Executive Summary

As a maritime nation, the United States' economic and national security future hinges on our ability to understand and harness the ocean (National Science and Technology Council, 2022). The **Ocean Tech Hub (OTH)**, representing all of Southeastern New England, brings together government, academia, nonprofits, early- and mid-stage commercial ventures and legacy companies to catalyze commercialization of **robotics and sensors with AI/ML embedded** (KTFA 4, 1) and the **advanced material science they need** (KTFA 10). The project will concretize regional leadership in these KTFAs by: providing commercial access to world-class testing facilities, streamlining access to water-based testing, and enabling iterative testing in a digital environment; providing targeted second stage-business growth supports including technical assistance and access to capital; developing a comprehensive workforce development portfolio that includes K-12, wraparound supports, lab-based internships, and ongoing employer signaling to ensure demand-driven and future-looking workforce programs.

Southeastern New England (SENE) is the nation's prime ocean-focused tech hub location: It has a confluence of distinct water-based assets that cannot be replicated. It is strategically located near additional commercial hubs in the Northeast, adjacent to the the North America-Europe and North America-Northern Africa shipping routes and telecommunications lines. It has a robust naval research, development, and deployment community as well as strong commercial sectors in marine-serving manufacturing, composites, and robotics. The region comprises a dozen urban areas (pop: 22,000 to 190,000) in a small footprint with rapidly changing demographics. The OTH provides a model opportunity for urban renewal focused on equity and climate resilience.

The Promise of the Ocean Technology Hub

The OTH builds on a decade of strategic investments in innovation and economic development to braid the region's rich legacy of advanced manufacturing with its entrepreneurial expertise and focused technological leadership in robotics and advanced materials. The OTH's vision sees SENE recognized as the Silicon Valley of Ocean Technology—a region that engages residents from all backgrounds and all levels of educational attainment and acts as a model for how to couple new industry growth with legacy industry revitalization. The region has a density of Justice40 communities that extend throughout and beyond the area. The promise of the OTH is to create 1) a globally competitive industry cluster around robotics, AI/ML, and advanced materials while changing the trajectory of small urban areas with historical manufacturing job loss and major requirements for reskilling and 2) create a commercialization hub that is driven by climate responsibility: finding solutions to mitigate climate change and protect our economic and national security. This together provides a road map for economic and workforce reinvigoration focused through a Just Transition lens.

SENE is home to over 400 robotics firms and research organizations, over 100 data analytics firms including 52 specializing in marine applications, and over 100 composite and advanced materials makers and suppliers (aggregated internal data). Cutting edge academic and private research institutions focused on marine robotics and autonomous systems have been advancing undersea technology and in particular, materials technology for decades. This has contributed to the current surge in market demand for AUVs: The industry is expected to reach $4.03B by 2027, representing a CAGR of 18.8%. Advancements in technology being pioneered by SENE-based companies like Jaia Robotics, Saab AB, Exail Technologies, L3Harris Technologies and others are allowing for cost economics that have made undersea technology more accessible, opening new commercial markets. Further, the region's strong defense-industry presence—

$119.1B in annual economic output and 407,500 jobs throughout New England as of 2022—draws both small and large companies that are working in these industries to the region. The Department of Defense's (DoD) Defense Innovation Unit's focus on AI/ML and autonomy, and DoD's targeted focus on adoption of commercial technologies through the 2022 National Defense Strategy well positions the OTH to dramatically expand dual-use capabilities and spawn new commercial markets for AUVs, the data they collect, and the materials that give them shape.

Our region is also a place where companies can find talent across the education spectrum: RI specifically graduates more STEM degree earners per capita than all but one other state in the nation and over 56% of Rhode Islanders have some post-secondary credential as of Feb 2024. (The state's goal is 70% post-secondary attainment by 2027.) Since 2010, even with the pandemic, the MSA has seen of the largest national drops in unemployment (BLS and FRED).

The OTH consortium and component projects have been assembled to best capitalize on the potential of this opportunity: Consortium members and partners include businesses and industry associations (Brito Associates, IBM, Infused Innovations, Jaia Robotics, RIMTA), higher education researchers and tech transfer offices (Brown University, RIC, UMass Dartmouth, URI, WHOI), labor unions (RI AFL-CIO and MA AFL-CIO), workforce development and community organizations (CCRI, RI DLT), business support organizations (401 Tech Bridge, Polaris, RI DEDI, RIHub, SeaAhead), investors (Blue Angels, Propeller Ventures, Slater Technology Fund), and state agencies (RI Commerce, MA Executive Office of Economic Development) in order to enact a full-throttled approach to achieve OTH's accelerated growth. Additional collaborations and partnerships with K-12 districts, support organizations, environmental justice, minority-business serving organizations, and others ensure holistic needs and voice are represented through the OTH. These include but limited to RI Commerce's 12 Minority Business Accelerator partner BSOs and the RIDLT's 25 (and increasing) Community Engagement Partners.

In considering the OTH's water-based technology and the region's spread of assets, the OTH through the Component Projects are building a networked framework to activate regional assets that benefit the development of water-based and dependent ocean technology. Collectively, they will prove out use cases for technologies that will both sustainably leverage our oceans as well as support their protection and cleanliness:

- *Component Project 1: Ocean Tech Hub University Consortium (OTH-UC)*: This project catalyzes the regions academic institutions, streamlining marine science and technology research, providing top-of-the-line test tanks and dedicated salt- and fresh-water testing facilities, and unique and specific business supports not contemplated through other projects (i.e., legal work). The SENE ranks second nationally in patent diversity and third in university-based knowledge spillover. We're middle of the pack in tech transfer, with rankings in OTH-UC of 65 (UMass), 151 (Brown), and 190 (URI). This project creates structure, process, and relationships for enhanced tech transfer. Lab-based internship opportunities for local college students, including, importantly those from the region's minority-serving institutions (RIC, CCRI) is an additional element.
- *Component Project 2: Blue Robotics Lab (BRL)*: This project creates a co-working space and fab lab for robotics, providing startups and growing businesses with space, equipment and programming to build, test and iterate designs as they commercialize undersea robotics and materials. Direct water access for testing and demonstrating new products as well as ready-made flex industrial space can be leveraged for rapid company growth. This project provides a unique landing spot within a 30 min drive of the full MSA to businesses looking to locate near supply chain and competitors. Companies that

graduate from lab space through the OTH-UC and/or are engaged through Grow Blue Business or other OTH projects will have access to the BRL.

- *Component Project 3: Clean Energy Center Testbeds*: This joint-entity project will provide OTH businesses with dockside, near-shore and permanent deep offshore testing facilities with a focus on servicing the clean energy sectors. Renewable energy represents a growing market for AUVs and advanced materials regionally and globally, with workforce demand for wind power generation anticipated to increase by 52% over the next decade in the region (JobsEQ). The project's headquarters is strategically located in New Bedford, MA, complementing both the assets and the location of OTH's other physical testing sites (OTH-UC and BRL projects). It will also provide access to sensor deployments and data collection for the Buzzards Bay build-out of the SmartBay.
- *Component Project 4: SmartBay Initiative*: The SmartBay Initiative will create a "digital twin" of the marine conditions and geography of the region's waters. This virtual architecture, created through the meshing of data gathered from both existing and newly placed sensors and newly deployed AUVs, will provide lighter-touch access to new product testing in a virtual environment. This will lower barriers to entry for diverse entrepreneurs, enable earlier product validations to drive commercial investments, and limit environmental strain due to iterative product testing. This project can be leveraged by companies engaged throughout the OTH ecosystem as a complement the physical testing assets and support the Workforce of the Future project.
- *Component Project 5: Workforce of the Future*: Success of business growth in the OTH will depend on an available, able, and engaged workforce. This project will leverage the Real Jobs Rhode Island (RIRJ) platform to directly fund community and workforce organizations to reskill and upskill workers, filling identified gaps in the ecosystem. Trainings provide needed wraparound supports and adhere to the Good Jobs principles. An Employer Signaling program will enable the OTH's RJRI to train for the future jobs needed as technology evolves. K-12 engagements will ensure our region's youth, especially those from underrepresented communities, gain exposure to these growing job opportunities. This project catalyzes all others.
- *Component Project 6: Grow Blue Business*: While other projects focus on TRL growth and workforce, business readiness is equally critical for scaling a successful commercial venture. Grow Blue Business (GBB) will engage the growing global ocean technology business market through the Global Ocean Technology Challenge, and directly connect entrepreneurs to venture capitalists through the Blue Venture Investment Summits. It will support second-stage businesses through concierge services, SeaAhead's Blue Pilots and RIHub programs. GBB will additionally support legacy manufacturers and other suppliers as they pivot into the ocean tech supply chain. This project will provide a business pipeline for Component Projects 1-4, support employer signaling done through Component Project 5, and strengthen the ecosystem and drive factor for entrepreneurs and CEOs to grow their companies in the SENE and/or base their US operations here.
- *Component Project 7: OTH Central*: This project provides overarching governance, leadership, and connective tissue to the OTH efforts, knitting all projects together and ensuring the six core project efforts are additive and not duplicative to each other. OTH Central will be the home of the Regional Innovation Officer. This project additionally manages risk mitigation and reporting and ensures an equity lens is utilized throughout all OTH decision-making and strategic implementation effort..

These component projects will be coupled with policy and investment commitments from the State of Rhode Island including targeted tax credits to be leveraged to incentivize the creation of good jobs in the region and support the growth of manufacturing (Manufacturing Investment Tax Credit and tax-exempt bonding for manufacturing projects) and R&D Tax Credit. In addition to several grant programs relating to infrastructure and equipment, Massachusetts also offers quasi-public agencies specialized in supporting commercialization through mentorship and grant programs to build on federal awards such as SBIR/STTR. When successful, the OTH work will lead to the development of over 200 new companies, 15,000 new jobs, and an increased regional GDP of over $2.2B. We additionally seek for a wage growth increase of $20,000/year on average in the region by 2030.

Pre-award implementation efforts will continue in 2024, with particular focus on preparing with community and climate justice groups for deeper engagements during the grant period. The Blue Robotics Lab build out (pre-award efforts) will done in 2024 as well. OTH Component Projects will commence in Q1 2025 (immediately upon award). Each project is designed to run for four years, with the OTH Central maintaining operations for a fifth year to sustain and transition overarching momentum, collect impact and metrics, and work with the Consortium to plan for next steps. While OTH-UC testing facilities are presently available, the enhanced URI lab-based resources (leveraged assets paid for through bond funding) will be operational in the first year of the Tech Hubs grant. It is anticipated that the SmartBay will come online in 2025 and that the OTH TestBeds dock and nearshore sites will be operational by the end of year 1 with different components of the offshore site (ASIT tower) completed between 6 and 15 months after startup. Workforce programming will run continuously; employer signaling will be done at least in years one and three of the grant. Business support programming will be ongoing as well, with the initial Global Ocean Technology Challenge running in or around Q3 2025 and the first Blue Venture Summit hosted at the same time.

Barriers to Commercialization

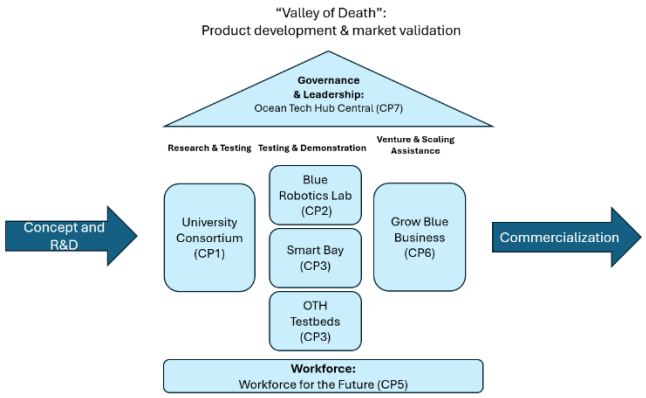
Ocean technology has long been the domain of defense interests—especially the autonomous undersea vehicle (AUV) industry. Harsh ocean climates create a dynamic and unique set of variables that have not yet been tested for at large-scale. The Ocean Frontier is the final one—and there is limited established base of technology from which to draw: Battery storage, material strength and dynamism, and capabilities of both programmed robotics and AI and ML are all requirements for the growth of ocean technology and are all at the edge of design presently. This offers immense possibility for the industries both individually and for compound growth collectively (details below) but it has also kept prices for undersea AUVs prohibitive to commercial use. Until recently, this has rendered ocean technology the domain of defense (or research) almost exclusively. This means that much of the IP most relevant to the ocean technology space resides within defense agencies or institutions of higher education.

Recent technology breakthroughs (many achieved by companies in the SENE region) and an increased focus from the DoD on dual-use technology and from universities on tech transfer have brought this new economic frontier into commercial viability. The OTH region is showcasing the possibility to scale commercial ocean technology through composites development and manufacturing, deep-sea submersible development, and off-shore renewable energy firms. However, scaled commercial market demand has not yet materialized.

Within the region specifically, extensive local research through the Grow Blue Action Plan (2023), Charting the Course: A Regional Assessment of the Marine and Science and Technology Sector in Southeastern New England (2019) and the MassCEC feasibility study

highlight four regional barriers to scaling business operations related to ocean technology: 1) access to real-world/water testing facilities outside the university environment for product development and demonstrations, 2) ability to secure venture capital for second-stage business scaling, 3) ready and able-to-work talent that is agile in their skills development, and 4) a coherent strategy for regional collaboration to avoid disjoint and duplication of efforts. Solutioning for any one of these alone will not trigger the catalytic growth required to crack global leadership in these industries, nor will it realize the OTH's vision of equitable economic development and security throughout the region. Each of the seven component projects that the OTH is submitting explicitly align to at least one of these targeted gap areas; interconnections of the component projects have been purposefully designed to ensure coherence of and supportive redundancies in strategy implementation.

The University Consortium, OTH Testbeds, and Blue Robotics Lab projects provide critical "outside the wall" testing and demonstration capacities needed to accelerate technology transfer and translation, business creation, and scalable growth—and encourage further development of the presently robust pipeline of TLR 1-5 technologies. SmartBay provides a parallel capacity to test and demonstrate technology—with lower barriers to entry and fewer environmental impacts as (necessary) in-water testing require. The GBB project provides access to capital opportunities as well as the precursor supports needed for businesses to obtain that capital. And the Workforce of the Future project leverages the insights from employers of OTH industries to tailor workforce training that meets their needs while also ensuring successful job placement for workers.



While not a barrier to commercialization, the OTH understands that economic development for nascent industries, without clear cultivation, can become siloed and thus stall. And, unless proactively addressed, can perpetuate or deepen the structural inequities seen in American society—a core reason for the dedicated OTH Central project.

The Ocean Technology Hub Nexus

The time is right for Southeastern New England. SENE has reached a critical mass of ocean technology companies and supportive initiatives that make this moment ideal for Tech Hub investment: As of 2022, there were 54,038 jobs in Ocean Tech industries in the OTH MSA, which produced $6.6 billion in GDP (with an additional 168,999 jobs in the supply chain). Combined, these jobs generated $27.6 billion in GDP. Without intervention, we anticipate the region's ocean tech industries to grow by 4,841 jobs over the next decade. Further, targeted investment has been made to develop business pipeline in this region and in these sectors over the past decade: According to internal Pitchbook analysis, RI and MA companies comprise 5.2% of total funding received globally in these sectors since 2012. MA ranks 2nd in total deals confirmed and RI ranks 10th in funding and 4th in total deals confirmed. EDA investment will capitalize on these seed investments to further catalyze this building momentum and exponentially add to this growth.

The time is right for the United States. Allies like the UK, France, and Norway have been investing in ocean-based cluster organizations/hubs since the mid-2010s. China established the Shandong "New Area" Peninsula Blue Economy Fund in 2014 and established the Qingdao Blue Silicon Valley in 2020, which marshalled 35% of the region's workforce and over 200 marine scientists from across China to conduct on-site research. With over 95,000 miles of coastline in the US, there is a heightened national security need to further develop robust capacities and maintain global leadership in undersea AUV and sensoring technologies. Sonar improvements, as example, make traditional undersea rovers detectable—requiring advancements in bio-mimicking robotics with variable buoyancy and alternative communications capacities to maintain homeland security and aquatic border patrolling. In the commercial space, the undersea robotics sector has a 14.5% CAGR through 2030; AUVs specifically are positioned to see an 18.8% CAGR during that time frame, with cross-industry use cases for ocean technology ranging from ocean research to marine trade to aquaculture to renewable energy to underwater infrastructure (e.g., broadband). (Compare this to the more mature market of Automous Surface Vehicles, which are only projected to grow 4.4%.) Ceding the leadership of ocean technologies to firms and government entities outside the U.S. puts American interests—both commercial and strategic—at risk.

And the Ocean Tech Hub is the right bet. The OTH is the only ocean technology hub designated in the US; it capitalizes on current collaboration and centralizing efforts in the region to ensure a globally competitive Atlantic presence in ocean technology for the nation. SENE's assets include direct access to open ocean, including fisheries and shipping lanes, deep-water ports, and a variety of coastal environments. This geographic advantage allows for a wide range of ocean technologies to be explored and developed in a single region, leading to shared ideas and development and a multiplier effect based on proximity. The OTH boasts the support of businesses, local and state government, research institutions, and labor, enabling us to marshal all required manner of resources to reach out vision.

The Role of Partners: Government, Philanthropic, and Private Participation

As detailed throughout this overarching narrative and the component project applications, a cross-state government collaboration is squarely at the center of the OTH—providing both assurances of sustainability for the work as well as a deep suite of resources and tools that can be deployed in service of the OTH efforts. Over 80 partners are committing ensure the OTH is able to increase the time-to-value of new technologies, including RI Foundation, the state's largest community foundation. Additional examples: Blue MVMT, IBM, Infused Innovations, and HavocAI are contributing the equivalent of over $2M of in-kind time in the build-out of the SmartBay. Dassault is providing licenses to necessary engineering software for stronger collaboration with the OTH-UC universities and entrepreneurs. And the Herreshoff Marine Museum is providing a five-year lease to a high-bay garage and office space and first-rights access to marina use for businesses in the OHT to test products. Unique to the OTH is the cross-border partnership between Rhode Island and Massachusetts. While identified in our MSA, the OTH couldn't exist without recognizing the vast similarity, synergy and history between our two states in this region, especially in the socioeconomic landscape as well as maritime base. Further, Connecticut brings an additional dimension to expanding collaborations in an extended region. The marine sciences and ocean technology assets have been critical components of our three-state economy and is further maximized at the juncture of OTH.

Sustainability of the OTH

It is this level of dedicated partnership between government and the private and nonprofit sectors that will ensure sustainability of the OTH after the award period ends. The State of Rhode Island is committed to maintaining the efforts within OTH Central after completion of the Phase 2 Tech Hub grant term through state appropriations. Additionally, as also explained in the OTH Central application, the OTH is scoping three options as potential sustainability models for the OTH. We anticipate using the first two years of the grant to gather data and determine which model may be the most effective for both business growth as well as continued Hub operations. Future state appropriations will also be a factor.

Option 1: Fee-for-usage: Businesses and others pay a fee for utilization of the lab, hardware, and software infrastructure established by the Hub (as contemplated in the plans of the Blue Robotics Lab and the SmartBay, as examples). A percentage of the revenue from these fees would be assessed to the OTH.

Option 2: Profit-sharing: Understanding that share-taking and/or non-dilutive funding is not an allowable use of EDA funds, the OTH will explore what the structures for profit-sharing may be possible and feasible through other investment funding to maintain Hub operations.

Option 3: Membership model: Similar to an industry association, membership fees would be assessed based on size of business and/or utilization of the network resources.

Working with Labor

Partnership with Labor is central to the success of the OTH consortium efforts. Our Phase 1 application included our commitment to the Good Jobs Principles developed by the federal Departments of Commerce and Labor. The commitment to these principles will foster an equitable workforce environment that will broadly distribute the benefits of the hub's success across communities in the region. Initially, the OTH concept was presented to the Rhode Island AFL-CIO executive board, which unanimously supported the project; the RI AFL-CIO has been deeply engaged in the development of the component project proposals. Both the Rhode Island AFL-CIO and the Massachusetts AFL-CIO are on the OTH Steering Committee and the RI Building and Construction Trades Union has signed on as a supporter. Further, the OTH's RJRI program (the Workforce for the Future framework) partners heavily with labor in the design and implementation of critical registered apprenticeship and other training programs.

OTH's Commitment to Equitable Outcomes

Justice40 communities are central to the SENE region economic development strategies. The City of Providence is a steering committee member; Fall River is considered by Consortium Member UMass Dartmouth's CIE campus; the City of New Bedford is another Consortium member, with core investments in workforce and infrastructure being made in these two largest urban communities in the region with populations of over 30% non-Native English speakers and about 20% households living at or below the poverty line (US Census). Rhode Island's Division of Equity, Diversity, and Inclusion is on the OTH steering committee, as are the region's two HSIs. Rhode Island College's workforce training center is strategically located in Central Falls (68% residents of color, US Census) to ensure direct community access to workforce development programming, 401TechBridge's sister agency runs the JARC center that focuses on upskilling formerly incarcerated individuals, and our RJRI and labor partners explicitly prioritize equity in access to trainings through wraparound services support.

Equity is additionally central to the OTH efforts: The OTH is committed to the Just Transition Framework, recognizing economic transition due to work of the OTH is inevitable, but that it will not be equitable without deep intentionality. We further internalize that SENE institutions are largely and have historically been white-led. To that end, the OTH Central project

explicitly includes hiring a DEI consultant that will embed inside the steering committee to ensure meaningful prioritization of equity in all OTH decision-making. The OTH additionally has built community-based working groups into the governance model for the consortium, including a cross-cutting working group on equity, accountability, and transparency. This working group will focus on implementation of metrics—especially the equity-related metrics that the OTH has set, as detailed in the Project Outcomes and Goals below. Finally, targeted programming within the OTH is focused on increasing engagement of W/M/DBE and community groups. Community engagement is built into the OTH Central project; the proposed OTH Ambassadors program helps elevate justice-equity voices and creates intentional space for growth of W/M/DBE and leadership development for workers of color and those from other marginalized groups. And the SupplyOceanTech work explicitly ensures supplier and small business access to the increased B2B customer base for the region's suppliers.

Project Outcomes and Goals

As showcased in our component projects, the OTH plans to track input metrics, output metrics and outcome metrics as outlined in this table:

Metric	Annually	By year 4	By year 10	Equity Metric
INPUT METRICS				
Unique Businesses Engaged Annually	360	1,440	3,600	At least 25% of these businesses will be minority- and/or women-business enterprises
Interns placed	250	1000	2,500	At least 40% of interns self-identify as a member of a covered population
Patents and invention disclosures filed	25	100	2,500	
K-12 students engaged	1300	5200	8000	At least 90% of K-12 students engaged attend school in a Justice40 or coastal community
Cluster development events held	19	76	190	At least 30% of participants will be members of a covered population
OUTPUT METRICS				
Funds raised by OTH-connected businesses	N/A	$684,000,000	$1,710,000,000	At least 15% of funds raised will be to minority- and/or women-business enterprises
Supply of qualified workers	2050	8200	20,500	At least 20% of IHE graduates in relevant fields will identify as a member of at least one covered population as defined by 47 USC 1721(8) At least 50% of workers trained through RJRI programming will identify as a member of at least one covered population as defined by 47 USC 1721(8) At least 70% of workers trained through RJRI programming reside in a Justice40 or coastal community
Offices opened in SENE	24	96	200	Companies that open offices in SENE through OTH commit to Fair Chance hiring practices and Good Jobs Principles

Contracts developed	136	544	1360	At least 15% of prime and subcontracts established through the OTH are to minority- or women-business enterprises
OUTCOME METRICS				
CAGR growth in region	N/A	1%	1%	
GDP growth in region	N/A	$880,000,000	$2,200,000,000	Household incomes in Justice40 communities and historically disadvantaged Census tracts (based on BLS data and EDA's median income thresholds for distressed communities) rise by $20,000 by 2030 Fewer MSA Census Tracts qualify as distressed by EDA thresholds (59 distressed Census tracts in Rhode Island as of January 2024)
Employee growth (jobs created, retained, and/or pivoted to OTH industries)	1250	5,000	15,000	At least 75% of jobs created will have an annual salary above the median income for the MSA At least 50% of hires will represent a covered population as defined by 47 USC 1721(8)
Contracts value	$500,000,000	$2,000,000,000	$20,000,000,000	At least 15% of dollar value of prime and subcontracts established through the OTH are to minority- or women-business enterprises

Housing a Growing OTH Workforce

Housing concerns (stock and affordability) in Southeastern New England pre-date the Ocean Tech Hub; the States of Rhode Island and Massachusetts are making concerted efforts to increase housing stock that is affordable to people of all incomes, with significant investments being made over the past five years.

Rhode Island dedicated $320M of the State's SFRF funding to addressing affordable housing or homelessness (representing approximately 25 percent of the state's SFRF funds). Over $175M of this funding is being used to build new housing affordable to low- and middle-income households. Rhode Island's SFRF funds have been committed to projects building more than 1,600 new housing units in the state, with more awards being made in the coming months. More than 87% of the 1,600 new housing units are affordable. Current developments are being built across almost half of the municipalities in Rhode Island with the majority located in the Providence area. Rhode Island has also dedicated SFRF funds to supporting municipalities with technical assistance grants to review zoning practices related to transit-oriented housing development. Further, Rhode Island voters have approved four housing bonds totaling $190M since 2006, with the most recent $65M housing bond approved in 2021. Rhode Island's Governor recently proposed an additional $100M bond to support housing development. This proposed bond would be the largest housing bond in Rhode Island's history. Additionally, Rhode Island recently established a Department of Housing and created a $30 million annual state low-income housing tax program. Policymakers have further enacted a faster application process for government funds for low- and moderate-income housing, created incentives to support transit-oriented housing development, and expedited processes for converting non-residential buildings (mills, schools, office buildings) to housing units.

In Massachusetts, Governor Healey recently announced a comprehensive package of spending, policy and programmatic actions, representing the largest proposed investment in housing in the state's history, aiming to fund or enable more than 40,000 housing units. The state

is also advancing an ambitious multi-family zoning requirement along the state's MBTA transit network, which stretches well into Bristol County.

The OTH consortium recognized the ongoing challenges for housing in the region and the members representing our two state governments will continue to work with our Housing colleagues to support the housing needs that could develop from the success of the hub—as well as ensuring the new housing stock is accessible at all price points and well as accessible to the Hub's growing commercial clusters by car and, especially, public transit.

Activities Since Designation

Since October 2023, the OTH has focused on four core activities: market analysis, governance and capacity building, community engagement, and strategic decisioning. RI Commerce engaged a vendor to complete a detailed market analysis of the global ocean technology sector and to identify opportunities for the OTH to devise the most thoughtful growth strategy. While we previously had strong signaling data, the OTH requires a more targeted and comprehensive analysis of market demand and global use cases around the confluence of undersea robotics and automation, AI/ML, and advanced materials, as well as an assessment of how they relate to our region's capabilities and assets. The final analysis from this effort will be completed by August 31, 2024 and include: 1) detailed buying and production trends; 2) outline of leading businesses, products and services in the ocean technology sector globally; 3) tracking and forecasting of investments in ocean technology; 4) identification of risks to market entry; 5) a competitive analysis of other ocean tech-forward regions globally; 6) and a final assessment of opportunities specific for the OTH region.

The OTH has further framed the structure of the Consortium and its steering committee. We have updated the Steering Committee membership to deepen ties to our urban communities, Hispanic-serving institutions (HSIs), and industry as well as partners engaged through component projects. We developed a deeper cross-state relationship as well with key members of the Massachusetts Executive Office of Economic Development. We have also restructured our working groups to better align with new project scoping. We have additionally formalized collaborative agreements between RI Commerce and component project leads. And hiring for the consortium's full-time Regional Innovation Officer is underway.

Since October, our steering committee has continued to meet weekly. We have additionally continued to engage stakeholders from the wider community as we prepare for larger-scale implementation of OTH efforts. We launched a website and LinkedIn presence—and we set up a newsletter and online intake form for to keep stakeholders engaged and informed.

For this Phase 2 strategy, we ran an open call for concept papers for innovators, institutions, and community groups in the region to share their work and ideas for how the OTH should be prioritizing efforts over the next four years, receiving nearly 30 responses. We hosted two public, in-person forums, bringing together nearly 150 people to discuss and prioritize those ideas, and then formed subgroups to help inform the final projects. We presented and received feedback on the OTH structure and priorities at numerous industry and community meetings, including the Greater Providence Chamber's Innovation Committee; SeaAhead's Ocean Start Up Showcase; and the Blue Innovation Group, a new meetup for the blue economy ecosystem with startups, investors, government and academia. Notably, since designation, all the work we have done—including the submission of this grant—has been fully developed and executed by the OTH Consortium members themselves without the support of consultants. This represents the level of engagement that we will bring to bear in service of the OTH implementation and well as proves the regional collaboration and work product we are collectively primed to deliver.