

# **A CHANGING TIDE**

## A Strategic Plan for Maritime and Ocean Sciences High School in Greater Seattle

By Victoria Bergsagel | January 15, 2020 In collaboration with the Port of Seattle



Changing tides are part of the natural order of things. A group of local leaders in the Puget Sound have recently come together to address historical racial inequities, a shortage of local maritime workers, and the region's environmental challenges. They now want to turn this tide by establishing a high school focused on maritime and ocean sciences.

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## Introduction

Education and meaningful apprenticeships are springboards for opportunity. Connections to mentors, awareness of options, preparation for next steps, and support for learning have all proven critical factors for success. Young people with limited access, inadequate preparation, and lack of awareness about these opportunities, however, face dramatically reduced prospects and a lower quality of life.

To address this disparity, and with the backdrop of the urgency of climate action, a diverse group of industry, tribal, government, nonprofit, labor, education and youth leaders in the Puget Sound area are joining forces to equip

students who are furthest from economic opportunity for the climate-adaptive, new-economy jobs in the Puget Sound region. Over the last year these key participants have validated the need for a new project-based high school embedded in the region's thriving maritime ecosystem through a series of workshops, stakeholder summits, advisory meetings, and conversations, and confirmed the desire from students, business and labor leaders, and educators to advance the development of a maritime high in South Seattle.

## The Outlook

The maritime industry is at the core of Washington State's cultural heritage and economic sustainability. One of the oldest industries in the region, it is also one of the most promising, with new opportunities in what the World Bank calls the Blue Economy – the sustainable use of ocean resources for economic growth, improved livelihoods and jobs, and ocean ecosystem health.<sup>1</sup>

A maritime high school would prepare students for the Blue Economy and address three distinct issues that threaten the region and its young people.

## The maritime industry is a pillar of the state's economy, yet workforce gaps threaten the sector.

According to the Washington State Department of Commerce, "Maritime activity has long been a pillar of the state's economy; it continues to grow (an average of 6.4% a year), utilizes the latest technologies, includes leading global companies, and today provides jobs with substantially better pay than the average for all industries. The average pay for a job in Washington is \$52,000, while maritime workers are paid an average of \$70,800 — totaling over \$4.7 billion in wages."<sup>2</sup> In King County 830 maritime businesses provide 19,500 jobs that pay on average \$82,800 per year.<sup>3</sup>

Maritime industries in Washington State are booming. Unfortunately, they lack qualified workers to meet the region's needs, and struggle to develop inclusive work environments. In fact, the average age of the state's maritime workforce is 54,<sup>4</sup> the majority of whom are white males, owing to structural inequities that have kept women and people of color on the sidelines.

Current projections indicate the future maritime workforce will fail to meet the demands of this growing market sector. Absent a stronger career pipeline, many maritime positions will remain unfilled; and career-connected learning opportunities will continue to elude the diverse young people who comprise King County's population.

#### The global response to climate change will be waged on, in and around the ocean.

Maritime industries will be essential to creating climate solutions, from sustainable fisheries, to efficient and clean movement of goods and people over the water, to the development of offshore renewable energy sources. They can



simultaneously promote economic growth and social inclusion and empower young people to be part of the solution to ending the catastrophic consequences of climate change.

Youth today have an increasingly strong social and environmental awareness. The United Nations reports that while 89% of youth say young people can make a difference on climate change, 84% say they need more information to confront climate change.<sup>5</sup>

# Students of color make up more than 70% of students in the residential areas closest to many of the region's maritime industries and should enjoy commensurate representation in its workforce.

The financial gap between families of color and white students has widened during the region's most recent economic expansion, and poverty rates have increased in historically-impacted communities. For instance, the average black family wealth in Seattle is \$37,696, compared to the average for white families of \$125,824. Black homeownership rates hover around 24% versus 50.9% for whites.<sup>6</sup>

At a time when our region has created more new wealth than most other metropolitan areas in the country, area schools offer few educational career pathways into maritime careers and marginalized communities have limited access to waterfront jobs.



Take for instance the Lower Duwamish Waterway, a roughly five-mile stretch of the Duwamish River running from Elliot Bay south into Tukwila. It offers thousands of maritime jobs and ample access to the shoreline.

Industry there constitutes a significant source of the region's employment, yet a small percentage of its population actually work there. For instance, only two percent of the people who live in South Park are employed in businesses there.<sup>7</sup>

Taking such data into consideration, Port of Seattle Commissioner Ryan Calkins and Charles Costanzo, Vice President for the Pacific Region of the American Waterways Operators, addressed the conundrum in the Pacific Maritime Magazine in August, 2019.

"In the next two decades, the maritime industry will add tens of thousands of jobs nationwide. In trade, fisheries, conservation, transportation and tourism, the Puget Sound region is poised to take advantage of these maritime career opportunities both at sea and ashore ... However, we face a significant hurdle. Not enough local workers have the skills we need to expand the maritime ecosystem ... The larger and better-trained the workforce, the faster we can grow; the smaller the workforce, the greater the constraints on innovation. At the same time, educators are realizing the need to provide career connected learning opportunities for middle and high school students. It's time to establish a maritime high school in Seattle dedicated to providing pathways to maritime careers in the trades and hospitality, as well as to traditional four-year degrees."<sup>8</sup>

## A Maritime Collaborative Comes Together for Good

The Port of Seattle convened a summit to determine whether an expanded maritime-focused collaborative would be feasible and desirable. Over 75 participants from a wide variety of organizations came together at the Seattle World Trade Center to offer their insights.

Commissioner Calkins opened the summit by recognizing the history of the land upon which the group was gathered. Acknowledging that indigenous people were the original stewards of the Salish Sea, he emphasized the importance of cultivating enduring relationships, resilience, and respect. Regarding opportunity he said, "The maritime industry is a bright spot in our economy for future employment, with career openings across a broad range of professions. Today students of color and women are entering the workforce with the expectation that they can do anything they set their minds to. Educational institutions are shifting from a 'one-size-fits-all' mentality toward a 'many paths' model for college and career readiness. As we gather today, we realize that if humanity is to successfully face down the threat of climate change, it will be in large part to an effort waged on, in and around the ocean. Every aspect of our maritime industries will be instrumental to fighting climate change."

There were four suggested outcomes for the summit.

- 1. Affirm that expanding maritime secondary education opportunities, particularly for women and students of color, is a feasible and desirable goal;
- 2. Analyze educational models to identify those best suited to the Puget Sound's unique context;
- 3. Determine ways in which the group, through the organizations represented, might contribute to best practices and develop approaches for enhancing maritime and ocean sciences education in the greater Seattle area; and
- 4. Offer recommendations to an advisory group—essentially a subset of those present—who will produce a concrete proposal for next steps by the first quarter of 2020.

At day's end participants identified five significant themes:

Focus on equity and access;

- 1. Engage youth voice and choice to ensure that the initiative is student-centered and student-led;
- 2. Foster interdisciplinary partnerships and funding;
- 3. Support a continuum of maritime education across all age groups; and
- 4. Pursue the development of a project-based maritime high school.

An advisory group was then formed to map out a more specific plan.

## **Guiding Principles for Design**

Early in the process, leaders agreed upon three guiding principles for the work.

First, they recognized that equitable access, programs, policies, and practices will be critical to ensuring that maritime career opportunities are available to all and emphasized that targeted efforts should be made to recruit and prepare students underrepresented in maritime and ocean science careers.

Second, they acknowledged that students benefit from a quality education and hands-on experiences with experts via research, internships, and career-connected learning; and they committed to address issues such as skill gaps, employer readiness, and systemic barriers that threaten to constrain futures to better enable students to follow their interests to enter a trade, earn industry certifications, and/or post-secondary degrees.

Finally, they agreed on the importance of equipping students to tackle environmental challenges and empowering them to advance social justice.





## **Guiding Principles**

Guiding principles are critical to the work of educational design. They prove invaluable as projects unfold by helping leaders focus their work and help clarify important decisions when individual interests come in conflict with overall goals. The principles below will guide important educational decisions and the choice of operational systems consistent with the mission, vision, and ideals of a new maritime high school in the greater Seattle area.

#### Mission

To deliver an extraordinary and relevant education through a community and youth-led maritime and ocean sciences high school. We will empower students, combat structural racism, expand opportunities, close workforce skill gaps, build prosperity in place and fight climate change through environmental justice.

#### Vision

A world-class education within an historically-impacted community that advances the next generation of leaders, innovators, and marine professionals.

#### **Equitable Access**

Inclusive programs, policies, and practices ensure that maritime career opportunities are accessible to all. Focused efforts are made to recruit, prepare, and empower students who are under-represented in maritime and ocean science careers, emphasizing students of color, students with limited access to resources, and girls. In partnership, we work with—not for—the communities we serve.

#### **Quality Education**

With pathways into the trades, college and professional degrees, the school provides opportunities to engage in hands-on learning with experts in classrooms, in laboratories, on vessels, and in businesses. Diving deep into real-world practices, students follow their interests to learn a trade, earn industry certifications, and/or pursue the post-secondary path of their choosing. At the same time, the school collaborates with employers to address skill gaps, employer readiness, and system barriers that constrain young and diverse people.

#### **Sustainability**

Humanity faces a great and urgent challenge as we confront the devastating effects of climate change. Students are well-poised to craft solutions with a multidisciplinary lens to address highly interdependent environmental, social and economic elements of our region and the world. Leaders in safeguarding a sustainable future, they are prepared to advance environmental justice and prioritize social cohesion for a more responsible future for generations to come.

## Learning from Others

Following the summit, a small delegation of port, school and community leaders traveled to New York to participate in a study tour to learn from colleagues involved in maritime education and youth development.

**Day One** was spent in the South Bronx, the poorest congressional district in the United States, and included visits with the several organizations serving youth around the Bronx River.<sup>9</sup>

Fannie Lou Hamer Freedom High,<sup>10</sup> a school affiliated with Big Picture Learning,<sup>11</sup> places students at the center of their own education. Student achievement is anchored in portfolios and performance assessment, and learning extends into the community via experiences, internships, and real-world learning opportunities, including classes and internships for some students at Rocking the Boat.

Rocking the Boat<sup>12</sup> empowers young people to develop self-confidence, set ambitious goals, and gain the skills necessary to achieve them. Students work together to build wooden boats, learn to row and sail, restore local urban waterways and revitalize their community while creating better lives for themselves. Students are given opportunities to participate in paid internships and receive wrap-around social services provided by licensed social workers. Their motto: "Kids don't just build boats, boats build kids."

The Bronx River Alliance works to protect, improve, and restore the Bronx River corridor so that it can be a healthy ecological, recreational, educational, and economic resource for the communities through which the river flows. Its base of operations is the Bronx River House, an environmental learning laboratory.

The Bronx River Foodway<sup>13</sup> is a project at Concrete Plant Park to examine how a sustainable food landscape can be integrated into a public park. Currently the Foodway offers the public access to a variety of edible plants and works with students to teach horticulture and history.

The delegation noted many similarities to Seattle's Duwamish River,<sup>14</sup> which as a result of nearly a century of industrial activity, has been designated a Superfund Site by the United States Environmental Protection Agency (EPA).

Day Two was spent in the New York Harbor touring one of the country's premier maritime high schools.

The New York Harbor School,<sup>15</sup> located on Governors Island, focuses on providing a college and career preparatory education built upon New York City's maritime experience. It instills in students the ethics of environmental stewardship and the skills associated with careers on the water. Freshmen are introduced to the various CTE programs via the Harbor Class, then as sophomores, students enroll in one of seven career and technical education (CTE) programs of study, leading to industry certification in marine science or technology. The program includes a continuum of work-based learning experiences that extend student learning from the classroom into real-world, work-related contexts. Career pathways include Aquaculture, Marine Biology Research, Marine Policy and Advocacy, Marine Systems Technology, Ocean Engineering, Professional Diving, and Vessel Operations.

The day ended with a visit to the Urban Assembly,<sup>16</sup> a non-profit organization that works to advance students' economic and social mobility by improving public education. Its school support model prioritizes innovation and

efficient collaboration between partners to meet the evolving needs of students on their path to college and career success. Urban Assembly's school support network is comprised of collaborative teams that provide differentiated services to 22 small public middle and high schools in New York City.



As they debriefed the trip, the delegation confirmed many of its ideas and identified the following design tenets:

#### Location

- The school will be strongly rooted in, and designed by, the community, industry, and students.
- The educational experience will support the study and improvement of the region's waterways, providing a pathway for students to enjoy the benefits of their community's improvement.
- The school location(s) will have access to the water.
- Consideration will be given to locating the school near mass transit, to facilitate ease of access.
- There is interest in locating the school along the Duwamish River, replicating community-driven ecological improvements of the Bronx River Alliance and Rocking the Boat.

#### Equity

- The school population will reflect the student population of South King County to ensure equitable access.
- It will be necessary to intentionally design an enrollment process that ensures an equitable percentage of students at the school are students of color, students with limited access to resources, and girls.
- Tribal leaders, whose ancestors were the original stewards of the Puget Sound, will be integrally involved.
- The impacts of gentrification may influence which communities live in the neighborhood(s) where the school is located. Attention should be paid to ensure high percentages of students furthest from educational justice are served. Consider partnering with local municipality(ies) to mitigate gentrification impacts.
- Principal and teacher diversity should reflect the intended student population.

#### Personalization

- The school will be small (around 400-500 students) to facilitate an agile and personalized learning environment.
- Additional student supports will be necessary to ensure success for students who are furthest from educational justice.
- Community-based organizations will be encouraged to provide youth development services.

#### Academics

- The academic programs will be project-based and experiential.
- Early selection of the founding school principal and supporting team/partners is critical.
- Allow for one planning year with the founding principal.
- Community and industry partners will be involved in providing extended learning opportunities.
- All students will have an educational advisor and community mentor.
- Strong memorandums of understanding will need to be in place between the school district(s), tribal leaders, nonprofits and industry partners to ensure collaboration in principal selection, evaluation, articulation agreements and policy alignment.

#### **Career-Connected**

- The educational model will offer robust, project-based, CTE pathways that are highly engaging and strongly connected to maritime industry and ocean science jobs.
- The school's project- and place-based learning approach will align with state and industry certification standards. Three to seven CTE pathways is ideal for a small school this size.
- The educational model will include apprenticeship opportunities and employer- and union-based internships for which students receive high school, industry and college credit.

- Education about local maritime labor history and navigating union membership will also be available, including how to join different unions, and the requirements and benefits of union membership.
- A full-time partnership coordinator will be critical to connecting students with internships and fostering and maintaining strong relationships with employers.
- The goal is not necessarily for every student to work in the maritime industry post-high school, yet it is expected that exposing hundreds of youth to the maritime industry will have a positive impact on the region's maritime workforce.

A month later a delegation traveled to Port Townsend to learn from the Northwest Maritime Center (NWMC)<sup>17</sup> and the Port Townsend School District.<sup>18</sup> The NWMC is a community-based and regionally-oriented organization dedicated to experiential education. With twenty years of place-based learning experience, it is dedicated to maritime education and career-connected training. NWMC spearheaded an effort that transformed the Port Townsend School District into the first place-based maritime K-12 educational system in the nation, and in September 2019, opened the Port Townsend Maritime Academy Skills Center, the first accredited maritime CTE skills center program in Washington State to provide students with a year-long underway vessel operations maritime curriculum. It has offices in Seattle and Port Townsend.

As a result of that meeting, a decision was made to pursue a Career Connect Washington Launch Grant<sup>19</sup> to fund the development of: 1) an action plan to prepare for the opening of the proposed maritime high school by fall 2021; 2) a project-based career-connected curricula and 3) the formation of a nonprofit Maritime Apprenticeship Council. (Surprisingly, there are currently no certified marine pre-apprenticeship or apprenticeships for youth in Washington State.)

The team subsequently learned they were not one of the four successful bidders, but will continue with fundraising plans to secure additional resources.

### **Moving Forward**

The emerging vision for a proposed maritime high school is a far-reaching concept that will require unprecedented partnerships between youth development, industry, K-12, and higher education partners. While much still needs to be decided, a general framework is emerging with input from an advisory committee and local educational leaders.

#### **Location and Jurisdiction**

With enthusiasm, several King County superintendents, school board members, educators, elected officials, industry partners, and community leaders have engaged in conversations regarding the proposed maritime high school. The potential school's governing body is yet to be determined, but there is a growing consensus that it will be a public regional magnet. (There is little interest at this time in pursuing charter school status.)

Without question the school should be should be on, or near the water, and situated somewhere south of I-90, as diversity and poverty are more concentrated in South Seattle/South King County.<sup>20</sup>

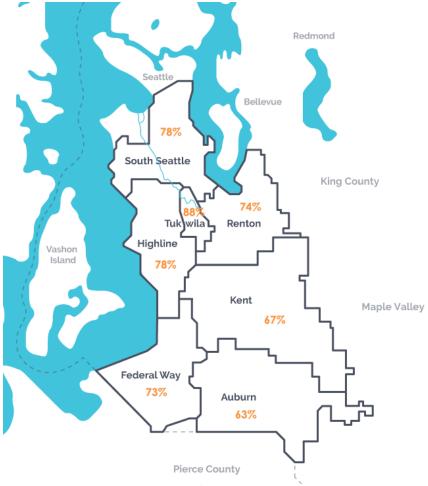
Washington State's recently enacted the HEAL Act<sup>21</sup> aims to improve health disparities through targeted investments in areas suffering the most from the effects of pollution. Its environmental health disparities map,<sup>22</sup> provides insight as to the potential school's location.



Combine that with the Port of Seattle's *Duwamish Valley Community Benefits Commitment Policy Directive*—which suggests the port and community address institutional racism, engage community leaders to promote interagency collaboration—and the port is uniquely positioned to partner with local school districts to design a high school located within a maritime-impacted community.<sup>23</sup>

Analyzing critical success factors learned from successful maritime schools around the country, the advisory group agreed that access to the waterfront was essential. With that in mind, they considered clusters of maritime careers in proximity to the regional communities emphasized for student recruitment, and the consensus conclusion was to locate the school along the Duwamish Waterway, a roughly five mile stretch of the river running from Elliot Bay south into Tukwila, where minority students make up more than 70% of the population and where there are thousands of maritime jobs and ample access to the shoreline.

Superintendents from Seattle, Highline, Tukwila and Federal Way School Districts will meet soon to discuss the best approach to designing a regional magnet populated via a lottery system with transportation-enabled choice to ensure equitable access.



#### Percentage Students of Color in Road Map Districts

(Map courtesy www.roadmapproject.org, a multisector partnership working to address racial inequity and build stronger systems for communities in South King County)

#### **Academics**

This maritime and ocean sciences high school will provide a dynamic, science-based, personalized learning experience for students to explore a range of professional and career pathways through active, hands-on project-based learning. Upon graduation its students will be empowered to enter directly into the world of work with industry certification(s), pursue baccalaureate degrees and/or earn graduate degrees should they choose to do so. From start to finish, all students will be supported to pursue their career and life goals.

Cognizant that students often need enhanced opportunities to earn dual credits and stackable credentials to support their college and career preparation, the school will coordinate training for workforce development and postsecondary career counseling to ensure that all students are empowered to achieve success.

#### **Personalized and Experiential**

The proposed maritime high school will intentionally be designed as a small, personalized learning environment. It will initially enroll 100 ninth graders, and over a four-year period enroll up to 400 students in grades 9-12. Each student will be matched with an industry mentor(s) based on the student's career interest. Mentors will assist students in completing projects, assess demonstrations of their work, help identify and secure work-based learning opportunities, and provide guidance for work placement and post-secondary education.

#### **Equity and Social Justice**

This school will embed racial equity goals into its curriculum and policies to ensure that post-secondary attainment goals are realized for all students. School leaders and partners will work with community partners to advance equity as an economic and moral imperative and learn from King County leaders who in late 2016, produced its Strategic Plan for Equity and Social Justice. A blueprint for action and change, it guides pro-equity policy direction, decision-making, planning, operations, services, and workplace practices to advance equity and social justice in partnership with communities, and is intended to expand access to opportunity in eight areas: child and youth development; jobs and economic development; environment and climate; health and human services; housing; information and technology; transportation and mobility; and the justice system.

All partners in this new maritime high school will ensure proportional representation that reflects the student population in South King County and will work together to address systemic and workplace barriers to access and retention.<sup>24</sup>

#### **Community and Shared Resources**

Student voice will be a key driver in the school's design, as will the integration of input from the communities the school is intended to serve. As one contributor aptly stated, "There should be no decisions about us, without us."

To date select members of the Youth Maritime Collaborative <sup>25</sup> and the Duwamish Valley Youth Corps<sup>26</sup> have been involved. Additional organizations which foster youth development will be included in the future, and Port-wide community ambassadors will be empowered to ensure the delivery of a world-class education.

In fact, with the recognition that the interconnected nature of social equity, economic viability, and environmental protection are nested within the region's social fabric and environmental security, partners will purse social justice through education to ensure community resilience.

The research regarding education and job mobility states, "a limited education typically reduces the number of employment opportunities" and "given the place-based nature of climate change-related risks, community members are likely to be the experts in development and deploying solutions that enhance social cohesion, prevent displacement and bolster community resilience."<sup>27</sup>

With this in mind, community and family engagement will begin in earnest in early 2020 to better determine what this school should be and where exactly it will be located.

#### **Student Recruitment**

As with any successful new school or program, information will need to be clearly communicated to help prospective students become aware of the benefits of participation. Outreach will need to be conducted to ensure that students—especially those historically underserved by educational and marine career pathway programs—are apprised of the opportunity to attend this school.

# Learning from Aviation and Aerospace

**Raisbeck Aviation High School**<sup>28</sup> is a model of success from which the proposed maritime high school can draw inspiration. Founded in 2004 as a public school of choice, it serves 420 students from 25 school districts in the greater Puget Sound region. It is co-located with the Museum of Flight on Boeing Field and enjoys strong industry partnerships and wide popularity as evidenced by the fact there were 400 applicants for 105 spots in the past year's lottery.

The Aerospace Joint Apprenticeship Committee (AJAC)<sup>29</sup> launched in 2008 with an investment from Washington State to skill-up the aerospace and advanced manufacturing workforce through registered apprenticeship. AJAC has now developed and implemented ten high-growth, in-demand apprenticeship occupations to serve a variety of demographics, industries, and companies across the state.



Middle school maritime activities and the involvement of middle school counselors will also be a key component of student recruitment. A lottery system will be developed to ensure equitable access and diversity and strategies will be identified to empower target populations, including consideration of location, transportation, language issues, and supports for universal access. Under no circumstances will students who are differently-abled be prevented from participating in this high school or its feeder programs. Every effort will be made to ensure the full involvement of all.

#### **Well-Articulated and Career-Connected**

Maritime and ocean science careers are available shipside, shoreside, and frankly, everywhere in between.

Unfortunately, few high school career pathways are in place regionally to ensure that well-coordinated educational pipelines and partnerships improve student access and success.

Partners connected to this potential new high school will work together to provide students with internships, certifications, pre-apprenticeship, and apprenticeship programs and will ensure that clearly articulated pathways provide more robust opportunities via collaboration and optimized resources.

#### **Place-based and Authentic**

School programming will capitalize on the genius loci of the Pacific Northwest. Students will be immersed in our local cultures, waterways, and rich maritime heritage as resources are leveraged and authentic engagement prioritized.

Mutually-beneficial relationships will situate students in real world settings to the dynamic advantage of all.

## An Opportunity to Invest in Young People

Momentum for a new project-based maritime high school is building. The maritime sector is thriving, yet threatened by a shortage of skilled workers. Students are eager for exciting learning experiences on and around the regions waterways, and ready to tackle environmental challenges. Communities see opportunities to equitably engage all their learners. Family-wage jobs await those who are well-trained.

Now is the time to catalyze the energy of our diverse stakeholder group to expand opportunities, close workforce skill gaps, address climate change, promote environmental justice, combat structural racism, and advance the next generation of maritime leaders, scientists, and innovators.

Now is the time to turn the tide, dramatically, and for the better. It is time for a maritime and ocean sciences high school.

### What Folks are Saying ....

"Our region is filled with companies that have the desire to engage with both young people and to better address issue of equity and diversity; a high school would be a valuable tool for bridging the distance between their intention and the current reality of an aging and largely white workforce. A maritime high school could focus the energy and enthusiasm of this work, enabling an industry that is time-tested cornerstone of our regional economy and accelerating its investment in innovation and equity.

Maritime career education is not only a critical pathway for the maritime industry, it is also a phenomenal way for student to learn ... Immersive project and place-based learning projectand place-based learning makes academic subjects come alive and opens doors into a world of potential maritime sector employment that most students in our region are likely unaware of, despite the opportunities for family wage careers."

– Joshua Berger, Governor's Maritime Industry Sector Lead, State of Washington, Department of Commerce

At times we get ahead of ourselves and think that we need to have this huge strategy for the next 10 years. That is getting in the way of us actually having active experiential opportunities right here, and right now. Yes, I think we need to have a plan; but it shouldn't stop what we're doing right here and right now to get people exposed to the Maritime industry.

–Sarah Scherer, Former Director and Dean, Seattle Maritime Academy, now Manufacturing and Maritime Advisor, City of Seattle Office of Economic Development

The work should be driven and guided by the communities it is intended to serve. Youth care deeply about environmental justice and are willing to engage to make a difference in their world.

– Paulina Lopez, |Executive Director, Duwamish River Cleanup Coalition

Who is preparing the maritime industry for the people we want to bring in? Are we going to continue to send people to training and then place them in an industry where they won't stay because they don't feel like they're welcome? This is not just a technical solution. It is a huge adaptive solution.

 Trish Millines Dziko, Cofounder, Technology Access Foundation

I think it is important to ensure the maritime industry is ready and prepared for a workforce that included more women and people of color. Education is key.

– Hilary Pickerel, Workforce Development Manager, Vigor The Puget Sound Pilots have long been a champion of maritime education for young people—and maritime career awareness in general—and have been involved in many activities that serve to foster diversification of the maritime workforce. This combination of powerhouse organizations with complementary missions can only result in beneficial outcomes, not only for the students' futures, but the maritime industry's inclusive and equitable future.

We recognize that creating a maritime high school is a big complicated lift. It is essential this work begin much earlier in the schools and communities to raise awareness and excitement to attain sufficient matriculation into a maritime high school.

- Captain Eric vonBrandenfels, President, Puget Sound Pilots

Equity is important to everything. You have to build schools, programs and initiatives in institutions that are welcoming and inclusive. We absolutely must look at other industries (like aviation and technology) and learn from their promising practices.

– Bookda Gheisar, Senior Director for Equity, Diversity, and Inclusion, Port of Seattle

I really think the water itself needs to be the connective tissue for this type of education.

– Peter Hart, Regional Director for the Regional Director for the International Longshore and Warehouse Union

If we had a maritime high school that was teaching different skills, then we would have workers who could come in right away, be ready to go to work and keep up with our more experienced workers. We need to be talking to young people so they can start when they're young and stay for their entire career so that by the time they are retiring, they have become experts in their chosen career field.

– Ali Vekich, Washington Area District Council, International Longshore and Warehouse Union

We support the idea of a maritime high school in South King County because we need more people to know about the opportunities in our industry. We are convinced that those opportunities can be a lever for creating a greater degree of economic equity right here in the Pacific Northwest. Both the complexity of the certifications and the complexion of the industry can be a barrier for communities of color who are exactly the communities the maritime industry should engage as vacancy rates soar for much needed positions. We are in staunch support of this initiative.

> – Trinity Ng Yeung, Vice President, Finance and Operations, Global Diving and Salvage, Inc.

## Endnotes

- 1 https://www.worldbank.org/en/news/infographic/2017/06/06/blue-economy
- 2 https://www.commerce.wa.gov/growing-the-economy/key-sectors/maritime/
- 3 http://www.mapyourcareer.org/maritime
- 4 https://www.maritimefederation.com/uploads/2/9/9/6/29962189/final\_wmf2017.workforce.policy.pdf
- 5 https://www.un.org/youthenvoy/environment-climate-change/
- 6 https://www.fastcompany.com/90349324/can-cities-design-policies-to-shrink-the-racial-wealth-gap
- 7 On the Map: Inflow Outflow Report created by the City of Seattle using the U.S. Census Bureau's on the Map tool (http://onthemap.ces.census.gov) on 10/25/2018
- 8 https://www.pacmar.com/story/2019/08/01/features/op-ed-its-time-for-a-maritime-high-school/717.html
- 9 https://www.msn.com/en-us/money/markets/congressmen-representing-the-richest-poorest-districts/ar-BBOWXrA
- 10 https://www.flhfhs.org
- 11 https://www.bigpicture.org
- 12 https://rockingtheboat.org/who-we-are/mission-and-history
- 13 http://bronxriver.org/
- 14 https://www.kingcounty.gov/depts/health/environmental-health/healthy-communities/duwamish-fishing/ superfund.aspx
- 15 https://newyorkharborschool.org/
- 16 https://urbanassembly.org/
- 17 https://nwmaritime.org/
- 18 https://www.ptschools.org/
- 19 https://www.sbctc.edu/career-launch/
- 20 Students of color represent 53 percent of the total student population in the Seattle School District; yet south of I-90, that number is 79 percent. Statistics for selected other school districts in South King County are in the map above. https://washingtonstatereportcard.ospi.k12.wa.us/ReportCard/ViewSchoolOrDistrict/100229 and https://roadmapproject.org/the-problem/
- 21 https://www.knkx.org/post/state-house-passes-heal-act-environmental-justice-first-washington
- 22 https://fortress.wa.gov/doh/wtn/WTNIBL/
- 23 Focused on promoting a healthy environment, the Port of Seattle supports anti-displacement solutions that will enable the Duwamish Valley community thrive in place through equitable access to training, jobs, career pathways, and port-related economic opportunities. https://www.portseattle.org/sites/default/files/2019-12/ Policy\_Directive\_Duwamish\_Benefits\_Commitment\_0.pdf
- 24 https://kingcounty.gov/elected/executive/equity-social-justice/strategic-plan.aspx Seattle's Youth Maritime Program helps prepare high school seniors for a career in the maritime industry. This two-year program provides students a smooth transition through their senior year in high school toward college readiness. It helps build strong soft-skills and connects students with future career maritime opportunities.
- 25 https://kingcounty.gov/elected/executive/equity-social-justice/strategic-plan.aspx
- 26 http://www.urbanwaterslearningnetwork.org/community-driven-cleanup-restoring-duwamish-river-hannah-kett/
- 27 https://cig.uw.edu/our-work/applied-research/an-unfair-share-report/
- 28 https://rahs.highlineschools.org/about/school-profile
- 29 https://www.ajactraining.org/
- 30 http://www.archachieve.net/index.html

Photos courtesy of The Port of Seattle

#### About the Author:

Victoria Bergsagel, Founder and President of Architects of Achievement,<sup>30</sup> is renowned for her skills in the areas of school design, community engagement and organizational development. Focused on helping communities realize their hopes and dreams for their children, she distinguished by her practical knowledge, educational experience and strategic approach.

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