA labs and partner institutions, to ensure **synchronization** and **adaptability** to NOAA's changing mission needs.
3. Positioning the CIs as an extramural **performer of choice** for ongoing research partnerships with NOAA.
4. Defining the CIs as a natural complement to NOAA's **workforce**. CIs have the capability to increase the breadth and depth of NOAA research and connect NOAA to the vast array of experts housed within the partner institutions.

Ultimately, NOAA and CI staff developed a specific set of 22 draft recommendations to improve the Cooperative Institutes portfolio systematically. These recommendations highlight four key areas: *Mission Alignment and Enhancement* (MAE), *Workforce Development* (WFD), *Finance and Management* (F&M), and *Private Sector Engagement* (PSE). These recommendations can be achieved over different timescales: *Short-term* (6-9 months), *Medium-term* (1-3 years), and *Long-term* (3-5 years).



## **CI21 Recommendations**

### **MAE Recommendations:**

In order to increase mission alignment and enhancement, recommendations charge NOAA and the CIs to engage fully and increase coordination and dialogue, and promote intellectual contribution to new concepts for NOAA/CI research. The CIs will evolve through enhancement of their diverse activities to ensure alignment with NOAA's mission.

### **WFD Recommendations:**

Cooperative Institutes are a critical component of NOAA's workforce and are instrumental in training the next generation of researchers to engage in federal research endeavors. These recommendations aim at increasing and expanding the NOAA and CI workforce by creating and utilizing best practices which further graduate students', postdoctoral scientists', and staff members' career development and advancement opportunities. By providing concrete guidance and encouragement, along with promoting flexibility and stability, both institutional knowledge and subject matter expertise will be retained throughout the lifespan of long-term projects.

### **F&M Recommendations:**

The financial and management recommendations work to alleviate funding and policy issues while streamlining communication between NOAA and the CIs. The greatest strength of the CI program is its breadth and diversity; an analysis of the overall benefit of the CI program will be conducted.

### **PSE Recommendations:**

Cooperative Institutes' academic partners have established a range of successful engagements with the private sector. Recommendations aim to develop a more effective strategy for taking better advantage of these relationships and leveraging resources to meet the mutual needs of the CIs, NOAA, and the private sectors by identifying best practices, developing opportunities, and creating incentives for such partnerships.