

US IOOS Independent Cost Estimate: Summary Information



Purpose

- **Provide summary level information about the US IOOS Independent Cost Estimate, completed in 2012.**

Why an IOOS Independent Cost Estimate?

- **Required by the ICOOS Act of 2009 (P.L. 111-11)**
- **Section 12309 of the Act requires:**

“Within 1 year after the date of enactment of this Act, the Interagency Ocean Observation Committee, through the Administrator and the Director of the National Science Foundation, shall obtain an independent cost estimate for operations and maintenance of existing Federal assets of the System, and planned or anticipated acquisition, operation, and maintenance of new Federal assets for the System, including operation facilities, observation equipment, modeling and software, data management and communication, and other essential components. The independent cost estimate shall be transmitted unabridged and without revision by the Administrator to Congress.”

How was the IOOS ICE Accomplished?

- **The IOOC engaged the Jet Propulsion Laboratory Earth Science and Technology Directorate to conduct the ICE based on their:**
 - experience with cost modeling and estimations of this magnitude
 - insulation from U.S. IOOS, making the ICE independent.
- **JPL conducted the ICE over the course of 8 months.**
- **Relied upon information furnished by IOOC and expert experience of JPL's cost estimation team and other documents.**

Structure of ICE

- **Estimates total cost of a fully functional U.S. IOOS based on:**
 - 10 year development period followed by
 - 5 year operations and sustainment period.
 - Does not include the acquisition cost of assets already in use
 - Does not include unfunded Federal requirements
- **Presents costs in three distinct groups:**
 - Federal – Agencies that are executing appropriated national ocean observing programs
 - Non Federal* – Regional entities focused on meeting regional and local constituent needs, using Federal and non-Federal funding
 - Central Functions – IOOS unique functions required to develop, operate, maintain, coordinate and manage the System to deliver ocean, coastal and Great Lakes info in an easily accessible form.



Federal Costs in the ICE

- **The ICE revealed that the largest portion of IOOS cost estimate (83.4%) is already funded in federal programs.**
- **Scope includes all Federal programs that are integrated or planned to be integrated into IOOS**
 - Current investment in ocean observation programs in 17 federal agencies average \$3 billion per year.
- **Federal programs**
 - ensure maritime safety and maritime shipping efficiency,
 - identify dangers to coastal communities,
 - support beach safety, search and rescue, public health, national security and many other national interests.
- **The federal investment quantified in the ICE is required to meet national needs independent of IOOS.**

Non-Federal Costs in the ICE

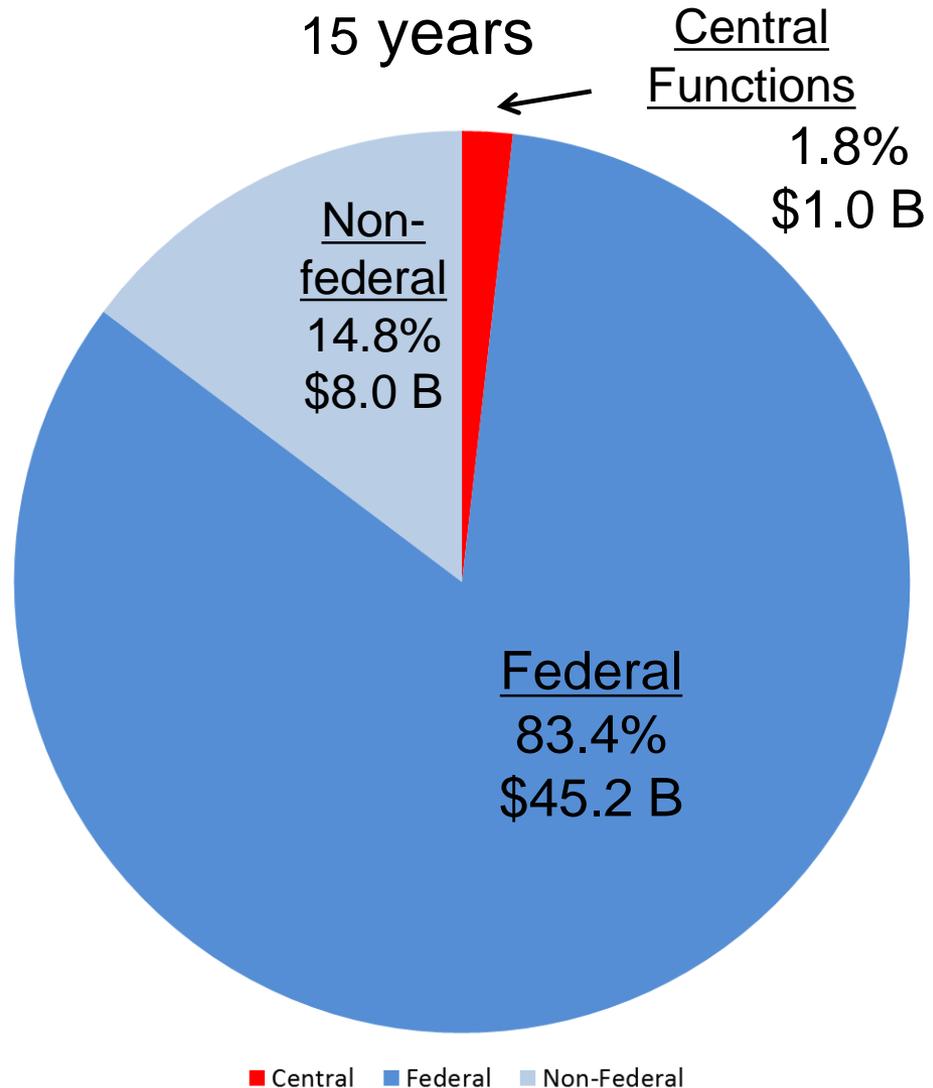
- **Second largest portion of ICE (14.8%) is the regional component.**
 - This is identified as “non-Federal” because execution of the work is by Regional Information Coordination Entities (RICEs).
- **RICEs integrate data from Federal systems within their region**
 - Cost of operating & maintaining these systems is part of Federal estimate.
- **Non-Fed estimate was derived from regional build-out plans**
 - Plans were developed by 11 Regional Associations, proxies for RICEs.
- **Current RICE activities primarily funded by Federal agencies, although RAs also receive support from non-Federal sources.**
 - ICE estimates the costs of RICE-managed ocean observing systems as \$534 million per year.
 - Current funding, awarded by Federal Cooperative Agreements, is approximately \$22 million per year.

Central Function Costs in the ICE

- **The smallest portion of ICE (1.8%) is the federally funded Central Function.**
- **Central Function costs address required Federal activities necessary develop, operate, maintain, coordinate and manage the System.**
- **The ICE determined that an investment of \$65 million per year would enable conversion of the existing average \$3 billion per year of national investment into a readily accessible and usable national system.**

Cost Estimate by Category

- **Federal share represents the existing investment.**
- **Non-Federal share is largely unfunded.**
 - Non-Federal entities execute federal funding and some other funding
 - Detailed regional build out plans are basis of estimate.
- **Central Functions include cost to develop and sustain a national system.**



Federal Contribution by Agency

- 98% of Federal contribution is from NOAA, ONR, NASA and NSF.
- Only existing Federal investments were included.

