



# Development of NOAA Observing System Portfolio Management Capabilities

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Enabling the Transition of Research into Operations

Thanh Vo, Martin Yapur  
NESDIS/TPIO

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# Outline

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**Purpose**

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**History**

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**Recent Development**

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**Next Steps**



# Purpose

- Introduce current development of NOAA's capabilities for Observing systems portfolio management
- Share our experience
- Gain insight from the AMS communities for next steps



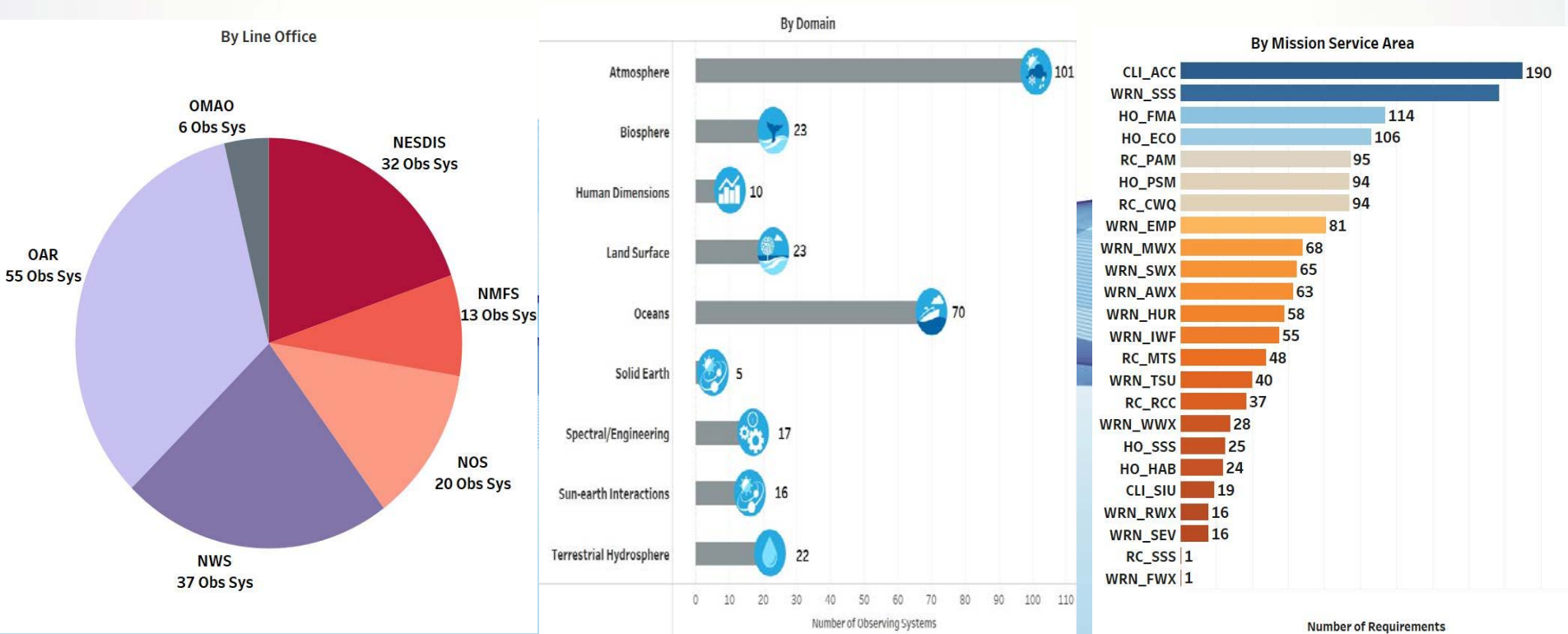
# NOAA's Observing System Architecture Portfolio

- “The What”  
End-to-end system that emphasizes performance, output, service and users
- “The How”  
Making decision for best value investment & maintaining performance and reliability of our observing system,
- “The Why”  
An operating paradigm responsive to evolving technologies and economically sustainable in response to an ever-growing demand for environmental information



# Complexity of NOAA Observing Systems Portfolio

- \$2.5B of \$5B budget
- 174 systems, 1515 Observation requirements (own, partners & leverage)
- 27 mission services areas, to implement 200 legislative mandates



- **Complex system of systems, in a changing environment and legislative constraints**
  - **Need coordinated, integrated to improve and leverage observing systems and investment**
  - **Must make decisions for budget ensuring strategic objective for mission services, and adaptive to external trends**
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- A person is standing in a snowy field at sunset, holding a large satellite dish antenna. The person is silhouetted against the bright orange and yellow light of the setting sun. In the background, there is a large, dark building with a prominent dome structure. The sky is a mix of dark blue and orange, and the ground is covered in snow with some tracks.

# History of Observing systems portfolio Management

- 1970: NOAA formed from Several independent organizations
- May 2003: NOAA Observing System Council
- 2012. NOSC strategic review
- Jan 2016, NOSC Strategic Retreat



# Early Development of Portfolio Management from 2016

- NAO 212-16, Procedure Directives & Technical handbook
- Emerging Technology Workshop
- Improving foundational information (User Requirement and Value Tree and Observing system)
- Developing the annual report for State of NOAA Observing System Health and Risks
- Engaging in Planning & budget process



# Experience

- Leadership role: need both Career and political leadership engagement
- Communication & Coordination: roles of the institution (NAO/PD) and the actions
- Adaptive to changes while anchoring with fundamental federal budgeting planning processes, and mission of the agencies



# Next steps

1. Engage political leadership and the budget cycle of FY20
1. Develop the first annual report of State of NOAA Observation Enterprise
1. Refresh foundational data for portfolio management
1. Develop technical skills
1. NOSC facilitates the infusion of emerging technology
1. NOSC works with other Councils to support Leadership decisions
1. Document and develop technical guidance in a Technical Handbook for NOAA



Questions, Comments, Advice?