



AltaSea at the Port of Los Angeles: A Business Model to Sustain the Operations of a Blue Economy Nonprofit

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Abstract

The concept of leveraging underutilized port assets to drive innovation and sustainability is gaining traction globally. This paper examines AltaSea at the Port of Los Angeles, a nonprofit organization operating a 35 acre (14 ha) ocean innovation campus located on a historic pier in the Los Angeles Outer Harbor. A modified leasing and valuation framework that formally recognizes non-compensatory public benefits, such as heritage conservation, public engagement, job creation, education and workforce development, enabled this public-private partnership (PPP) to revitalize an underutilized historic site. A 50-year agreement between the Port of Los Angeles and AltaSea was structured to allow the nonprofit to generate revenue for its longterm viability, ensuring its own mission and the rehabilitation of historic structures. The model suggests a replicable approach for ports seeking to activate historic maritime sites while supporting nonprofit led blue economy ecosystems.

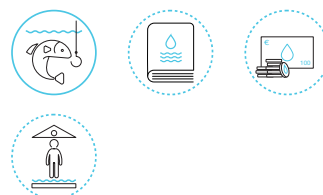
Policy Recommendations

- Port authorities can design a modified valuation framework that recognizes public benefits, such as heritage conservation, education, workforce development, and community engagement, as legitimate compensation for the use of port property.
- The cost and complexity of rehabilitating historic structures can serve as justification for long-term and deeply discounted rental agreements while providing a pathway for the nonprofit's financial stability, including the ability to retain rental income. Leases structure around non-monetary compensation should include performance metrics and annual reporting requirements.

KEYWORDS

blue economy
ports
leasing policies
NGO financial stability
public-private partnership

WATER VALUES



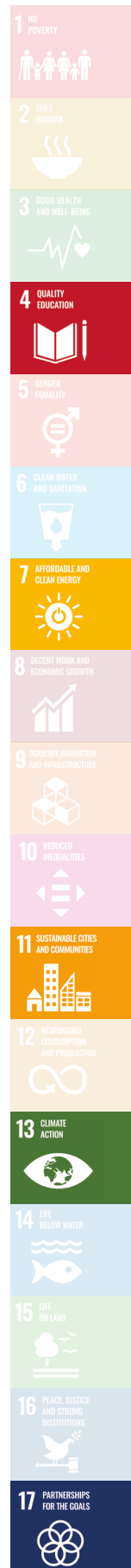
CLIMATE



Csb: Warm-summer Mediterranean climate



< Fig. 1 Aerial photo of the Port of Los Angeles. AltaSea leasehold is the outer harbor pier just to the west of the main channel. Research barges are berthed along side the renovated warehouses fitted with rooftop solar panels (Source: Port of Los Angeles, date unknown).



Introduction

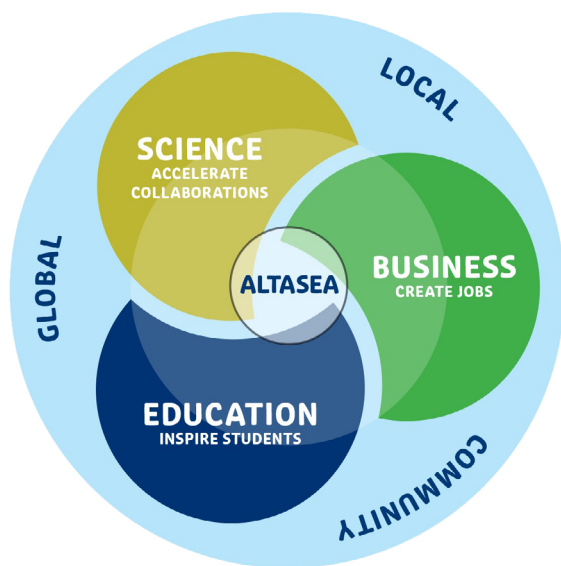
AltaSea at the Port of Los Angeles is an urban ocean institute created to develop and operate a 35-acre (14.2 ha) blue economy, multi-tenant campus on a historic pier located in the Los Angeles outer harbor (fig. 1). Many seaports have developed blue economy hubs, recognizing the potential growth in the ocean economy and its potential for job creation (OECD 2025; World Economic Forum 2024). Blue economy hubs like Port of Halifax's COVE, NEWLAB at the Brooklyn, NY Navy Yard, PORTXL and RDM in Rotterdam use various financing and governance structures (Port of Seattle 2019). AltaSea is unique in both its financial structure and its approach to heritage stewardship. It demonstrates that adaptive reuse of historic port infrastructure, the operation of a blue economy campus and NGO financial sustainability can be mutually reinforced rather than competing objectives. The public-private partnership between AltaSea and the Port was specifically designed to ensure the long-term viability of a special-purpose NGO created to assume development and operation of a blue economy campus to support research, education and ocean-related businesses. Conceptually approved as part of the Los Angeles Waterfront Project in September 2009, it took several more years for the project to be refined. Rather than undertake and operate the project itself, the Port, working with the philanthropic Annenberg Foundation, facilitated the creation of a new non-governmental organization to carry out the project. Using an innovative leasing framework, the Port was able to transform obsolete yet historically significant waterfront assets into a site devoted to the blue economy, while simultaneously safeguarding the site's historic values.

Traditional port leasing models can present barriers for early-stage nonprofits facing struc-

tural challenges, such as limited access to capital, staffing costs and operational instability. A 50-year agreement between the Port of Los Angeles and the newly created organization was structured to allow the nonprofit to generate revenue to support its staffing, mission and operations. At the same time, the Port of Los Angeles agreed to non-monetary compensation as its payment for the leasehold. In doing so, the partnership created a governance model in which heritage preservation became a foundational element of the site's identity and economic value.

Creation of a Special Purpose Nonprofit

An innovative PPP structure has given AltaSea a stable foundation to grow a blue economy ecosystem at the Port of Los Angeles. A working group was established in 2012, comprising Port of Los Angeles staff and commissioners, along with the Los Angeles Mayor's Office of Strategic Partnerships, to brainstorm an organizational structure. A pending philanthropic donation from the Annenberg Foundation, combined with the recognition that most philanthropic organizations prefer to donate to qualified nonprofits, rather than governments, necessitated the creation of a separate non-governmental entity. In January 2013, an AltaSea Advisory Cabinet was established as a precursor to the AltaSea Board of Trustees. In August 2013, the Advisory Cabinet authorized the filing of the Articles of Incorporation for "AltaSea at the Port of Los Angeles" and its application for nonprofit tax-exempt status under the US Internal Revenue Code. Because this process takes approximately 18 months, the Port of Los Angeles entered into a 50-year lease in November 2013 with Rockefeller Philanthropy Advisors for the 35-acre site and 4,510 lineal ft (1,375 m) of wharf to serve as AltaSea's fiscal sponsor and the holder of



^ Fig. 2 AltaSea's science, education, and business-oriented impact ecosystem (Source: AltaSea, 2023).

grant funding from the Annenberg Foundation. This first lease authorized the assignment to AltaSea upon approval of its nonprofit status.

AltaSea's mission is to accelerate scientific collaboration and advance emerging blue economies through business innovation, job creation and education (fig. 2). AltaSea focuses on three areas: sustainable aquaculture, offshore renewable energy and blue technology with an emphasis on underwater robotics. Within each of these areas, AltaSea has clustered business and research interests and developed relevant educational programming and workforce development tools. AltaSea is part of an alliance of 15 community colleges and the Los Angeles Economic Development Corporation, which created the Blue Economy and Climate Action Pathways program (BECAP). This program develops curricula for non-degree certificate programs in sustainable aquaculture, green hydrogen and underwater robotics (Los Angeles Economic Development Corporation 2025). Copies of the college curriculum can be requested via the

AltaSea website at <https://AltaSea.org/education/#request-curriculum>. STEM educational tools on marine energy, marine exploration and aquaculture, available in English and Spanish for K–12 teachers, can be downloaded from <https://AltaSea.org/curriculum/>.

Adaptive Reuse of the Historic Site

The AltaSea site, historically known as City Dock N° 1, has deep significance in the history of Los Angeles and its Port. Completed in 1914, the pier was constructed in anticipation of the Panama Canal opening to position the Port of Los Angeles as a major hub for international commerce. At 2,520 ft long and 650 ft wide (768 m by 198 m), it was built with reinforced concrete, then considered a pioneering engineering method for wharf construction (ICF Jones & Stokes 2008). The warehouses at Berths 58–60 were completed by 1915, and a further transit shed at Berth 57 was added in 1923. These early twentieth-century structures, totaling 180,000 sq ft (16,723 m²), used for traditional cargo loading and unloading, are the predominant features on AltaSea's west campus. The east campus was home to an oil loading station operated by the Pan American Petroleum Company at Berths 70–71. A building constructed in 1923 is the last remaining structure from what was once a large petroleum terminal complex. As containerization transformed the shipping industry, City Dock N° 1's narrow footprint and limited backland rendered it obsolete for cargo handling, and the warehouses fell into disuse. The petrochemical facility was shuttered in 2011.

AltaSea's entire leasehold is designated as a historic district due to the role this pier played in Port of Los Angeles history and development. Historic designation added another layer of complexity to the design of modern, world-



^ Fig. 3 AltaSea West Campus with 180,000 sq ft (16,723 m²) of renovated warehousing equipped with solar panels (Source: AltaSea, 2024).

class laboratory and research facilities. Due to the limited use of the obsolete warehouses, the Port took little action to maintain or improve them. Essentially, AltaSea took the site “as is,” recognizing that physical improvements might reveal unforeseen circumstances that could affect renovation costs. The warehouses were barely habitable, and AltaSea needed to initially establish offices in the surrounding community until sufficient renovations were completed to allow for daily use of the site. The site’s historic designation shaped the financial architecture of the partnership between AltaSea and the Port. Rather than considering the historic designation as a constraint, renovation of the site was approached as an opportunity for adaptive reuse. The cost and complexity of rehabilitating century-old structures to modern standards justified the Port’s decision to grant deeply discounted rent and accept non-monetary compensation instead of rent. Preserving

the industrial character of the site is consistent with international best practice in waterfront heritage management and community identity (ICOMOS 2011).

Between 2012 and 2024, AltaSea raised \$111 million through philanthropy and grants and, in 2023–2024, spent \$30 million renovating 180,000 sq ft (16,723 m²) of warehousing at Berths 58–60 to serve as its Center of Innovation (figs. 3 and 4). As a separate organization, AltaSea was able to more adeptly solicit multiple philanthropic grants for restoration from organizations that were outside of the Port’s traditional network. Likewise, many philanthropic organizations gained a greater awareness of the Port. The renovation demonstrated that adaptive reuse can be economically generative, blending heritage conservation with sustainable infrastructure. The east campus warehouses have new roofs equipped with



^ Fig. 4 Interior of one of the AltaSea renovated warehouses following adaptive reuse and rehabilitation works (Source: AltaSea, 2024).

solar panels that generate 2.5 MW of power. AltaSea hosts 26 organizations on-site, including multiple universities, business start-ups, a venture advisory and accelerator, Braid Theory, and a bank, Beneficial State, to assist in financing. Bob Ballard's Ocean Exploration Trust makes AltaSea its winter home.

Deviations from the Port's Standard Leasing Policy

The Port of Los Angeles had standard leasing policies governing its agreements with tenants and customers. In most cases, the Port, as landlord, builds facilities for its customers and leases them under long-term leases, with payments to the Port set to meet the Port's rate-of-return investment policy. Generally, these leases are for cargo-handling facilities, although there are also commercial operations

within the Port. AltaSea's lease required a different approach, and the Port had to disclose its deviation from its standard policies publicly.

Deviations from the Port's typical lease agreements included:

- Not seeking competitive proposals for the site. Instead, an organization was created specifically to enter into the lease and implement the project.
- Deviating from the Port's standard rate of return goal of 10 per cent on land and 12 per cent on facilities. The structure of the lease would not give the Port of Los Angeles a monetary return on its historic investments. Instead, the Port shifted the responsibility for maintaining and rehabilitating the historic structures to AltaSea.
- Eliminating the requirement for a security deposit.

Activity	Parcel	Requirement for Non-Monetary Compensation
Public Engagement	Berth 56A	• Within 5 years, reach 5,000 students (Kindergarten-12th grade) through on-site or off-site programs • Public access (minimum 40 hours/week over 5 days, including at least 4 hours on weekends) • Bi-weekly K-12 educational tours for LAUSD students • Annual open house • 12 public lectures annually within Los Angeles • Community workshops every 2 months
Research & Public Tours	Berth 57	• Develop exhibit space at Warehouse 57 with a minimum of 40 public hours/week • Provide middle and high school curriculum materials related to research • Bi-weekly tours of exhibit space and premises • 6 annual lectures by on-site researchers (within Los Angeles)
Programs & Jobs	Berth 57	Within 5 years, establish: • A post-doctorate program at the premises • An undergraduate program • Within 10 years, provide approximately 70 jobs on-site
Exhibit Space	Berth 58 Berth 60	• Establish 2 exhibit spaces (minimum 3,000 sq ft) at Warehouses 58-60 with 40 public hours/week • Provide bi-weekly public tours of exhibits • Bi-monthly garden and activity tours, including the viewing platform on Parcel B61 • 6 annual lectures by subtenant entrepreneurs within Los Angeles

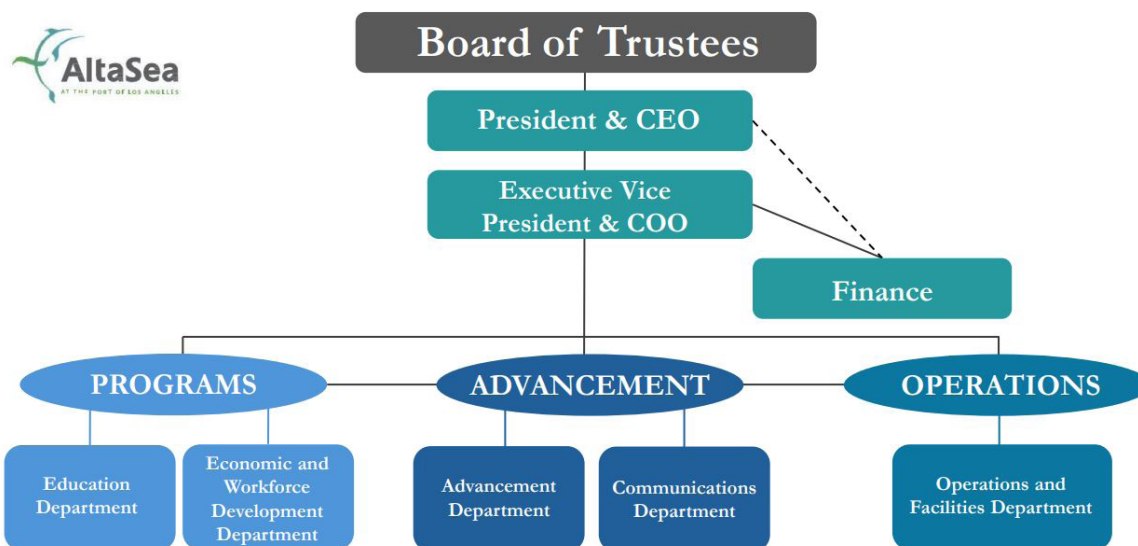
^ Table 1. Some of the non-monetary compensation parameters required by the Port of Los Angeles in its lease with AltaSea (Source: Geraldine Knatz, 2026. Based on Port of Los Angeles lease with AltaSea).

These deviations from standard leasing policy were acceptable to the Port because it recognized the project as a way to create job opportunities in technology and sustainability, while potentially addressing the Port's environmental challenges.

Making the Nonprofit Operations Financially Stable

It is the unique structure of the lease agreement with the Port of Los Angeles that created a pathway for the new organization's operations to become financially sustainable. The lease divides the 35-acre (14.2 ha) site into specific parcels, which are released to AltaSea for use

once AltaSea has demonstrated the necessary capital investment to initiate renovations and implement parcel-related improvements. While AltaSea is obligated to maintain the site, the Port has committed to investing \$37 million in the historic pier's structural rehabilitation over the 50-year lease. The rental payment due from AltaSea is a modest amount, 10 per cent of the Port's typical market rental rate for land, water and warehousing. The Port was able to justify the 90 per cent reduction in market rents in exchange for non-monetary compensation in the form of economic development and public benefits, including regular educational and public programs, public tours, lecture series and job creation requirements (table 1). There is no rental charge to AltaSea for areas used



^ Fig. 5 AltaSea organization chart (Source: AltaSea, 2026).

for public engagement. Additionally, AltaSea is eligible for a one-to-one rental credit for the funds it has spent on the historic facility renovations, which can be applied against the remaining 10 per cent of rent. This arrangement between the Port, as the landlord, and AltaSea, as the lessee, results in a no-cost lease to AltaSea. AltaSea is obliged to report annually to the Port on its compliance with its non-monetary compensation requirements.

Despite not having to pay rent, AltaSea is allowed to charge its sublessees rent. Income from sublessee rentals is used to sustain AltaSea's operations, including staffing and facility maintenance. After successfully attracting sublessees, AltaSea reached a point where its income supports its operating expenses. AltaSea went from a bare-bones operation with few staff to a multi-department organization, with over 30 staff and 36 volunteers (fig. 5).

AltaSea can lease its land and water area to sublessees at rates up to full market value. For example, a well-established company like Boe-

ing that might want to test its submarine would pay AltaSea full market rent. Universities and start-ups pay significantly reduced rent if they agree to engage in AltaSea's public outreach programs.

Fine-tuning the Partnership

As the project began to materialize, the Port and AltaSea realized the lease needed modification. Revisions were made to reduce the initial capital investment by the Port and AltaSea, and to help AltaSea advance quickly toward sustaining its operations through revenue production. A significant part of AltaSea's master plan included the construction of a public engagement center, a non-revenue-generating expense. Overall, the approach to lease amendments was to activate the site with rent-paying users as soon as possible to generate revenue while replacing the non-revenue public engagement center obligation with weekly public tours of the active research facilities and public days. Rather than expecting a major university

to commit to subleasing a warehouse, AltaSea found it easier to work directly with university researchers who had grant funding and needed access to clean ocean waters for their research. Academic researchers from three universities, USC, UCLA and Caltech, are conducting research on carbon sequestration at the site.

Conclusion

The AltaSea case demonstrates that the adaptive reuse of historic port infrastructure and the development of a financially sustainable blue economy hub are not competing objectives but complementary ones. AltaSea's partnership with the Port of Los Angeles combines a nonprofit operator, an extremely long-term nominal lease and the ability to sublease and self-fund through a portfolio of tenants. The Port recognized that leasing policies designed for cargo-handling facilities could not be met by a nonprofit organization and agreed to waive them, accordingly, accepting non-monetary compensation in the form of heritage conservation, public engagement, education and job creation. This innovative structure has provided AltaSea with a stable foundation to develop a blue economy ecosystem at the Port of Los Angeles, one that is not only home to innovative ocean-based industries but also creates a financially stable administrative organization that fosters educational and workforce development activities to support the entire Los Angeles region.

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