

Maritime Innovation Center Design Funding

May 14, 2019



Maritime Innovation Initiative Progress

- Update Business Plan
- Form advisory group
- Develop MOU with WA State
- Develop virtual incubator and accelerator
- Complete design work on Ship Supply building**

“The challenging times in all port related markets, like logistics, oil and gas, and maritime, require that we have a window on new technologies. [The] PortXL [Maritime Accelerator] helped us identify these trends, bringing new business models to our markets and challenging conventional businesses.”

Paul Smits
CFO, Port of Rotterdam



Advancing Maritime Innovation

- Seeking authorization for design services in support of developing Ship Supply building at Fishermen's Terminal.
- Requesting \$1,750,000
- Part of 2019-2023 Capital Improvement Plan



Maritime Innovation Center

Mission:

The Port of Seattle's Maritime Innovation Center will provide support required by marine and ocean-oriented companies in their effort to modernize and/or innovate the maritime industry and create good-paying Blue Jobs.

The Center will provide this support by making use of its own facility as an incubator and accelerator environment as well as by leveraging on local assets, resources and network...

When people think about sustainable BlueTech industries, we want them to think about Puget Sound in the same way the world equates finance with New York or technology with Silicon Valley.

Innovation Center Strategic Objectives

1. Be a focal point for maritime innovation
2. Become a centralized information source to the BlueTech sector
3. Offer incubator and accelerator environment
4. Support investment in BlueTech start-ups and new technologies
5. Support workforce development and maritime career exploration



Innovation Center Services

- Business development assistance
- Professional network and relationship support
- Educational programs
- Out-reach services
- Facility-based services
- Virtual Services

TOP FIVE RATED INCUBATOR SERVICES

Survey respondents were asked to assess a large range of incubator services. This list shows the top identified challenges.

- 1) Shared resources with research centers, testing facilities, universities and private companies
- 2) Guidance and mentorship from business leaders/investors
- 3) Business support service provider assistance (e.g. HR, legal, marketing)
- 4) Access to general equipment for testing or fabrication of prototypes
- 5) Classes/training for workforce and skills development

Benefits to Incubator/Accelerator Companies

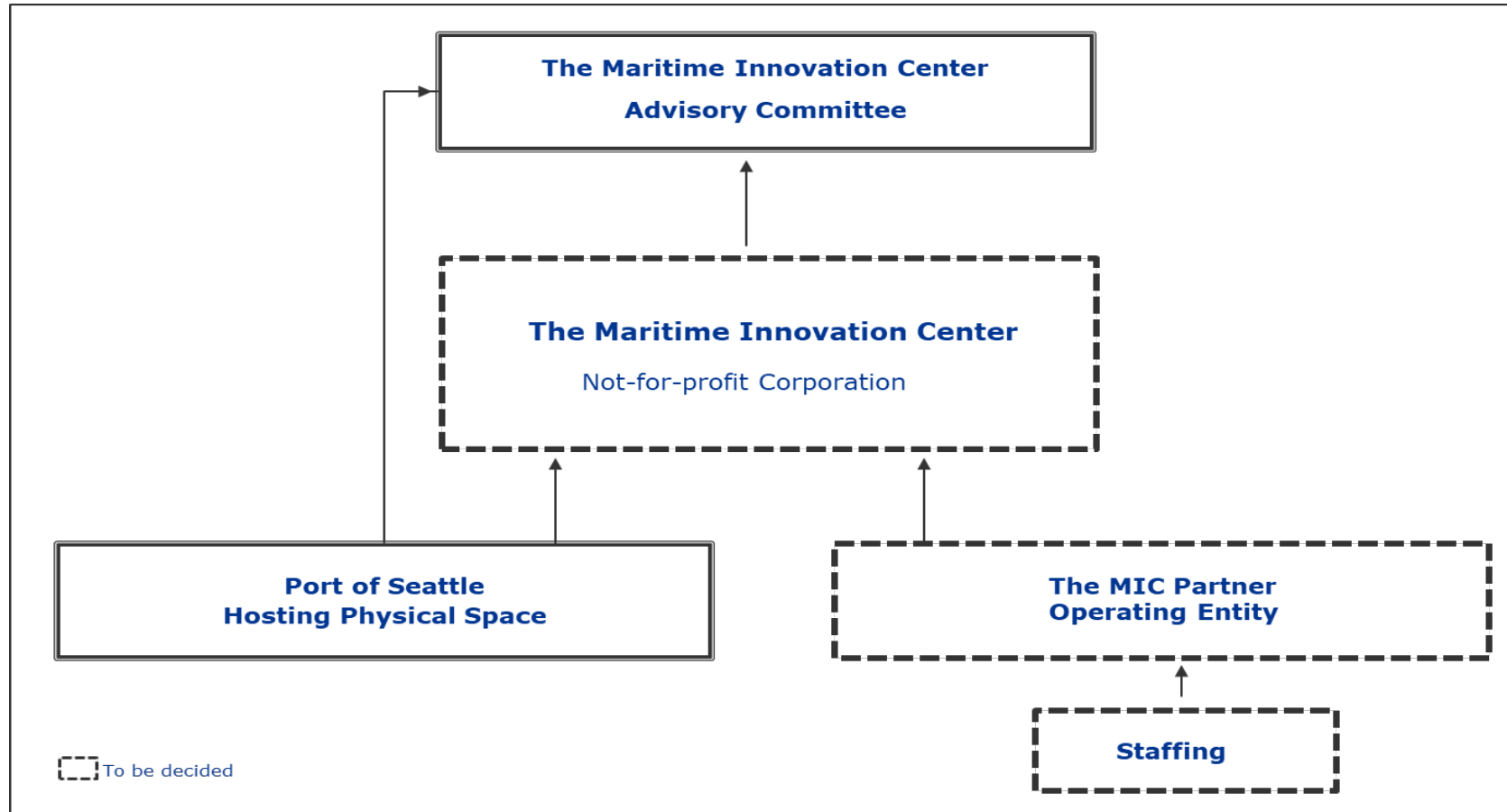
- Reduced barriers to entry
- Networking and mentoring
- Increased visibility and stature
- Increased company valuation



SURF Incubator in Seattle helps early stage high-tech companies

Governance

Recommend that nonprofit partner operate innovation center



Facility Location Criteria

- Accessibility
- Access to water
- Access to laydown area
- Proximity to Maritime Suppliers and Manufacturers
- Visibility
- Historic Preservation, Aesthetics & Ability to Leverage Capital



Site Evaluation




- Fishermen's Terminal (FT) site options ranked higher than Terminal 91 options:
 - More proximate to suppliers and partners
 - More visible and accessible
 - Better access to water
- FT's Gateway and Historic Ship Supply sites ranked similarly
 - Ship Supply slightly better based on historic preservation opportunity
- Capital development costs not considered

Financials

- Center will generate positive operating income for the Port from Year one onwards
- Center “operator” will be able to cover most of its operational costs from facility rental revenue
 - 79% in Year 1 to 97% in Year 7
- Center operator will need to secure contributions of approximately \$ 72,000 annually for initial 5 years period



Maritime Innovation Center Development Schedule

Maritime/Economic Development Project	Project Sponsor	Project Manager	Project Complexity	2018	2019	2020	2021	2022	2023
				Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4
Development Design Funding		Leonard			    				

* Community engagement tasks will vary by project needs



Community Engagement*



Commission Approval



Environmental Review



Planning/Design



Construction

Proposed Building Improvements

- Abatement of regulated materials in existing structure
- Partial existing building demolition (timber structural framework to be preserved)
- Enhancement of structural piles and framework
- Construction of new MIC building core and shell
- Utility services removal and replacement
- New building perimeter and parking lot paving

Maritime Community Engagement

Fishermen's Terminal Master Planning (2015-2016)

- Madison Bay study: Interbay industrial market
- Multiple planning sessions, open houses and stakeholder meetings
- Need for meeting rooms/conference center

Maritime Innovation Center Planning (2017-2018)

- SWOT workshop
- Online survey input from 150+ stakeholders
- Interviewed 35 Maritime stakeholders
- Facilitated design charrette



Enhancing Engagement: Washington Maritime BLUE Initiative

A **Strategy** for accelerating the BLUE economy, technology innovation and sustainability in Washington's maritime industry.

A **Cluster Organization** formed as the focal point for coordination, incubation, capital investment & commercialization.

A **Maritime Innovation Center** to support R&D and commercialization of innovation technology through public/private partnerships.

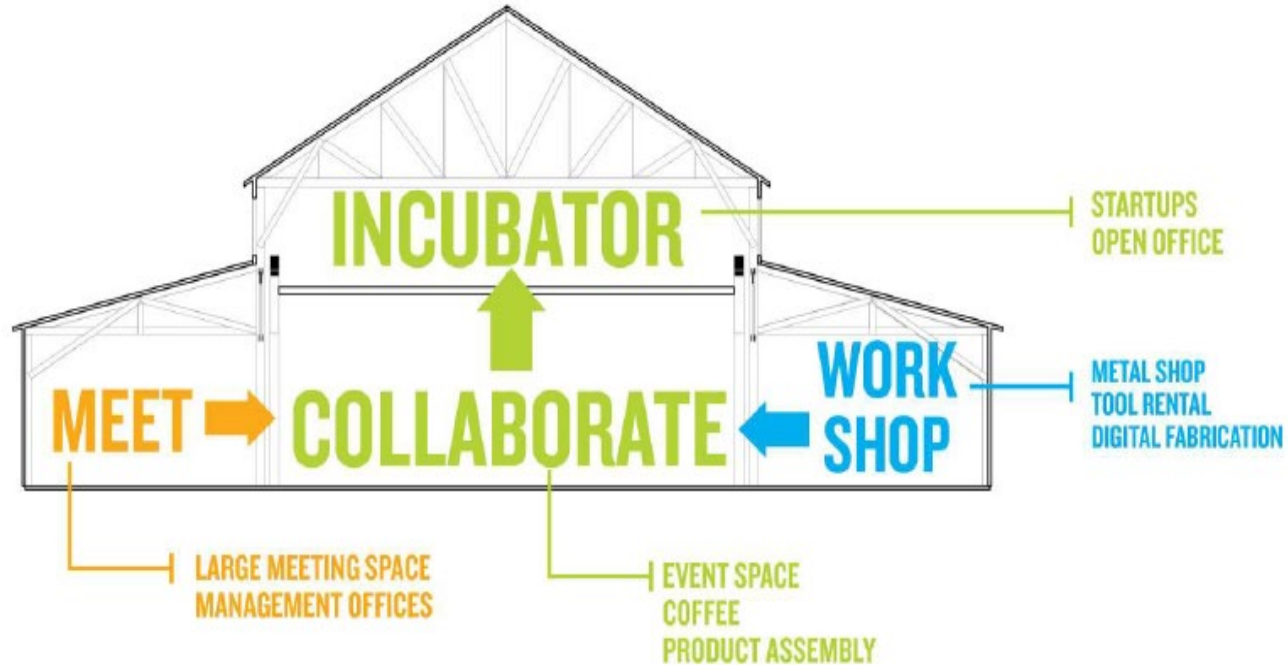


Next Steps

- ❑ Develop MOU with WA State (July)
- ❑ Develop and pilot maritime incubator and accelerator initiatives (Q4)
- ❑ Fact finding Trips (Q3 and Q4)
- ❑ Advisory Committee Meetings
- ❑ Complete 60% design work on Ship Supply building (Q1 2020)
- ❑ Make decision on location of innovation center (Q1 2020)



Community Benefits



- Job creation
- Enhanced image
- Business development
- Industry innovation and sustainability
- Increased tax revenue
- Workforce development
- Meeting space for FT tenants and customers

APPENDIX



Existing Seattle
Ship Supply Building

Fishermen's Terminal

An Ocean of Opportunity

16 SECTORS OF THE BLUE ECONOMY

- Aquaculture & Fishing
- Biomedicine
- Boats & Shipbuilding
- Cables & Connections
- Defense & Security
- Desalination/Clean Water
- Marine Recreation
- Ocean Energy & Minerals
- Ocean Instrumentation
- Oceanography & Marine Science
- Ports & Maritime Transportation
- Professional Services
- Robotics & Submarines
- Telecommunications
- Very Large Floating Platforms
- Weather Science & Climate Changes

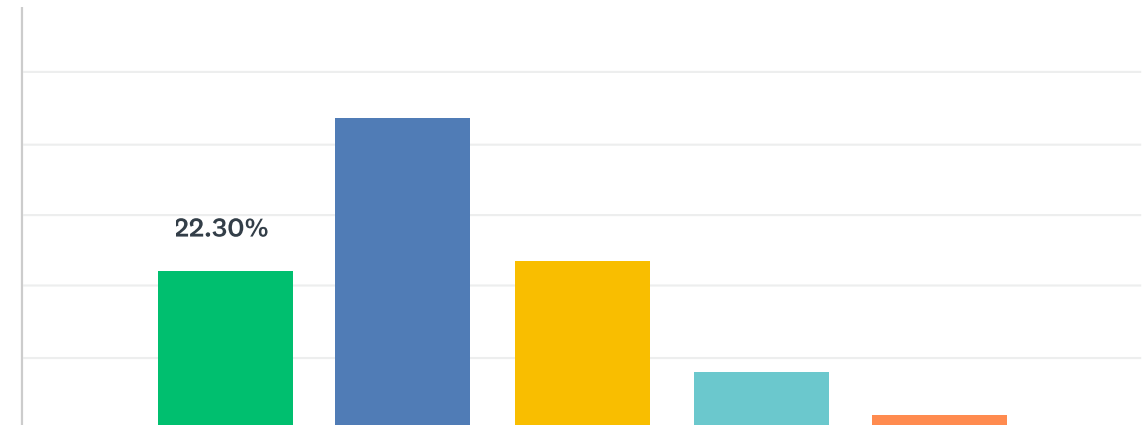
The global “Ocean Economy” is valued on a conservative basis by the Organization for Economic Cooperation and Development (OECD) at \$1.5 trillion (2010) and growing to \$3.0 trillion by 2030...

Stakeholder Input: Room and Opportunity for Improvement

1. The Maritime industry does not enjoy the visibility or reputation that other industries enjoy in Seattle (ex. Aerospace and IT)
2. Washington's Maritime industry is not particularly innovative
3. The top three trends/opportunities for the Washington maritime sector include:
 - Electrification
 - Ship and vessel design innovation
 - Marine renewables

Business Innovation Center Survey

Q3 Compared to other industries, how would you assess the "innovation" performance within the maritime sector? Innovation can be defined as either new business starts or development of commercially viable new products or services.



Site Evaluation

No	Site Selection Criteria	Weight	Site 1: Ship Supply Building		Site 2: T91 Uplands		Site 3: FT Gateway	
			Score	Weighted Score	Score	Weighted Score	Score	Weighted Score
I	Accessibility 4 = Facility is within 200 yards of public transit and within 20 minute commute from partners (UW Applied Physics Lab, Maritime Blue, etc.) 3 = Facility is within 1/4 mile of public transit and within 20 commute from partners 2 = Facility is within 1/2 mile of public transit and within 30 minute commute from partners 1 = Facility is more than 30 minutes drive from partners	20%	3	0.6	1	0.2	4	0.8
II	Access to water 4 = Facility is on fresh or salt water with moorage capacity 3 = Facility is within 1/4 mile of fresh or salt water - limited moorage capacity 2 = Facility is within 1/2 mile of fresh or salt water - limited moorage available 1 = Access to fresh or salt water difficult or not optimal	20%	4	0.8	2	0.4	3	0.6
III	Access to laydown area for staging 4 = Facility provides a laydown area 3 = Facility is within 200 yards of a laydown area 2 = Facility is within 1/4 mile of a laydown area 1 = Access to laydown area is difficult or not optimal	20%	4	0.8	4	0.8	3	0.6
IV	Proximity to Maritime Suppliers and Manufacturers 4 = Facility is within 1/2 mile of machine shops and maritime suppliers (inc. chandlery) 3 = Facility is within 1 mile of machine shops and maritime suppliers (inc. chandlery) 2 = Facility is within 3 miles of machine shops and maritime suppliers (inc. chandlery) 1 = Facility not located in proximity to maritime supply chain	20%	4	0.8	3	0.6	4	0.8
V	Historic Preservation, Aesthetics & Ability to Leverage Partner Capital 4 = Facility is historic and can leverage other capital \$ 3 = Facility is new and can leverage other capital \$ 2 = Facility is new but it may not leverage other capital \$ 1 = Facility not located in proximity to maritime supply chain	10%	4	0.4	3	0.3	3	0.3
VI	Visibility 4 = Visible from Seattle arterials and surrounding streets 3 = Visible from property entrance 2 = Visibility possible from property entrance with signage or other building improvements 1 = Not immediately visible	10%	3	0.3	1	0.1	3	0.3
Total Scores		100%	3.7	3.7	2.3	2.4	3.3	3.4
Site Ranking			1		3		2	

HUB AND SPOKE MODEL



Center Will Be Built on Partnership

Maritime Innovation Initiatives – RDM Rotterdam



- Converted from a defunct shipyard into a new interdisciplinary space that supports events, technical training academy, an incubator, storage space with a wave tank, and other testing facilities
- Co-located with a senior secondary vocational school and a higher professional educational program
- Supported with funding from the European Commission, the Port of Rotterdam, and other sponsors
- Focused on maritime technologies and other ocean related verticals including innovative housing concepts over water and design

Maritime Innovation Initiatives - COVE



- Converted an old Coast Guard facility into a hub for scientific research, events, incubator space, ocean technology tenants, and workforce programming
- Significant government funding and support
- Focused on ocean technologies
- Governed by a nonprofit organization that is similar to a cluster, and its incubator is contracted out to another company that specializes in running incubators.

Maritime Innovation Initiatives – Port XL



- “World’s first Port Accelerator,” spun out of the Port of Rotterdam, runs as an independent accelerator
- General co-working office space with fast-paced programming for startups that are selected through a competitive process in cohorts
 - Two Seattle based companies have participated in the accelerator
- Value proposition is the connection to the port and a growing number of end-users at one of the largest ports in the world
- XL wants to open US office