

# Florida Institute of Oceanography Strategic Plan 2021-2025

# "Enabling Excellence in Marine Science, Technology and Education"

The Florida Institute of Oceanography (FIO) developed its third-generation strategic plan following a 10-year period of growth and, at times, contraction of activities. The first strategic plan (2010-15) focused on developing an organizational framework that emphasized education, research, outreach, communication, networking and collaboration. The goals were expansive and focused on developing a broad membership to share responsibilities for infrastructure assets. The second strategic plan (2015-20) was built on the successes of membership expansion from the earlier plan. That plan took a more comprehensive member-focused approach to identify key areas of focus along with a metrics-oriented plan to assess success. The current strategic plan (2021-2025)<sup>5</sup> maintains the track of the 2015-20 plan in that it relies on data from the 2015 Member Survey. The stated goals and Key Performance Indicators have been updated, aligned to areas of responsibility, and introduce a vision to embrace a modern, diverse and inclusive society. FIO maintains its course as an enabler, facilitator and coordinator of the State University System's core membership along with the growing participation of Associate and Affiliate members representing the breadth and depth of Florida's coastal and ocean-focused community, environmental needs and economy.

To form the basis for the current strategic plan, the FIO Director, FIO Leadership Team, and FIO Council<sup>6</sup> conducted an internal assessment to generate a set of five Guiding Principles:

- FIO will advance its mission through safe, efficient and effective operation of FIO facilities and vessels.
- FIO will position itself for success by promoting a data-priority culture.
- FIO will identify, acquire and support "state-of-the-art" technologies and platforms to keep the SUS institutions at the national and international forefront of ocean science and education.
- FIO will advocate for informed ocean and coastal stewardship of Florida's coastal and ocean resources.

<sup>&</sup>lt;sup>5</sup> The Years 2020-21 were incorporated into the previous strategic plan due to changes in FIO leadership and the COVID-19 pandemic. The current strategic plan will be over a four-year cycle to return the planning cycle to its original intent.

<sup>&</sup>lt;sup>6</sup> The current FIO Director assumed the position in January 2021, assembled and mobilized leadership, and worked with FIO Council and Executive Committee to assess status, trends and performance in context of current and projected needs.

• FIO will extend the scientific, social and economic reach of the consortium through broad stakeholder, multi- and trans-disciplinary initiatives. This will include activities that increase diversity, equity, inclusiveness and social justice.

#### **FIO Mission Refinement**

The Vision, Mission and Strategic Plan of FIO must reinforce the Strategic Priorities of the Board of Governors of the State University System (SUS) of Florida<sup>7</sup> as well as the Principles of Community and Strategic Plan of the host institution, the University of South Florida<sup>8</sup>. In previous FIO strategic plans, the emphasis has been on *directly* supporting: "Teaching & Learning" and "Scholarship, Research, & Innovation." However, "Community & Business Engagement" was largely under-represented in planning. The current FIO Strategic Plan recognizes the importance and incredible opportunities around Florida's ~\$40 Billion maritime 'blue' economy<sup>9</sup>. Therefore, attention has been given to extending the

economic reach of the consortium through community, state, regional, national and international activities that ultimately benefit Florida's economy and workforce. FIO leverages the power of its consortium membership and its growing stakeholder relationships to both directly and indirectly support all of the SUS Board of Governors' Strategic Priorities.

GOALS	EXCELLENCE	PRODUCTIVITY	STRATEGIC PRIORITIES	
TEACHING & LEARNING	Strengthen Quality & Reputation of Academic Programs & Universities	Increase Degree Productivity & Program Efficiency	Increase the Number of Degrees Awarded Within Programs of Strategic Emphasis	
SCHOLARSHIP, RESEARCH, & INNOVATION	Strengthen Quality & Reputation of Scholarship, Research, & Innovation	Increase Research Activity & Attract More External Funding	Increase Commercialization Activity	
COMMUNITY & BUSINESS ENGAGEMENT	BUSINESS Commitment to		Increase Community & Business Workforce	

In addition to Board of Governors' Strategic Areas, FIO maintains continuity with the core principles and goals of the host institution. The University of South Florida's Principles of Community further emphasize the connectedness of people, education, innovation, and the prosperity through commitments to Excellence with Equity, Diversity with Inclusion, Freedom with Responsibility, Dialogue with Respect, and, Transparency and Accountability. The host institution's Goals include, to:

- 1. Promote the lifelong success of well educated, highly skilled, and adaptable alumnae/alumni who lead enriched lives, are engaged citizens and thrive in a dynamic global market.
- 2. Conduct high-impact research and innovation to advance frontiers of knowledge, solve global problems and improve lives.

<sup>&</sup>lt;sup>7</sup> State University System Board of Governors, Strategic Plan 2012-2025.

<sup>8</sup> https://www.usf.edu/president/principles-of-community/index.aspx

<sup>&</sup>lt;sup>9</sup> Florida Ocean Alliance (2020). "Securing Florida's Blue Economy: A Strategic Plan for Florida's Oceans and Coasts."

- 3. Be a major social and economic engine creating robust global, national and regional partnerships to build a prosperous and sustainable future for our regional communities and the State of Florida.
- 4. Provide a safe, inclusive and vibrant community for learning, discovery, creative activities and transformative experiences enabled through adaptive design of physical, social and digital environments.
- 5. Practice continuous visionary planning and sound management throughout USF to ensure a strong and sustainable financial base, and to adapt proactively to emerging opportunities in a dynamic environment.

Further refinement of the FIO Mission for 2021-2025 incorporates the need for a sustainable future that extends beyond the sciences and into the realm of those who indirectly benefit from ocean and coastal science that contribute to a healthy and sustainable environment.

Diversity, Equality, Inclusiveness and Social Justice

The previous FIO Strategic Plans and Missions were developed outside the context of a role for FIO in the national conversation around social inequalities and injustice. FIO recognizes that the sciences, ocean and coastal sciences in particular, have lacked diversity. This has led to a lack of diversity in thought and perspective in the ocean and coastal sciences, a lack of connectedness to environmentally vulnerable communities, and a loss of talent for innovation and prosperity. FIO is in a position to reverse trends by connecting the incredibly talented and diverse pool of SUS students and faculty mentors with like-minded non-SUS stakeholders. The new FIO Mission reflects the need for socially relevant programs to meet the needs of a diverse Florida populace connected to the sea.

# Mission

The Florida Institute of Oceanography ensures sustained excellence in marine research and education through the advancement and availability of infrastructure, development of partnerships, and the enabling of outcomes that benefit the people of Florida. FIO serves as an enabler, facilitator and coordinator across academia, state and federal agencies, ocean science organizations and the private sector.

## Vision

The Florida Institute of Oceanography will enable excellence in coastal and ocean science and education. To do so requires advancing science, technology and education through state-of-the-art infrastructure, multi-institutional and cross-disciplinary activities, information sharing, public private partnerships, diversity and inclusivity, and socially relevant programming.

### **Core Values**

**Cooperation, Coordination and Participation** – of members to solve problems related to the coast and oceans and to facilitate education and training of marine scientists who reflect the diversity of the State of Florida and the nation.

**Collaboration and Communication** – among members to leverage the collective vast and deep expertise to benefit Florida in the context of a national and international conversation on critical issues and to communicate outcomes for the advancement of science-based decisions.

**Transparency and Accountability** – in all interactions that support the members, member institutions and the State University System of Florida.

# Tag Line

"Enabling Excellence in Marine Science, Technology and Education"

## Strategic Goals, Objectives, and Key Performance Indicators (KPIs)

The 2021-2025 Strategic Plan is organized into four broad goals that align to a revised structure for organizational responsibility: Operations, Education, Research, and Finance. This reorganization is critical as it creates a mechanism for organizational responsibility and accountability. The functions of communications and FIO member relations are elevated to a Communications Office at the Administrative (Director's) Level of the organization. This move recognizes the overarching importance of what was previously characterized as "Information" and "People" and will be the responsibility of a redefined FIO Communications Officer.

This Strategic Plan utilizes Key Performance Indicators (KPIs) rather than metric-based reporting. The use of KPIs follows SMART (Specific, Measurable, Attainable, Relevant, Timely) methodology as a means of not only tracking performance (as in metric-based methods) but also providing timely information that can be used to adjust the plan.

## **Substantive Changes from 2015-2020 Strategic Plan**

- Updated FIO Mission to be consistent with current SUS member needs and not only provide for the availability of infrastructure, but also for the advancement of FIO infrastructure to prepare for anticipated requirements.
- Updated Vision Statement to encompass the role that FIO should have in fostering diversity, inclusivity and social environmental justice as part of its enabling capacity.
- Aligning the four core goals of: Infrastructure, Education, Research, and Business Engagement
  with Leadership Team Areas of Responsibility that are mapped to a revised organizational
  structure. This is critical for assigning, tracking and assessing activities to meet objectives.
- Elevate Communications & External Relations and Finance Administration & Budgeting Offices to the Director's office as they provide overarching functions to FIO. This better reflects the function of transparency, accountability, information sharing and communication within FIO.
- Establish an Education Support Office to facilitate the development of FIO-sponsored educational programs in collaboration with SUS and other members as identified in the 2015-20 Plan and to develop processes to work among SUS institutions for grade and tuition distribution. An Education Support Office will coordinate and facilitate in designing, delivering and assessing consistency in policies and procedures when multiple institutions are participating.
- Establish a Research Support Office to foster coordination of large, multi-institutional, public
  private partnerships and other research-oriented opportunities. FIO's infrastructure depends
  on the success of the collaborations among the FIO membership.
- Establish a Business Engagement Office to facilitate interactions, including R&D, industry clusters, government agencies, and workforce pipelines to support Florida's ocean-based economy.
- Expanding SUS Subsidized Ship-time and Keys Marine Laboratory (KML) utilization to include
  integrative programming that includes nontraditional disciplines such as humanities, business,
  and social sciences when they may benefit from these facilities and support the FIO Mission.

#### **Goal 1: Operations**

FIO will provide for the safe, efficient and effective operation of research vessels and the Keys Marine Laboratory. The Marine Superintendent of vessels and the Director of the Keys Marine Laboratory will plan for, coordinate and execute the efficient use of the members' expertise and resources to facilitate and support the research of scientific investigators and students, engage external contractual opportunities, and provide opportunities for community outreach. FIO will work with members to increase participation of underrepresented groups across Florida, operationally support programs that promote and engage underrepresented students in FIO supported activities, and facilitate entrance into the ocean-related workforce.

While the FIO vessels, scientific equipment pool and KML are the primary physical assets available through FIO, member institutions also have a wide array of facilities and equipment that can be utilized (and possibly co-branded) by the FIO membership. FIO will maintain an inventory of substantive marine research and education infrastructure and will enter into agreements with members and other key stakeholders when FIO might assume an active role in the management or operations of these facilities and equipment.

The most pressing needs for operational sustainability of FIO is i) the replacement of the 40+ year old *R/V Weatherbird II*, ii) elevating, hardening and modernizing the core education, science and administrative facilities at the Keys Marine Laboratory, iii) increasing overnight lodging capacity at KML to increase utilization rates, and iv) establishing a budgetary process for the auxiliary units that clarify expense and revenue streams and allow for an understanding of the true necessary financial support from the state to operate FIO assets. These priorities require deliberate, yet urgent, discussion and business planning (that is already underway).

FIO Council Responsibilities: Communicate opportunities to constituent faculty and students; maintain a Vessel and KML Committee to review and rank subsidized opportunities; support the use of FIO facilities through grants and contracts; minimize overlapping and competing efforts; enhance FIO's position to manage or operate member assets with co-branding opportunities.

## Objectives and KPIs

<u>Objective 1:</u> Increasing utilization rates of research vessels and KML through targeted communications and marketing, development of new agency agreements to supporting direct access of facilities (e.g., during emergencies and environmental crises), improved industry relationships, and new investments for facilities operations by the state.

*KPIs:* Utilization rates of facilities by FIO members; requests for subsidized use by SUS members; agreements with agencies in place; funds supporting FIO operations received.

Objective 2: Develop and implement facilities modernization plans, including a replacement plan for the *R/V Weatherbird II* and an infrastructure plan to elevate and harden KML core facilities and increase lodging capacity at KML.

*KPIs:* Plans developed to include business models, projected return on investment, project scoping and design elements; implementation of plans with project management procedures in place.

Objective 3: Stabilize operations budgets through use of longer-term needs outlooks, scheduling procedures and programming support for Education and Research Support Offices. KPIs: Reservations and requests over out-years.

Objective 4: Establish service centers within the auxiliary units to clarify and strengthen annual operating budgets for vessels, KML and a scientific equipment pool. KPIs: Service centers established.

Business Model and Timeline: The core function of FIO is to provide access to and financial support for modern facilities for its SUS constituents. The new structure for tracking expenses and revenues within the individual auxiliary units will allow FIO to understand the actual costs of these units and to improve budget planning and funding requests (both base budget realignments and recurring and non-recurring Legislative Budget Requests). This financial model for operations will be in effect by end of CY2021 so that requests for support of SUS subsidized activities can be fully implemented by FY 2022-23, following legislative requests through the host institution.

A complete understanding of facilities operating expenses and revenues will also guide decisions for an R/V Weatherbird II replacement and KML facilities upgrades as these rely on a clearer picture of finances than currently available. User needs assessments for all operating facilities are being developed and will be complete and available for the host institution and FIO Council review during Q1 of CY 2022. At present, a Weatherbird II replacement plan should be completed by end of CY 2022 with acquisition and operationalization of replacement vessel by Q2 of CY2023. A KML facilities upgrade plan will be complete by Q2 of CY 2022 with funding requests in place by end of CY 2022 and construction starting by end of CY 2023.

The current utilization rate of vessels and KML by the SUS institutions<sup>10</sup> has been a result of a thin operational budget. The combined state base funding, auxiliary earnings and indirect return cover a large portion of the overall operating budget leaving little mobility to increase support to the SUS members. It is imperative that FIO doubles the facilities utilization rate to meet the SUS' faculty and student demand.

<sup>10</sup> Over period of FYs 2017-20, FIO has committed funds from the state appropriation to support SUS activities

totaling about 25% of the operations of vessels and KML. The remaining 75% of the operational budgets for vessels and KML are from grants and contracts. The goal is to have 50% of vessel and KML operations derived from state support to meet SUS requests.

#### **Goal 2: Supporting Education**

FIO will provide a venue, either physical or virtual, for offering collaboratively developed, multi-institutional, cross-disciplinary, and experiential curricula that would benefit from a partnership approach due to logistics, finances, and participation. FIO will seek and provide resources and value-added opportunities for educational programs for students at all levels of higher education, sustain and build upon existing educational programs, and promote new programs and partnerships that expand FIO's role in marine science throughout Florida and the nation. FIO will use its networking capacity to help its members develop national and international leaders in the marine and coastal sciences.

A newly created FIO Education Coordination Officer will identify, plan for, implement and coordinate educational activities with faculty and instructors, including processes needed to manage tuition and fees, resource instructional positions, distribute grades or assessments, centralize communications and expectations, serve as the contact for disability accommodations, and coordinate facilities and travel for students and instructors.

FIO Council Responsibilities: Communicate opportunities and work with students and instructors at member institutions for entry; grow and expand the Marine Field Studies and the Applied Methods in Fisheries Science courses through participation; identify and communicate ideas and plans for new courses; provide institutional solutions to problems and barriers to implementation; enhance FIO's position to offer marine and coastal educational opportunities that serve the SUS needs at a greater level than the member institution can provide alone.

# Objectives and KPIs

<u>Objective 5:</u> Develop leadership and networking opportunities among the SUS' students and early career faculty and researchers such as a cohort-based professional development program, creating a clearinghouse site for student internship opportunities, hosting virtual and in-person job fairs to connect students and graduates with the marine industry in Florida.

*KPIs:* Internship placement; Job placement and prospective employer connections; Participation in and feedback from development workshops.

<u>Objective 6:</u> Develop and coordinate specialized courses and training programs among member institutions in order to increase participation by students and maximize efficiency for SUS member institutions in areas such as marine technology, mapping and charting, K-12 teacher training in the ocean sciences, and other courses as identified by the FIO Council.

KPIs: FIO-managed courses offered; Student participation; SUS institutions represented.

<u>Objective 7:</u> Work with non-SUS consortium members (e.g., aquaria and agencies) with educational and work programs to provide experiential educational opportunities and internships for SUS students. KPIs: Internship and student work placement; Experiences offered and received.

Business Model and Timeline: As an AISO, the focus of support for infrastructure is based on utilization of the SUS membership for academic needs. The model FIO is establishing expands to include and emphasize FIO-coordinated curricula. The current structure focuses on member-coordinated courses, but this model relies on distributed management. It would be most effective and efficient to manage tuition and grade distribution (and other academic resourcing such as disability accommodation)

through FIO using an Education Coordination Office. In turn, the Academic Coordinator will work with the host institution for academic processing needs (such as credit transfers) and with the host institution bursar's office to manage tuition and fee recovery, as needed, to hire instructors and cover other course expenses. An academic programming plan will be generated by Q2 of CY 2022 and an Academic Coordinator will be hired in Q2 of 2022 to implement the plan. The position will be supported using both E&G funding and tuition recovery from FIO-coordinated courses.

#### **Goal 3: Supporting Research**

FIO will provide a venue, either virtual or physical, for coordinating and managing multi-institutional, cross-sector, or public private partnership research programming that would benefit from the breadth of expertise and the ability to coordinate and manage large, complex research programs of its consortium. FIO will seek and provide resources and value-added opportunities for research, sustain and build upon existing programs, and promote new programs and partnerships that expand FIO's role in marine science throughout Florida and the nation. The benefit to FIO as an AISO is increased stability in operational support through extramural funds, increased return of indirect funds ('overhead') funds to support FIO research administrative staffing, and increased access to FIO facilities for our FIO members.

Funded by the existing Florida Center of Excellence Research Grants Program (FLRACEP) a newly created Chief Science Officer will identify, plan, implement and coordinate research activities with faculty and researchers across the FIO membership. The position will connect science initiatives between the FIO members and other Gulf of Mexico states' representatives and will elevate FIO's profile in the Gulf. The Chief Science Officer will coordinate activities with the host institution's sponsored research office and other relevant research entities across the FIO membership to ensure adequate award management, sub-contracting, compliance and reporting.

# Objectives and KPIs

<u>Objective 8:</u> Increase research collaborations and scholarly output among FIO Member institutions (SUS and non-SUS, industry, non-profit) competing for large, multi-institutional awards.

KPIs: Numbers of submissions, awards, products (e.g., scientific papers, theses, dissertations, datasets)

<u>Objective 9:</u> Utilize convening power of FIO to host, virtually or in-person, development workshops on targeted scientific issues that require multi-institutional participation, public private partnerships, or other mechanisms suited to the FIO Mission.

*KPIs:* Number of workshops and proposals arising from workshops; Numbers and diversity of organizations participating in research development workshops.

<u>Objective 10:</u> Implement 3 to 4 long-term research programs that FIO can support, a multi-institutional public private partnership, or other collaborative opportunities that will directly support FIO's infrastructure.

KPIs: Utilization rates of FIO facilities under large research programs managed by FIO.

Business Model and Timeline: This Goal Area is currently being developed using the existing Florida RESTORE Act Center of Excellence Program (FLRACEP) funded by the Department of Treasury as part of the Deepwater Horizon penalties settlement. A Chief Scientist for FLRACEP will be hired using these funds by October 2021. It is anticipated that the FIO Chief Scientist will transition efforts to other large research program administrations as extramural funds permit and as staffing to support these programs increases. A portion of the Chief Scientific Officer's salary will be derived from returned indirect funds from the host institution's research office and that portion will support general administrative responsibilities. Additional large FIO-wide research programming may include Defense Advanced Research Programs Agency (DARPA) Reefense Program, submitted April 2021, and a newly established Florida Coastal Mapping Program office (Summer 2021).

#### **Goal 4: Supporting Business Engagement**

FIO will provide a venue, either virtual or physical, for integrating marine and coastal research and education with business and economic development entities across the state. A newly created FIO Business Development Officer effort will be built into the existing base funding as operational crew salaries are shifted to the appropriate auxiliaries. The position will coordinate with host and member institutions to promote expertise and capacity and to foster connections across the ocean science and technology industry with other like-minded organizations. The Business Development Officer will also identify and communicate workforce needs of our industry members to the FIO membership. FIO will develop and maintain an inventory of subject matter experts among the membership that can be queried for industry partnership development. FIO will serve as a clearinghouse for member academic/training programs that are pipeline programs to key industry partners or ocean industry clusters.

Objectives and KPIs

<u>Objective 11:</u> Broaden and incentivize participation of private sector Affiliate members in FIO's Consortium.

KPIs: Number and diversity of Industry Affiliate Members

<u>Objective 12:</u> Work across the FIO Membership and other relevant organizations to identify and promote the development of maritime industry clusters. FIO members and interests will be central to industry clusters and will serve the needs of R&D and workforce training.

*KPIs:* Florida ocean industry clusters are identified, geographically mapped, and related to FIO member distributions.

<u>Objective 13:</u> Create a virtual or in-person Annual Industry Forum to bring scientists, policy makers, agencies, industry and non-profits into non-adversarial discussions about sustainable use of Florida's coasts and oceans.

*KPIs:* Track numbers and diversity of participants, utilization of reports and publications presented, and policy/regulatory decisions that reference the industry-science forums.

Business Model and Timeline: This Goal Area is not considered a primary AISO Mission, and currently does not have funds support to establish a Business Engagement Officer. FIO will develop the Goal Area strategy over CY 2021-22, secure financial support, funds and participants by aligning with partner(s) (e.g., FIO Membership's Colleges of Business, Florida Ocean Alliance) by end of CY 2022. The intent is to secure a part-time FIO Business Engagement Officer in CY 2023 and implement activities in CY 2024. FIO will submit an LBR to fund the costs of this Goal Area with support from partnering organizations and industry members in 2022 legislative cycle.

#### **Executive Office Administrative Goals**

# **Finance Administration and Budgeting**

FIO Responsibilities: Coordinate all aspects of finance and budgeting in a deliberate and transparent manner that improves effectiveness and efficiency of FIO's administrative functions and Goal Area activities. This should include:

- Monitor and analyze operating performance (cash flow, growth rate, obligations etc.). Inform stakeholders (Council and host institution) how FIO investments are being optimized (ROI) to support members.
- Establish service centers aligned with auxiliaries support for vessels, Keys Marine Lab, and science operations.
- Review resource utilization for efficiencies and effectiveness for short and long-term sustainability.
- Ensure long-term customer satisfaction through regular surveys, potentially generating referral business growth and customer retention.

## **Communications and External Relations**

FIO Responsibilities: Coordinate communications strategies within the FIO core community, across the consortium membership, and to outside stakeholders to promote the activities and value of FIO in meeting its stated mission and goals. This should include:

- Manage communications approaches (newsletters, e-blasts, social media) that directly target
  existing and potential user bases, associate and affiliate members, and legislative offices
  regarding the value proposition of FIO and its physical and intellectual assets.
- Develop and implement a DEI strategy with member institutions for the purpose of engagement with external stakeholders, identify and meet the needs of a diverse and inclusive ocean science and education community, and connect minority students with research, educational and employment opportunities.
- Conduct and distribute regular and timely reports on FIO activities and utilization by FIO members.
- Maintain an institutional database that tracks member utilization for effective planning and resourcing of SUS support.

# Florida Institute of Oceanography 2021-2025 Strategic Plan Key Objective and Performance Indicators

	Alignment with BOG		Objective	Key Performance Indicator
Goals		Business Engagement: Strength Quality, Recognition, increase Business and Workforce	Increasing utilization rates of research vessels and KML through targeted communications and marketing, development of new agency agreements to supporting direct access of facilities (e.g., during emergencies and environmental crises), improved industry relationships, and new investments for facilities operations by the state.	Utilization rates of facilities by FIO members; requests for subsidized use by SUS members; agreements with agencies in place; funds supporting FIO operations received.
			Develop and implement facilities modernization plans, including a replacement plan for the R/V Weatherbird II and an infrastructure plan to elevate and harden KML core facilities and increase lodging capacity at KML.	Plans developed to include business models, projected return on investment, project scoping and design elements; implementation of plans with project management procedures in place.
			Stabilize operations budgets through use of longer-term needs outlooks, scheduling procedures and programming support for Education and Research Support Offices.  Establish service centers within the auxiliary units to clarify and	Reservations and requests over out-years.  Service centers established
			strengthen annual operating budgets for vessels, KML and a scientific equipment pool.	Service centers established
	Supporting Education	<b>Teaching &amp; Learning:</b> Productivity-Increase Degree & Program	Develop leadership and networking opportunities in collaboration with SUS institutions for students and early career faculty and researchers such as a cohort-based professional development program, creating a clearinghouse site for student	Internship placement; Job placement and prospective employer connections; Participation in and feedback from development workshops.
			Develop and coordinate specialized courses and training programs in partnership with member institutions in order to increase participation by students and maximize efficiency for SUS institutions in areas such as marine technology, mapping and charting, K-12 teacher training in the ocean sciences, and other courses as identified by the FIO Council.	FIO-managed courses offered; Student participation; SUS institutions represented.
			Work with non-SUS consortium members (e.g., aquaria, agencies) to develop, promote and deliver educational and work programs to provide experiential educational opportunities and internships for SUS students.	Internship and student work placement; experiences offered and received.
	Supporting Research	Scholarship, Research & Innovation: Strengthen Quality, Increase Research Productivity	Increase research collaborations and scholarly output among FIO Member institutions (SUS and non-SUS, industry, non-profit) competing for large, multi-institutional awards.	Numbers of submissions, awards, products (e.g., scientific papers, theses, dissertations, datasets)
			Utilize the convening power of FIO to host, virtually or in- person, development workshops on targeted scientific issues that require multi-institutional participation, public private partnerships, or other mechanisms suited to the FIO Mission.	Number of workshops and proposals arising from workshops; numbers and diversity of organizations participating in research development workshops.
			Implement 3 to 4 long-term research programs that FIO can support, a multi-institutional, public private partnership, or other collaborative opportunities that will directly support FIO's infrastructure.	Utilization rates of FIO facilities under large research programs managed by FIO.
	ment	Community & Business Engagement: Strength Quality & Commitment to Community Business and Workforce	Broaden and incentivize participation of private sector Affiliate members in FIO's Consortium.	Number and diversity of Industry Affiliate Members.
	Supporting Business Engagement		Work across the FIO Membership and other relevant organizations to identify and promote the development of maritime industry clusters. FIO members and interests will be central to industry clusters and will serve the needs of R&D and workforce training.	Florida ocean industry clusters are identified, geographically mapped, and related to FIO member distributions.
			Create a virtual or in-person Annual Industry Forum to bring scientists, policy makers, agencies, industry and non-profits into non-adversarial discussions about sustainable use of Florida's coasts and oceans.	Track numbers and diversity of participants, utilization of reports and publications presented, and policy/regulatory decisions that reference the industry-science forums.