

**Final Report: Historic Ships Museum Specialist, Observations and
Recommendations**

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Introduction

South Lake Union is home to a fascinating and representative collection of traditional watercraft and historic ships. Four of those historic ships, *Swiftsure* (listed as lightship #83, *Relief*), *Arthur Foss*, *Duamish*, and *Virginia V* are National Historic Landmarks, *Wawona* is on the National Register of Historic Places and all five vessels are Seattle City Landmarks, marking this site as one of the most important concentrations of maritime material culture in the nation. Under a master planning process being facilitated and implemented by the Center for Wooden Boats, the historic ship owning organizations are in process of institutional assessment and strategic planning as part of a combined revitalization project being undertaken in tandem with the agencies that administer Lake Union Park. This report ensues as that part of the master planning process designed to consider the role of the historic vessels in the presentation and interpretation of maritime history at Lake Union Park. The observations and recommendations contained herein are the result of conversations, meetings, and workshops with the Board and members of Northwest Seaport, leadership of partner organizations including the Center for Wooden Boats, *Virginia V* Foundation, the Puget Sound Fireboat Foundation, Seattle Parks, Seattle Museum of History and Industry, as well as other stakeholders. This report attempts to collate the ideas and aspirations articulated in those meetings with the experience and techniques of a variety of museums elsewhere that have achieved success with the interpretation of historic ships.

Scope of Work

Under a memo of agreement executed in October 2006, the basis of this report was established under the contractual responsibilities of **Historic Ships Museum Specialist**. The responsibilities consist of guiding interpretation and exhibit assessment with the National Landmark vessels currently moored at Lake Union Park, working closely with the nonprofits that own those vessels, Northwest Seaport, *Virginia V* Foundation, and The Puget Sound Fireboat Foundation, the other non-profits and entities which share joint use of the Lake Union Park site, including The Center for Wooden Boats, and potential future partner organizations such as the Museum of History and Industry.

The scope of work was to unfold in several phases:

- **Assessment:** The Historic Ships Museum Specialist was to travel to Seattle to tour all of Seaport's vessels located at South Lake Union and to meet with The Lake Union historic ship owning organizations Board members, vessel managers, and stake holders to obtain individual perspectives on the history of the vessels and past programming efforts.
- **Consultation:** Visits were made in November 2006 and March 2007, timed to facilitate meetings with the Boards of the Lake Union historic ship owning organizations as well as principals and stakeholders.

- **Coordination:** During the course of several meetings during the two visits the consultant was able to engage board members, volunteers, and staff of Northwest Seaport and partner organizations in joint discussions to gain a collective sense of how the various organizations could leverage their respective assets, programs, and areas of audience and expertise for mutual support and optimization of programming for the site emphasizing consistency with mission and maximum public benefit.
- **Evaluation:** During the course of the second visit the consultant was able to present preliminary findings, suggestions, and a conceptual framework for consideration by the Boards of the Lake Union historic ship owning organizations.
- **Feasibility:** In the context of these discussions the consultant endeavored to determine which program ideas ensuing from these discussions best fit each of the Lake Union historic ship owning organizations assets or general operations, keeping in mind that vessels are undergoing preservation and restoration efforts and that Lake Union Park is undergoing construction. Feasibility of programming attempts to take these issues into account.
- **Resources, Costs, and Benefits:** For those programs deemed a good fit for the historic ship owning organizations, assessment of the resources necessary to implement and maintain the program were to be roughed out, including materials and labor costs, optimal distribution of work between paid professionals and volunteer labor, and potential for income to be derived from the program as well as some assessment of scope, time, and resource constraints relative to implementation of recommended programs.
- **Recommendations:** After completing the phases noted above, a series of recommendations are tendered within the final report.
- **Final Report:** A draft document of the final report is to be submitted to the historic ship owning organizations which will, in concert with several partners, review and comment on the draft. Following this review the final report is to be submitted in response to these comments. It is intended that this document will also be included in the Master Plan for Exhibit and Interpretation at Lake Union Park.

Lake Union Park

The historic ships site is situated within a parcel located at the Southern apex of Lake Union known as Lake Union Park. Lake Union is itself a prominent and attractive body of water of approximately one square mile in area lying immediately to the north of central downtown Seattle, situated between and connecting Lake Washington with Puget Sound. The shores of Lake Union are densely populated with low rise development encompassing a variety of use including hotels, restaurants, marinas, shipyards, seaplane operations, and floating residences, surrounded by and connected with major and arterial roads that usually bear considerable vehicular traffic. Fortunately, the lake as a body of water is extremely well protected and suited to the permanent mooring and safe operation of small to moderate sized watercraft. Lake Union Park encompasses slightly less than 11 acres of land and water area containing a variety of features including parking lots, open space, shade structures and pavilions, work sheds, floating docks and the former US Naval Reserve Armory, a signature and imposing two story building with a footprint of approximately 30,000 square feet, and providing about 53,000 square feet of usable internal space (figure 1). Second only to the armory building in visual prominence is the collection of large historic ships situated adjacent. The eclectic and period nature of the ships

endow the site with an evocative historical quality that complements the surroundings and immediately identifies the entire site as a cultural space. In keeping, Lake Union Park has been designated for significant publically funded improvements in order to elevate its potential as a centerpiece urban park. By virtue of its setting, central location, access, drive by traffic, aesthetic features, historical connections, and current and proposed programming, the site has considerable potential for a variety of cultural and recreational uses that would exert attractive appeal for local and regional residents as well as out of town visitors.

Lake Union Park is managed by Seattle Department of Parks and Recreation. Objectives for the site expressed by Seattle Department of Parks and Recreation management included its emergence as a well recognized community resource and a place “to come to again and again.” The park is to function as a regional amenity that fits with the neighborhood demeanor – forward looking, sustainable, and a locus for culture and activity for which the Center for Wooden Boats is serving as a tangible model. It is the agency’s hope that the activity of CWB can persist and enfold the other organizations while still offering an aesthetic quality that sets off the park as a showpiece. Thematically, the park should show the historic and continuing relationship between human activity and the environment. Identified audiences for programming include local families, attendees to events, participants in youth and seniors programs, and students in educational programs. It was especially emphasized that the programming for the park should have universal appeal including appeal to underserved audiences, emigrants, people of color, and the disabled. The historic narratives available in the maritime story might be particularly suited to this objective in that the story itself is ethnically diverse. In addition to programming for the historic ships, the park could offer the opportunity to see the city from the water or the water’s edge, including trails in the park which could incorporate history stations, with the sense that the historic vessels as interactive and historic artifacts which could move and operate could function as intensive history stations along such trails. The ships could also provide special opportunities to get people out on the water who otherwise might never have such an opportunity. In summary, the park should resonate as a “good place to come and play.”

Some of this attractive potential is indeed a legacy from past and ongoing use. Lake Union Park has long been home to an assortment of marine related non-profits and foundations which care for and operate historic ships and traditional watercraft for educational, recreational, and group charter uses. From a public use standpoint the most active of these currently is the Center for Wooden Boats, which has achieved a national level of prominence for its innovative program of restoring or replicating traditional small watercraft and offering them for livery use by volunteers, members, and the general public. The large historic ships are also either in process of conservation, restoration or recent return to active operation for public, educational, and commercial use. In addition to various everyday use, Lake Union Park has often been the location for large scale public gatherings, festivals, concerts, and performances, for which the historic ships and traditional watercraft have provided facilities, atmosphere, and cultural context.

In tandem with all its important advantages of location and setting, Lake Union Park also has some geographic and architectural challenges. Like the rest of the surrounding parcels and reflecting the precious nature of water frontage, the Lake Union Park parcel is narrow, deep, and lineal in its configuration, segmented into several rectangular zones which at present do not seem

consonant and which present an impression of having arisen by fairly recent happenstance rather than by design or evolved from longstanding traditional use. The relationship of the armory building to the watercraft and the ships, indeed its purpose and relationship to the setting itself is not obvious. Most of the historic ships are moored behind the building, which effectively hides them from many viewing angles. Moreover, the historic ships are moored end-on in a marina style facility which has been designed to optimize space rather than to present the ships or what waterfront is available to best advantage, with the effect that they compete with one another within the same visual frame but without a clear relationship which links them to one another or to the setting. The presentation is further encumbered by the present forlorn condition of *Wawona*, arguably one of the most architecturally significant, historically important, and potentially iconic assets of the site, indeed of the entire region.

Lake Union

Lake Union functions in many respects as a marine town common. To that end the historic ships site is part of a point of public access which serves to transform the lake itself from a mere water feature into a vast public marine park with cultural and historical content, drawing upon the same resonance between park space and museum space so successfully employed in major cities elsewhere. In keeping, the architectural and cultural assets of Lake Union Park are as important to its optimization and that of Lake Union itself as landscape features or open space. Though they collectively constitute but a small footprint, the presentation and the interpretation of the historic ships can provide a multidimensional public appreciation of the park and the lake. Each ship provides a means of access through its own story, and some of them provide actual operational opportunities; each offers a different experiential pathway through the past to a common geography and a greater understanding of what that geography expresses in human terms.

The Armory Building

The Naval Reserve Armory building is the most distinctive permanent structure both on the site and the surrounding waterfront area. Adaptively reused, the building would serve admirably as a museum. In design and mass, it is obviously a work of institutional architecture. Though its design does not advertise a more specific purpose, it could easily be made to project the public impression of a museum through tasteful signage, landscape improvements, and referential artifacts situated outside and nearby. At this writing, it seems likely that the Museum of History and Industry will occupy the building and indeed has already commissioned a design and construction plans for its adaptation to Museum use.¹

Should MOHAI effect this transition, it would present opportunity for enfolding the historic ships and traditional watercraft in a way that would make the entire site cohere rationally. A major technology museum located within a centerpiece building would help stimulate a “sense of arrival” and project the impression of varied and ever changing but thematically linked experiences to be encountered in a way that is seamless to the visitor, despite the fact that they are being offered by a spectrum of non-profits working in partnership. A coherent program

¹ It should be noted that this is a daunting project. MOHAI estimates that they will need to raise \$50,000,000 for the project of which \$22,000,000 would go into building rehabilitation and \$13,000,000 into the public exhibition space.

which draws all of the diverse elements together would also be a necessary ingredient to effectively “branding” the park. The potential synergies unfold in several layers. First of all, the site and nearby watercraft emphasize the degree to which regional industries are historically interrelated, especially through use of the sea. The ships would act as prominent gatekeepers drawing attention to the stories that might be encountered within. The juxtaposition of the building and the ships provides opportunities for “inside to outside” experiences in which traditional exhibit gallery type of experiences are combined with immersive environment presentations on the ships and actual on the water experiences which draw people through the building, out onto the permanently moored vessels, and then onto the lake in operational vessels.

An example of this kind of presentation used successfully to powerful effect can be found at the Viking Museum in Roskilde, Denmark.² The Roskilde Museum draws upon the use of traditional gallery displays in a signature museum structure, thematic open space with subordinate structures, exhibition of historic vessels from the Skudelev archeological site (conserved in fragmentary form), and replica watercraft, including their actual use on the nearby historic waterway, to present a fascinating and multidimensional window on life in Northern Europe a thousand years ago (figure 2). The Roskilde Museum is a center for research, education, and living history as well as a locus of community identity and one of the most successful tourist attractions in Denmark. All of these strategies could be employed effectively to create a powerful sense of place and community identity at Lake Union; indeed many of them are already in place and awaiting an interpretive strategy to be drawn together.

One of the most difficult and expensive types of museum experience to produce is the “immersive environment” experience, in which a small representative segment from the world of another time and place is created indoors as an experientially rich encounter. Elaborate sensory techniques include use of motion, smell, noise, temperature, and humidity to produce the sensation of being elsewhere. These also happen to be among the most compelling and successful of all types of museum exhibitry. Arguably the most successful interior museum exhibits of all time are the “coal mine” exhibit of the Chicago Museum of Science and Industry which has operated on a sell-out basis for almost seventy years and the U505 exhibition of the same museum which has attracted the same level of attention since its installation in 1954 and which in 1999 became the focus of a multimillion dollar conservation project and relocation to a new gallery.³ However, because labeling schemes violate the illusion of another place, experiential immersive exhibits tend to rely on docents, audio interpretation, or adjacent museum gallery spaces to provide narrative and historical context. In this respect introduction and orientation to the Lake Union historic ships, presumably within the armory building, would be an important part of the visitor experience. Historic ships usually function as complete and self contained “immersive environments” just as they are. They can also leverage the narrative power evoked in traditional museum galleries nearby. Among the most successful historic ship - museum combinations in the United States is the frigate *Old Ironsides* and the nearby *USS Constitution* Museum, which in combination constitute the most visited element of Boston’s “Freedom Trail.”⁴

² <http://www.vikingskibsmuseet.dk/default.asp?contentsection=3964B7C731974A1DA15F5741EA743FE9&zcs=>

³ <http://www.msichicago.org/exhibit/U505/history/index.html>

⁴ <http://www.ussconstitutionmuseum.org/>

It is not difficult to envision the ways in which a regional technology museum and historic ships could leverage mutual attributes to powerful effect at South Lake Union. However, MOHAI is not a maritime museum, though its mission includes the maritime story, and MOHAI would naturally seek ways to avoid assumptions about its mission which might ensue from its situation in a maritime setting surrounded by historic ships and traditional watercraft. By playing on ways that the maritime story segues into its other subject areas however, the ships and setting could be used to good effect in providing the connective tissue which animates MOHAI's larger narrative. Perhaps the most spectacular and successful museum rebirth of recent years ensued when the Peabody-Essex museum expanded from its maritime niche to embrace the wider story of world culture, retaining the maritime content to provide connective tissue that enfolded one of the world's greatest collections of international arts and crafts (figure 3).⁵ In the case of MOHAI, the maritime story could be put to similar use, with the outside evidence of a maritime connection drawing visitors into the building to see how it all relates and unfolds in natural proportion to the seaport origins of Seattle itself.

Historic Ships

A number of historic ships are moored at South Lake Union and operate under the stewardship of allied but independent non-profit organizations. Despite the organizational complexity, most potential audiences unfamiliar with this history probably perceive the ships as part of a single collection and to the extent that this impression can be sustained, the ships and organizations mutually benefit.

Northwest Seaport

Northwest Seaport has served as caretaker for the historic schooner *Wawona* and subsequent vessels *Swiftsure*, *Arthur Foss*, *Twilight*, and *Yakutat* since 1964, two of these vessels having been recognized as National Historic Landmarks and a third recognized on the National Register of Historic Places. Objectives for programming identified by the Board of Northwest Seaport include programs for children that are inspirational, educational, vocational, and/or character building in nature. Additional purposes include recreation, personal enrichment, gratification in volunteering, the aesthetic appreciation of the ships as works of maritime art and architecture, learning something of local maritime history or satisfying curiosity, entertainment, socializing, and to simply enjoy the water.

Audiences identified by Northwest Seaport leadership include:

- Traditional museum visitors
- Tour groups
- Attendees to public events and performances
- Participants in away and outreach programs
- Maritime Music Audiences
- Film audiences
- Volunteers and members

⁵ <http://www.pem.org/homepage/> The Peabody-Essex museum of Salem Massachusetts is arguably the oldest museum in the United States. Founded as the Salem East India Marine Society, its collections originated with the world wide voyages of new England merchants at the end of the eighteenth-century. The seaport city of Salem itself is essentially an architectural museum.

- Attendees to private events and charters
- Educational audiences of various age groups including elementary age, secondary, vocational, undergraduate, and adult.

Above all, the leadership of Northwest Seaport see themselves as the caretakers of priceless historical artifacts and the purveyors of the culture those artifacts embody which might be forever lost were it not for their efforts.

It is important to note that the regional maritime enterprise is not in imminent danger of fading from living memory, so the preservation of its cultural content is hardly an academic exercise. Seattle's seafaring traditions go back to its origins and even before that to the traditions of pre-Columbian peoples who inhabited the area. Today, 20% of all Seattle's jobs are maritime related. As caretakers and purveyors of maritime culture, Northwest Seaport sees itself as providing the cultural continuity to activities which still form a mainstream contribution to the local economy. Ironically, though Seattle has a strong city landmarks program, it is felt that there is little emphasis on preservation. Where a strong preservation ethic is encountered, this is usually in the form of community centers and citizens groups, which Northwest Seaport typifies.

Schooner *Wawona*.

The 413 ton, three-masted schooner *Wawona* has been a fixture under the stewardship of Northwest Seaport since 1964 and her image does duty as the organization's logo. The first vessel to be recognized on the National Register of Historic Places, *Wawona* is the largest of the historic ships at South Lake Union and the only sailing ship. From a purely interpretive and symbolic standpoint, *Wawona* is the most complex and compelling artifact at South Lake Union and possibly in the entire region by her capacity to represent or evoke an entire age and subculture that has passed from living memory and into a semi-mythological stature. More than any of the other ships, *Wawona* functions as what some anthropologists call a "superartifact." Even without knowing anything of her individual history or provenance most people who saw her in rigged condition would know what she "means" or represents in collective memory in the same way that any covered wagon or steam locomotive calls forth broad and complex understandings not necessarily rooted or restricted to the history of that specific object. Next to the real estate of the park itself, *Wawona's* iconic power is arguably the most precious asset of Lake Union Park. That power is certainly well understood: it is probably the main reason for her continued existence and the cause for anguish on the part of the community responsible for her welfare and embarrassed at her decline, for she is also easily the most fragile and threatened historical resource on site.

Wawona was built at the yard of Hans Ditlev Bendixsen at Fairhaven California in 1897. A three-masted schooner built for the Pacific Northwest lumber trade she is an archetypal example of a last flourish in the history of both the oceanic sailing ship and the American schooner. In her time, hundreds of these ships plied the American and Canadian waters of both coasts, though they ranged as far as Australia and Europe respectively, carrying agricultural products, coal, salt fish, and lumber, the latter dominating the cargos of late nineteenth-century schooners on the

west coast.⁶ In 1914 *Wawona* left the lumber trade to become a fishing schooner in the Bering Sea cod fishery where over the next twenty-nine years she compiled a record as one of the most successful ships of the fleet. Thus, in addition to her capability to represent a waypoint in the evolution of the commercial sailing ship, *Wawona's* history as an industrial artifact speaks directly to three important west coast industries: shipbuilding, lumber, and fishing. She was purchased by Northwest Seaport in 1964 and entered the National Register of Historic Places in 1970. *Wawona* and the recently restored *C.A. Thayer* in San Francisco are the only two ships extant of the type.⁷

During her time as a museum ship *Wawona* has lived through a gradual decline punctuated occasionally by infusions of resources and energy that were never sufficient, unfortunately, to regain lost ground, reverse the trend, or stabilize her condition. To preside over the gradual decline of an important and historic ship was obviously never the intention of Northwest Seaport. But because best intentions to care for the ship were ever a victim of insufficient resources, the continuing deterioration over time also proved increasingly detrimental to the organization's own self image and ability to continue raising funds. What would normally have been the advantages of her prominent location and majestic aspect (even in ruin) ultimately became detrimental to efforts reverse the situation or even secure her immediate future. Even portrayed as a losing battle, however, it must be remembered that it was purposefully waged. These beautiful ships in their hundreds were once an ubiquitous and iconic presence all along the West Coast but only in two places, San Francisco and Seattle, were serious public efforts mounted to save one for posterity. The enormous commitment in time, money, and expertise on the part of Northwest Seaport's donors and volunteers indeed bought almost half a century's use of the vessel as an educational platform and object of wonder, delivering her to the present with some promising options for her future still remaining. Were she to disappear as a cohesive object, either from dismemberment into individual pieces, slow disintegration within some storage facility out of public view, or by being broken up, the grace and grandeur she evokes even now would be lost forever.

By 2005 the condition of the ship was widely recognized to have reached the point of becoming a matter of public safety. In December of 2005 a three day summit attended by local stakeholders and a panel of national experts in museum ship conservation convened to explore immediate actions to be taken and various scenarios for the long term future of the ship. A series of recommended immediate steps ensued, including the removal of her masts (completed the month afterward). The long term option deemed most feasible for *Wawona*, given present circumstances and techniques within the field, was to stabilize the vessel sufficiently for movement ashore under cover either for permanent exhibition in that condition or in tandem with some measure of piece by piece repair/replacement of her historic fabric when and as resources become available.

⁶ Thomas Cox, *Mills and Markets: A History of the Pacific Coast Lumber Industry to 1900* (Seattle: University of Washington Press, 1974); Harriet Tracy De Long, *Pacific Schooner Wawona* (Bellevue, Washington: Documentary Book Publishers Corporation, 1985) and David R. MacGregor, *The Schooner: Its Design and Development from 1600 to the Present* (Annapolis, Maryland: Naval Institute Press, 1997).

⁷ Almost five hundred of these schooners were built on the west coast between 1850 and 1921. Jim Gibbs, *West Coast Windjammers* (New York: Bonanza Books, 1968). Remnants of the schooners *Equator* and *La Merced* are reported to survive in Everett and Anacortes.

Preservation of sections of the vessel as part of an inside exhibition was deemed an inferior but feasible alternative.⁸

More recently, it has been suggested that the irreparable fabric of the ship be discarded and her viable remains integrated within a composite sculpture that sustains the heroic grandeur of the vessel outside in full scale at the South Lake Union site, thus preserving *Wawona's* most essential and valuable quality, the “idea” of the ship. There is ample precedent for this kind of interpretation performed successfully. The Skudelev Viking ships preserved indoors at Roskilde, mentioned earlier, are presented as fragmentary architectural ruins supported within skeletal armatures that project the size and graceful curvature of their hull forms (figure 4). As a second example, in 2006 Maine Maritime Museum completed the initial phase of a monumental outdoor sculpture which evokes the legendary 3500 ton, six-masted schooner *Wyoming*, originally constructed in 1909 on the site of the Museum’s historic Percy and Small shipyard.⁹ Ultimately the sculpture will become a three dimensional set of the ships lines lofted in full scale and formed by bent and welded pipe. The initial phase captures only the bow and stern sections but as these extend sixty feet into the air and are separated by four hundred feet, even the rudimentary phase conveys the awesome magnitude of the original vessel (figure 5). Of the same period and concept as *Wawona*, *Wyoming* was one of the largest wooden vessels ever built (and the largest ever built in Maine) but unlike *Wawona*, nothing of the original ship remains to integrate within the sculpture. As a final example, the sloop *Gjoa*, which Roald Amundson used to make the first traverse of the Northwest passage 1903-1906, is preserved as an outdoor monument in Oslo, Norway, immediately adjacent to the dramatic *Fram* Museum building (which itself houses the much larger arctic exploration ship *Fram* as an indoor exhibit, figure 6).¹⁰ Like many wooden vessels the *Gjoa* is largely a reconstruction composed mostly of new material, but none the less preserves the idea and the identity of the original ship as a monument to the age of arctic exploration. As in the *Wawona* proposal, *Gjoa* addresses the history and purpose of the site and complements the museum building situated nearby. Also like the *Wawona* proposal, in *Gjoa's* location she seems to preside over a small but active fleet of traditional watercraft used in similar fashion to those of the Center for Wooden Boats.

Should the *Wawona's* remains be incorporated within such a sculpture, this feature would also provide additional opportunities for interpretation and contemplation. With her towering rig restored, *Wawona* could easily rise to become a symbol of community identity and historic connections with the sea, the locus for public gatherings, and a useful educational demonstration and orientation station for the entire site. Depending on the degree to which the concept would also abide internal weather-tight space, there also exists the potential for exhibit galleries or immersive exhibits. At a minimum, as monumental sculpture, *Wawona's* sweeping lines and graceful proportions would balance and complement the institutional mass of the Armory Building to mutual advantage.

⁸ Wayne Palsson, Richard and Anna Linzer, and Shannon Fitzgerald, *The Wawona Summit Final Report* (Northwest Seaport, 2006).

⁹ http://www.mainemaritimemuseum.org/what_to_see/exhibits/

¹⁰ <http://www.fram.museum.no/en/>

Troller *Twilight*

The *Twilight* is a 36' fishing troller built in 1933 by Harold Hansen in Seattle and is representative of a type of fishing vessel once common in the Pacific Northwest. This type of vessel towed arrays of fishing lines and lures to catch salmon migrating along the Pacific Coast, not unlike the famed Monterey trollers of California. She was acquired by Northwest Seaport in 2000 for use as an educational vessel. She appears to be in good physical condition though evidently not mechanically operable at the moment. The current status of her Coast Guard documentation and legal capacity to carry passengers for hire is unknown.

While *Twilight* is too small a vessel to provide “immersion experiences” down below or to function well as a purely exhibition vessel she appears admirably suited for her educational purpose and could also be put into service taking museum visitors out for excursions onto the lake as an extension of the museum experience. Her size and modest manning requirements would seem to make for economical operations. Again, there is ample precedent for the use of small character vessels providing both classroom and museum excursion experiences on a daily basis as part of normal programming. Examples at Mystic Seaport, Connecticut, include the operations of the 1908 steamboat *Sabino* and the reproduction catboat *Breck Marshall* for thirty minute excursions on the Mystic River several times each day (both vessels are also available for charter).¹¹ At the Maritime Museum of San Diego, the 1914 pilot vessel *Pilot* also provides 30 minute excursions several times daily and in addition finds frequent use for children’s programs and public programs on the history and ecology of San Diego Bay, the latter sponsored by the San Diego Unified Port District (figure 7).¹² At both Mystic and San Diego, the 30 minute excursions are provided free or at a nominal fee, but only to Museum visitors who have already paid their admission. The opportunity to go on an historically narrated boat ride thus becomes just another aspect of the museum visit and a reason to purchase admission. It also has the effect of transforming the adjacent body of water into an extension of the Museum site.

Tug *Arthur Foss*

Like *Wawona*, *Arthur Foss* is historically and aesthetically important for her representative capacity, the general appeal and fascination of the vessel type, and for her own individual history. The *Arthur Foss* (originally *Wallowa*) was built in 1889 in Portland Oregon for service on the Columbia River Bar. In 1898, during the time of the Alaska Gold Rush, she began towing barges between Seattle and Skagway (and is one of only two vessels remaining that are known to have participated in the Alaska gold rush). In subsequent years she towed logs, lumber rafts, barges, schooners, and military vessels, portrayed the fictional tug *Narcissus* from the “Tugboat Annie” stories in film, and was the last ship to leave Wake Island before its capture by the Japanese during WWII.¹³ After a long and eventful career she was acquired by Northwest Seaport in 1970. During the time that Northwest Seaport has owned the ship she has undergone a major restoration, participated in the popular and colorful tugboat races, made trips to Alaska and Vancouver to participate in commemorative festivals, and was named Washington State Centennial Flagship. *Arthur Foss* was declared a National Historic Landmark in 1989 and in

¹¹ http://www.mysticseaport.org/index.cfm?fuseaction=home.viewPage&page_id=1

¹² <http://www.sdmaritime.com/>

¹³ Designated the DOHASAN YTT 335, the *Arthur Foss* served in Hawaiian waters during the remainder of WWII.

2003 was awarded a prestigious Save America's Treasures grant for restoration of her decks. Today *Arthur Foss* is one of the oldest tugboats in existence and arguably one of the most important historic working watercraft in the world.

At present *Arthur Foss* is in near operational condition and it is anticipated that deficiencies with her engine will be redressed as part of Northwest Seaport's educational program. Indeed, the NWS "Engineer for a Day" (utilizing all of the historic ships with diesel plants) and "Diesel Engine Theory" (*Arthur Foss*) courses offered several times each year that focus on "hands on" big diesel theory, operation, maintenance, and repair are the most successful and popular of their current programs. Though she will never be economical to operate on a daily basis, if *Arthur Foss* is restored to seaworthy condition the opportunity for Northwest Seaport members to participate in limited underway operations a few times per year would provide educational opportunities and almost certainly stimulate growth and commitment of the volunteers, especially given the success of the courses. Active ships are generally more alluring to volunteers and visitors alike than static ones, but it does not follow that an historic ship needs to be constantly in operation to sustain her active status or the benefits which ensue from it.¹⁴

At 120' on deck, *Arthur Foss* is a large vessel, but because her purpose emphasized propulsion rather than payload she does not have the large empty cargo holds of a vessel like the *Wawona* in which to arrange cases and artifacts to tell her story. She does, however, have the capacity to provide a rich and fascinating environment that evokes another world. To sustain this impression, the *Arthur Foss* story should rely on the ship itself without excessive or intrusive signage, models, artifacts in cases, paintings and photos, etc. that would not have been present at the time that the ship was in commercial service. From the visitor's standpoint, however, she is a complex object especially in her machinery and deck gear, and would not be understood without some comprehensive interpretation. This could be accomplished through handouts, guidebooks, audio guides, or best of all, volunteer docents who are familiar with both her story and her machinery.

***Swiftsure* (Lightship # 83)**

Apart from *Wawona's* potential presence, the lightship *Swiftsure* is the most conspicuous and imposing of the historic ships moored at Lake Union Park.

Lightship #83 was constructed in Camden, New Jersey in 1904, making her one of the oldest lightships (or other large navigational aids) in the United States. She came to the west coast early in her career, powered around Cape Horn by the large and imposing compound steam engine that is still one of her most important features today. As was the custom with lightships, #83 took the name of whatever station she was permanently assigned to. In this service she served first at Blount's Reef off Cape Mendocino and then outside San Francisco Bay for many years. During World War II she was outfitted with guns for service as a patrol vessel in harbor areas.

¹⁴ At the Maritime Museum of San Diego, *Star of India* and *HMS Surprise* get underway for day sails one weekend per year. This is none the less sufficient to sustain the commitment of more than 140 volunteer crew members who collectively contribute more than 20,000 maintenance hours to the Museum annually. The 1904 140' steam yacht *Medea* conducts operations 12-24 times per year, always with a largely volunteer crew. State tall ship *Californian* is underway approximately 250 days per year, frequently with all crew but the master sailing as volunteers.

Beginning in the 1950's she became the temporary relief lightship for those lightships absent from their station for repairs or maintenance and took the name *Relief* to signify this service. As a relief lightship she served on the Swiftsure Bank at the entrance of the Strait of Juan de Fuca, Umatila Reef, and the entrance to the Columbia River. When operating as a navigational aid on the Swiftsure bank, she also served as the race mark for the prestigious annual Swiftsure international yacht race.

Lightship #83 was decommissioned in 1960 and acquired by Northwest Seaport in 1969. She was placed on the National Register of Historic Places in 1975 and declared a National Historic Landmark in 1989. Northwest Seaport gave her the permanent name *Swiftsure* to reflect that part of her history spent in service nearby as well as to reference an independent thread of significant local yachting history. With her tall red topsides and rounded appearance, *Swiftsure* towers over her surroundings. Even without interpretation, to external appearance she signifies the nearby presence of the sea as a pathway to maritime commerce and the history of navigation from a time before automated devices and electronic aids, in which the safety of ships, cargos, mariners, and passengers depended utterly on the dedication and diligence of human beings doing their work in lonely, uncomfortable, and dangerous places such as lightships. As with the other vessels, *Swiftsure* has the capacity to tell a larger story in which her own tale is interwoven and in her case there is also a separate and unexpected yachting thread. Of all the historic vessels, *Swiftsure* is currently the only ship that has some empty space within her interior sufficiently large, protected, and unencumbered by other uses to mount a narrative exhibit. Like the others, however, the ship is amply furnished to provide immersive environments that could unfold visitors with the sense of being in another place and time. Her monumental compound engine is especially fascinating and could be cleaned up and made to turn over by electrical or hydraulic power. It is not anticipated that *Swiftsure* will ever again be under way under her own power.

The ship does have challenges. Her decks and upper works are in need of restoration as is also the case with many of the compartments and crew spaces located down below. Access to the ship, currently by means of a jacob's ladder, is certainly not practical for visitors and out of the question for the disabled. Finally, the entire purpose of a lightship is to be conspicuous but she is incongruously hidden behind the armory building amongst the group of other historic vessels. *Swiftsure's* contribution to the site could be magnified substantially if she were somehow brought further forward into public view, and if her light and characteristic could be restored to use (illuminated just sufficiently to become an attractive rather than irritating signal).¹⁵ Likewise, her bell and horn could be integrated within the program for public festivals and events or used to mark the passing of important dates and occasions.

Fishing vessel *Yakutat*

The *Yakutat* is an aft wheelhouse "halibut schooner" that exemplifies the early development of diesel-powered fishing vessels that transitioned human-powered, dory-styled fishing to mechanized long-lining techniques. Northwest Seaport acquired the vessel through donation in 2003. She is reported to be in good condition and was able to steam under her own power as recently as 2005, though is now in need of engine repair and a condition survey. Northwest Seaport has no plans to move her from her present location at Deer Harbor in the San Juan

¹⁵ *Swiftsure's* light is reported to be operable.

Islands to Lake Union but is assessing a number of other location and programming opportunities.

Puget Sound Fireboat Foundation and *Virginia V* Foundation

The presence of the other historic vessels at the site is fortunate and serves to common advantage in that they help establish the site with a “sense of place” that offers more than a pleasing waterfront scene. Together they signal the presence of a program and an invitation to explore. To the degree possible, this will be strengthened by the impression that all the ships constitute one cohesive collection, though each with its own story and purpose, and that they have been brought together according to deliberate and thoughtful intent and not opportunity, happenstance, and a diversity of unrelated interests.

Fireboat *Duwamish*

The fireboat *Duwamish* was built at Richmond Beach in 1909. When new she was the most advanced fireboat of her day and soon proved her value in helping fight the Grand Trunk Fire of 1914 and in many subsequent emergencies. Like the *Arthur Foss* and the *Swiftsure*, *Duwamish* played a local defensive role in World War II and was modernized into a state of the art fireboat once more after the war’s conclusion. *Duwamish* was retired from the Seattle Fire Department in 1984 and then acquired by the Puget Sound Fireboat Foundation. Interestingly, the Seattle Fire Department currently does not possess equipment that can match *Duwamish*’s firefighting capability in some important situations, leaving the intriguing possibility open that some arrangement might unfold whereby *Duwamish* enters a dual life as both a museum vessel and a standby resource for emergency response. If this does prove possible, not only would the vessel benefit from a demanding maintenance regimen keyed to her operational status, but her ongoing life as a working vessel would lend a continuing voice of authenticity to the artifact.¹⁶

The collection of vessels at South Lake Union is eclectic and *Duwamish* does not depart much from that theme, especially in present times when large powerful fireboats are somewhat of a rarity and ever fewer people are so connected to the sea in their daily lives that they understand in personal terms the scale of conflagration and catastrophe that *Duwamish* was built to confront. Without this popular understanding, *Duwamish* has not inherited a large natural audience except among those few subject matter experts who know of and love fireboats as objects in and of themselves. However, as with the other vessels, *Duwamish* sits at the intersection of important story lines including the history of regional urban development (especially the rise of major seaports), the regional story of maritime trade, and the history of fire and firefighting, and within these larger stories her own is nicely embedded. Thus, she also nicely cross references some of the other vessels. However, also like some of the other vessels, whatever interpretive strategy enfolds *Duwamish* within coherent story lines will have to make its case either through handouts, docent interpretations, an audio tour, or exhibits which address the theme in depth someplace

¹⁶ The 1914 pilot vessel *Pilot*, owned by the Maritime Museum of San Diego, continues to operate from time to time as a pilot boat for the San Diego Bay Pilots, a fact that visitors always seem to note. The Museum has the impression that *Pilot* is sustaining the longest career in consistent service of any working watercraft in the western hemisphere. Were *Duwamish* to return to occasional but active service as a working fireboat, she would obviously be able to contest that distinction.

other than the vessel itself. As a sophisticated and powerful piece of technology, she wasn't designed with the kind of internal open space that lends itself well to narrative exhibits.

Fireboats do, however, have another "exhibit" attribute which can win attention and interest in the form of the spectacular water displays they generate. As spectacular floating fountains, they can usually be found at the forefront of maritime parades signifying that something extraordinary is underway. In recent years, *Duwamish* has put on "water shows" by throwing screens of water on which colored lights are projected to musical accompaniment. Based on descriptions of public response to such performances it might be possible to explore the programmatic use of her firefighting monitors on a frequent perhaps daily basis to stimulate awareness and attendance.¹⁷ Again, however, her present mooring situation is not particularly suited to such purpose.

Steamer *Virginia V*

Of the large historic vessels moored at South Lake Union, the *Virginia V* is in the best condition and is also, not surprisingly, the most active. It is likely that she is also the only one of the large vessels to have a current US Coast Guard Certificate of Inspection to carry passengers for hire and employs it regularly in commercial use. She is thus also the only vessel currently benefitting from an obvious and significant operational revenue stream.

Virginia V was constructed in 1922 by the West Pass Construction Company of Lisabuela, Washington to transport passengers and freight between Seattle and Tacoma. *Virginia V* was one of the colorful armada of coastal steamships known affectionately as the mosquito fleet which provided the arterial connections that linked the maritime communities of Puget Sound. By mid-twentieth century the proliferation of roads and automobiles had supplanted the mosquito fleet but by that time *Virginia V* had migrated successfully into the excursion business where she acquired a strong following among the general public and steam engine enthusiasts. She was designated a City Landmark by both the cities of Seattle and Tacoma and in 1992 she was registered as a National Historic Landmark.

In 1996 the *Virginia V* Foundation embarked on an ambitious six-year campaign to raise \$6.5 million for her complete restoration and return to active service in providing excursions. She has been successful in that capacity, currently attracting customers for weddings, receptions, special events, business meetings, dockside events, dinner cruises, public excursions, and educational programs.¹⁸ The ship currently performs 65-70 revenue generating excursions per year and the

¹⁷ In *Star of India*, It is now the practice to set as much sail at the dock as weather and available manpower will allow. The Maritime Museum has found there to be a direct lineal relationship between the amount of sail set by *Star of India* and attendance – setting everything to the royals will increase attendance 50% over no sail at all for any given day. In fact, for comparable square feet, a blank sail exceeds the effect of any form of banner or signage we have tested against in stimulating attendance. Clearly, the visiting public responds to interesting spectacles. San Diego Maritime Museum has found a similar effect prevails if the *Californian* sails close to crowds on the Embarcadero and fires a blank broadside. It might well be the case that conspicuous displays by the *Duwamish* could achieve a similar effect.

¹⁸ The use of museum grounds, buildings, and historic vessels for private events and underway charters is a well established and widely pursued strategy. For the Maritime Museum of San Diego, such activity currently represents approximately 25% of the gross annual budget. However, two factors should be kept in mind. First, the IRS typically regards such activity as non-business related income for collecting and educational institutions and as such the net revenues are subject to taxes under corporate rates. More importantly, non-profits which generate much more

Foundation has self limited the maximum number of trips per year to 100 in order to keep to a maintenance schedule and avoid running down the equipment through over use. Typical excursions last three hours. In addition, the ship is also host to six or seven dockside events per year. The ship typically operates just on Lake Union, but on occasion also steams to Lake Washington, Puget Sound, and to other ports.

The Foundation has also been successful in pursuing the educational component of her mission through several programs established with regional schools particularly middle schools. Classroom visits involve explanations and demonstrations of the ship and her history at four or five stations, including the engine, navigation, weather, history of local steam navigation, etc. Eventually, the Foundation would like to see about 50% of the 100 trips per year be devoted to educational programming. The Foundation would also like to see *Virginia V* function as an exhibition vessel open to the general public. She is currently open to the general public two days per week.

Virginia V has an active volunteer corps and membership of 150-200. Members pay dues, receive a newsletter, discounts on merchandise and are invited to attend members only cruises. Donors to the Foundation are automatically considered members.

Historic assets placed into commercial use consistent with their own history can function as an effective form of interpretation. Moreover, such use provides opportunities to attract new audiences and corporate patrons. In such manner the operations of this important ship could be put to collective benefit as an ambassador for the entire site and as a point of color and interest marked by her departures and arrivals. Since Seattle attracts many conventions, it is also likely that some groups too large for the *Virginia V* to carry at one time might rent the entire site including the *Virginia V*.

Certainly her history is intertwined with that of the other vessels, the regional maritime story, and the economic, technological, and cultural history of the region. While it may not be possible to place the ship on continuous exhibition for daily visitors and still pursue an active operational schedule, her presence and activities could be referenced as a part of the overall interpretive plan for the site, and this presentation could, in turn, certainly function as part of *Virginia V's* marketing plan. In similar fashion, *Virginia V's* educational offerings could be augmented through experiences on the other vessels that the various organizations could jointly produce.

Reconstructing a Waterfront

Some passive ship museums and indeed some single ships museums are quite successful, but the ships in such locations are usually large enough to function as museum buildings in their own right, or they have large constituencies (such as retired naval personnel who served on that kind of ship), or they are wrapped within fundamental themes that are well enough understood to generate significant popular interest (World War II, Civil War, voyages of exploration, early

than 33% of total gross revenues from non-business related income may place their nonprofit status in jeopardy. Secondly, most museums that offer full service food and beverage seem to find that about 22% of revenue is available for support of institutional programs after expenses as opposed to 78% of gate revenues. This varies of course from institution to institution.

settlement, etc), or all the above. The historic ships at South Lake Union also each have their own individual strengths, histories, technological, and aesthetic appeal. However, it is doubtful that any of these vessels could manage to function as a stand-alone museum. Their strength lies in their close association and their capacity to convey an impression of interesting collective purpose. But while the collection as it currently exists now represents a discursive and fascinating array of vessel types, it's not clear that there exists a large and informed audience capable of appreciating them in their own right, or at least not enough of an audience to be sustaining. That potential does exist though, however loosely conveyed at the moment, in the very title Northwest Seaport taken by one of the steward organizations. Everyone knows what a seaport is, just as everyone is also aware that the sorts of places which come first to mind when we hear that word have gone the way of the old west and small town main street, into a colorful and romantic imagined past. A challenge for the ship collection now, is that even though it looks as it may have done so at one time, Lake Union Park does not presently convey the impression of an active traditional seaport in microcosm. Part of the problem is that with the exception of small craft and *Virginia V*, the historic ships at Lake Union Park are fairly passive in their present condition (and in *Wawona's* case, derelict).

Calling something a seaport implies the presence of waterfronts that are active. Ships, in turn, are at their most interesting when they are doing something or about to. The most difficult and important challenge in presenting a static museum vessel is to convey an impression of what it was like in its active state. (in like manner zoos and aquariums are more popular than natural history museums because even captive animals are more fun to look at than dead ones, however creatively mounted or exhibited in dioramas). For some historic vessels, though, active operations are simply not practical. One way to activate a whole grouping of passive vessels is to conspicuously operate one or a few of them, just as maritime artists always do when they paint an underway vessel into waterfront scenes. The spectacle of a tall ship out on the lake in full view of thousands of drivers and pedestrians every day, small craft coming and going from their docks, and people disembarking or waiting to board all conveys interest, color and excitement that would convey to the permanent vessels and their surroundings. To an important extent, the Center for Wooden Boats already does this, but the impression could certainly afford amplifying. Thus, when future acquisitions are considered, it might be useful to envision the kinds of vessels (including reproductions) that would complement, "activate," and thereby protect the existing ships rather than add to the number of passive ones in order to fill perceived holes in the collection or save yet another endangered vessel from the breakers.

Period sailing ship

With the *Wawona's* masts down, a distinctive feature of the site is no longer present. Even if *Wawona's* rig someday returns, the presence of a traditional and operational vessel, preferably square rigged, as an active part of the site would add to its visibility and allure. Evidence for the compelling nature of the tall ship effect is evident everywhere in the proliferation of period replica ships and tall ships as museum and educational vessels. Even now Lake Union is activated by the annual visits of the tall ships *Lady Washington* and *Hawaiian Chieftain*. The size of Lake Union, mooring space, mission and payload may make the choice of ship to acquire or build difficult. In other words, a ship small enough to operate on the lake, small enough to moor at the site, large enough to take a classroom of 5th graders with parent chaperons for a daytime

program, or enough public passengers for a day sail to make economic sense, berths enough for an overnight living history class, with a rig complex enough to make maneuvers meaningful for training and fascinating to passengers, economical to man, interesting and attractive enough to draw the allegiance of volunteers, capable of being issued a Certificate of Inspection by the Coast Guard, and related somehow to important regional events or historical story lines is a difficult set of requirements to fulfill. However, as with the Maritime Museum of San Diego's active use of the *Californian*, and the National Park service scow schooner *Alma* at the San Francisco Maritime National Historic Park as well as many others, the presence of an active ship can be a powerful institutional stimulus across a number of dimensions (figures 8 and 9).¹⁹

Period Rowing/sailing vessel

Most sailing educational programs, such as the longboat program developed by Grays Harbor and that of the Brig *Niagara*, employ experiences in ship's boats as an essential part of the curriculum.²⁰ In some cases, such as Lake Champlain Maritime Museum, rowing experiences constitute almost the entirety of educational programming.²¹ The informal consensus among maritime educators is that, though the big ships get most of the attention, multi-oared rowing craft deliver more experience for the dollar in terms of getting children out on the water, developing basic skills, and demonstrating the value of teamwork. Of course the Center for Wooden Boats is one of the leading authorities in the nation on the construction, reproduction, and use of oared watercraft in educational and public programs, so it is difficult to envision this type of program without the direct contribution of the Center for Wooden Boats as an extension of existing expertise. Rather, what all of the above named institutions have discovered (whether augmenting an existing tall ship program with a rowing program or vice versa) is that the synergy of experiences in a tall ship and the ship's boats is leveraged both ways. Unlike the proposed diminutive Lake Union tall ship, however, suitable and historically appropriate choices for rowing craft are fortunately quite abundant.

Ships in Historical Interpretation

As mentioned earlier, ships are what anthropologists and historians of technology call "superartifacts" that is, they have a transcendent capacity to embody in totality the attributes of the societies which create them. They are, in fact, the physical projection of a culture as microcosm into a dangerous and chaotic environment. Because they are required to provide a center of immutable safety, shelter, and purpose against the varied destructive forces of nature and time they are works of architecture in many respects more akin to buildings than to other technological conveyances such as aircraft, automobiles, or even small watercraft. Like great buildings, their aspect is monumental, *even in ruin*. They are also the product of many environmental factors combined with overarching cultural understandings and adaptations to that

¹⁹ Including financial. The Maritime Museum of San Diego acquired the *Californian* in 2002 and immediately embarked on a one year, \$500,000 refit. By summer 2006, the ship was generating revenue in surplus of expenses through educational programs alone. In 2006, *Californian* was host to more than 250 programs and underway operations. The 1891 scow schooner *Alma* is the most actively used of the historic vessels at the US Park Service Maritime Historical Park in San Francisco. Not coincidentally, it is also the vessel in best condition. See <http://www.nps.gov/safr/historyculture/historic-vessels.htm>

²⁰ <http://www.historicalseaport.org/longboats.htm>; <http://www.brigniaraga.org/museum.htm>

²¹ <http://lcmm.org/>

environment. Because these complex objects are created for specialized purpose and are fixed to a point in ever unfolding technological development, they also function as cultural snapshots frozen in time, no less so than letters, newspapers or paintings. Moreover, every seafaring culture endows its watercraft with human like qualities, mystical properties, and individual identity. It is no wonder that we should seek to preserve and interpret them. They provide interpretive pathways to vanished worlds unreachable by any other means.

In meetings with the Boards and stakeholders of the historic ship owning organizations, the following potential purposes for historic ships in museum environments were identified and reviewed :

Historical ships can be:

- Artifacts in themselves
- Places for collections and narrative based exhibit galleries
- Means for ongoing preservation and demonstration of traditional crafts, skills, and art forms
- Providers of rich immersive experiences
- Classrooms
- Performance spaces
- Private and public events spaces
- Providers for administrative and storage space
- Operational vessels
- Accommodations
- A museum store
- Monuments (or memorials, icons, or symbols)

Considering the particular histories, qualities, and conditions of the historic ships, the group then produced a matrix for the most appropriate roles to assign each of the historic vessels, with the object of maximizing the effectiveness and interdependence of the entire collection.

	<i>Wawona</i>	<i>Twilight</i>	<i>Arthur Foss</i>	<i>Duamish</i>	<i>Virginia V</i>	<i>Swiftsure</i>
Artifact	X	X	X	X	X	X
Exhibit gallery	***					X
Immersive environment	***		X	X	X	X
Classroom	***	X	X	X	X	X
Performance space	*		X	**	X	
Events	*				X	
Admin & storage						
Operations		X	X	X	X	
Monument	X (daytime)					X(evening)

*In the discussions there was no consideration of using *Wawona* as a setting for performances and events. However, subsequent discussions regarding the incorporation of her historic fabric within an heroic sculpture emphasized (stage) attributes as suitable for these purposes.

**The group did not consider use of the *Duamish* as a performance space, but she has herself been a performer in public water shows.

*** During the session, the group did not consider the possible use of *Wawona's* voluminous internal areas as gallery or classroom spaces, no doubt because her current condition would preclude it. However, more recent considerations for her reconstruction and dry land exhibition might well allow such uses, depending on the execution of the concept.

Not surprisingly, all of the ships registered as significant artifacts and would require inclusion within some interpretive scheme. Only one, the *Swiftsure*, possessed sufficient internal open space for adaptation as gallery space, but this is probably barely sufficient for even a small narrative exhibit. None of the ships were deemed appropriate for administrative and storage space, highlighting the desirability for nearby office and storage facilities. Also, neither “accommodations” or “museum store” functions were considered particularly appropriate to the South Lake Union historic vessels.

Ships as Part of Historic Sites

As one might expect, maritime museums tend to feature maritime stories exclusively, often for the many of the reasons cited above. Single ship museums tend to be even more focused in telling the story of their one essential artifact. Neither of these approaches would seem a good match for the Lake Union Park site. However, there are many successful examples of ships used effectively as part of a historic site to tell a larger and more complex story. These include Jamestown Settlement, where reproductions of the settlement ships *Susan Constant*, *Godspeed*, and *Discovery* draw hundreds of thousands of visitors each year, Mystic Seaport, where a complete reconstruction of a hypothetical New England Village is anchored upon an eclectic ship collection consisting of the whaler *Charles W. Morgan*, Grand Banks fishing schooner *L.A. Dunton*, training vessel *Joseph Conrad*, and a plethora of small watercraft, and Plymouth Plantation, where a reconstructed Puritan settlement functions as interpretive partner with the *Mayflower* replica located a few miles away.²² There are purely maritime stories to be told in these places to be sure, but in each case the ships are really part of a larger story emphasizing the degree to which the enterprise of the sea has been a force in world history and a connective factor in human experience.

The historic ships at the site subsume shipbuilding, lumber, fishing, transportation, communication, finance, and construction industry storylines as well as trade, navigation, gold rush, yachting, firefighting, and military history. This diversity of threads would seem to offer an excellent opportunity to use the historic ships as narrative devices to explain how various

²² <http://www.historyisfun.org/Jamestown-Settlement.htm>,
http://www.mysticseaport.org/index.cfm?fuseaction=home.viewPage&page_id=1,
<http://www.plimoth.org/>

segments of regional and industrial history interrelate, interweaving them in turn within MOHAI's interpretive strategy.

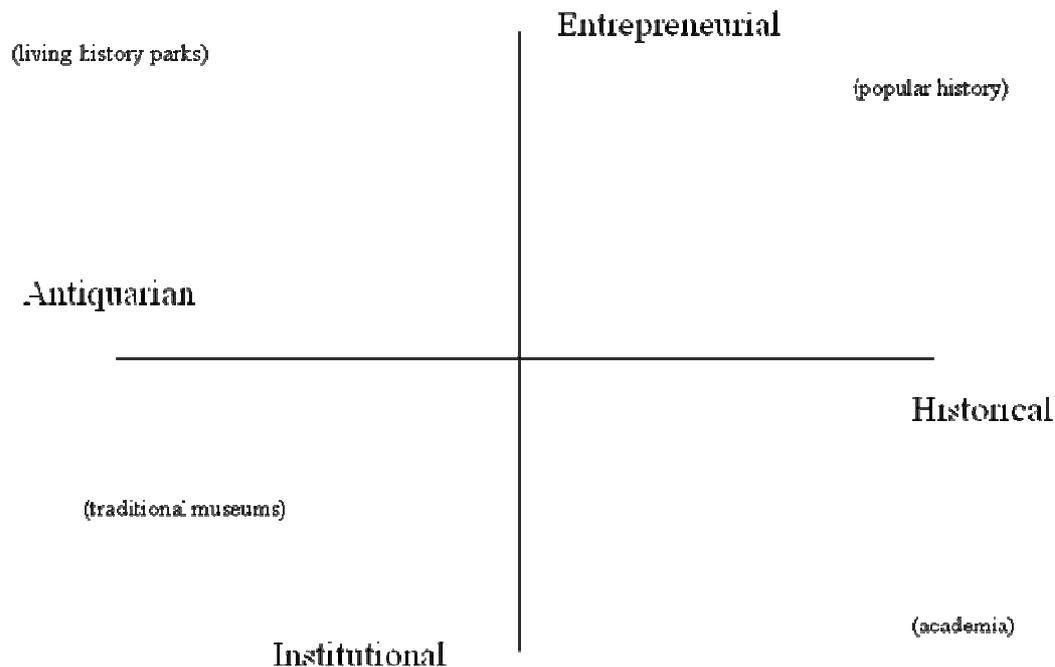
One technique for doing so might be to utilize the ship's individual biographies as referential story lines connecting the various themes within the museum (armory) building, supplying the kind of anecdotal examples which personalize and involve visitors in depictions of large scale events or developments. For example, this technique, originally adapted from role playing games, has been used very successfully in the Holocaust Museum in Washington DC, the Museum of Tolerance in Los Angeles, and Manzanar National Historic Site.²³ In this technique, each visitor is assigned the persona of an historic person (usually printed on the admissions ticket) and then encounters various dilemmas, choices, and clues to his own character's fate in the form of cues dispersed throughout the master narrative, never learning what actually happens to his character until reaching the end of the exhibit. By such means the visitor is able to personalize the experience in transposing his identity with that of the actual person caught up in events. Each visitor could either be assigned his "ship" or assigned the persona of someone associated with one of the ships, with anecdotal references that indicate how the story of the objects flow and connect with the larger story and stimulating an impression that the encounter with the ship outside is an opportunity to see, touch, and enter the world as though it had already been experienced in the museum presentation. Others means of using the ships in narrative ways include "sidebar" insertions connecting the stories of the ship to themes of discrete exhibit areas within the inside museum space devoted to the history of a particular industry, period, or chain of events. Probably the least effective method of integrating the historic ships within the museum experience would be in the form of a standalone gallery devoted to regional maritime history.

Presenting history - overview

As mentioned earlier, the visitor experience should emphasize an impression that the various assets have been assembled according to a well conceived plan rather than through the efforts of a number of organizations which came into being at different times for different purposes. Outward impressions of consistency should be conveyed through consistent signage, colors, fonts, wayfinding symbols, etc. and rooted within an overall interpretive strategy which enfolds the site.

Ingredients to a successful interpretation strategy include an understanding the characteristics of the story to be told, the audience to whom the story is told, and the attributes of the voice (institution) telling the story. These factors combine as style and style in turn influences approaches and methodologies for interpretation. One conceptual model that strives to address these factors and which has been employed elsewhere in strategic planning exercises was presented and discussed during the workshop session with historic ship owning organization Board members and stakeholders. In this model dimensions that define "style" in the institutional presentation of history by various kinds of organizations can be represented as follows:

²³ <http://www.ushmm.org/>,
<http://www.museumoftolerance.com/site/c.juLVJ8MRKtH/b.1580483/k.BE32/Home.htm>,
<http://www.nps.gov/manz/>



In the above diagram, the horizontal axis defines the institutional approach to history and can be said to represent the tension which always ensues between significance and detail. The vertical axis defines a range between two paradigms or worldviews that embody institutional cultural approaches to problem solving.

Antiquarian institutions focus on the minutia which once defined a past world, particularly its objects, taxonomy, and sensibilities. The approach to interpretation is essentially experiential.

Historical institutions take an approach to history that is thesis driven, presuming that the purpose of history is a search for cause, explanations for the outcome of events, and the discovery of patterns that have predictive value. Though objects may have explanatory worth, the methodology is narrative and focus is on ideas, especially as represented in documents and other archival sources.

Institutional organizations may be older, well established, and complex though this is not necessarily so. They approach problem solving in a formulaic manner determined by established practices and policies. Often the practitioners are several steps removed from the time when such policies are created and now proceed according to scripts that are codified and value weighted as best practices. Often they have achieved a position where they have sufficient influence over their immediate economic and political environment to determine outcomes. Organizational structure tends to be formal and hierarchical with a well established match between titles and job descriptions.

Entrepreneurial organizations may be consistent in their approach to problem solving, but also tend to evaluate each new situation on a case by case basis requiring a specific approach rather

than a script. They tend to operate within environments which they can only hope to influence rather than control, and thus must be adaptive to constant and subtle changes. Organizational structures tend to be matrix like, fluid, and personalized.

In this diagram of history's intellectual space, these axes are a continuum with no one institution all one thing or another. (For purposes of illustration, the diagram above is populated with the organizational archetypes indicated in parentheses). The point of the exercise lies in helping to formulate an effective mix of interpretive strategies and techniques. In present circumstances, it does not seem likely that the historic ship owning organizations will be able to collectively sustain themselves by defining style as a small specialized area within this intellectual space or addressing any one specific audience (market) for the stories they expect to tell with their ships, and should thus endeavor to embrace a style of interpretation that casts as wide a net as possible. Fortunately, the techniques available are as varied as the historic ships themselves.

There is a third dimension of institutional style not represented in the chart but which was discussed at length in the workshops, having to do with resources and means of procuring them. In contemplating any interpretive strategy this speaks to the issue of feasibility. History museums, like other non-profits, sustain themselves from a mix of revenue streams. At one end of this scale lie "top down" institutions which are funded through networks of elite patronage, especially through board members with significant capacity and the large endowments they support, and are not overly dependent on operational revenues. Institutional development tends to focus on donors and donor prospects. At the other end lie "bottom up" institutions with large membership and volunteer bases, "hands on" boards, budgets heavily dependent on operational revenues, and development departments that tend to focus on procuring and managing grants. Aside from the obvious issues of funding exhibits, bottom-up institutions tend to favor subjects and interpretive techniques which appeal to large popular audiences while top down institutions generally favor a more scholarly style and high end production values. Again, the extent that any institution will need to operate successfully all along this continuum is dependent on its own circumstance and control over its environment. From their individual institutional histories it appears that most of the historic ship owning organizations are to some degree bottom up organizations striving to extend their reach wherever possible, and this should be considered when assessing the feasibility of interpretive strategies and plans for implementation.

Most maritime museums, indeed most history museums, find themselves near the same place in the resource continuum. In comparison to history museums, arts and culture organizations which either address the sensibilities of elite culture or strive to remedy crucial social or medical problems are better positioned in their ability to attract conspicuous philanthropy. Thus, symphonies, ballets, art museums, universities, cancer research, children's clinics, homeless shelters, eldercare facilities, etc. have a competitive edge over history museums which exist to celebrate the accomplishments of ordinary people. It's important that civic entities and granting agencies understand that museums which address public history are not as well equipped to attract the patronage of economic elites. It's also important that such institutions themselves understand that to those unfamiliar with the stories embodied in the artifacts, the *preservation* mission risks appearing ornamental in nature unless thoughtfully implemented in ways that signal public benefit. In other words, preserving old vessels as an end in itself risks looking to the outside world like a hobby (and thus a questionable candidate for public resources and

philanthropy). This is why, to the extent possible, the *educational* mission requires emphasis – the social value it addresses is more obvious. The program defines how political capital is accumulated and translated into patronage.

Educational Programs

Several of the historic ship owning organizations have conducted successful educational programming in the past or as an ongoing strategy. Historic ships lend themselves naturally to experiential education and most ship museums embrace education as an essential part of their program. Structured educational experiences help answer the question, preservation to what end? Educational programs offer one of the best ways to integrate historic ships into the cultural life of the community and with time, the children who have memorable educational experiences on the ships grow up to become advocates and patrons. There are more examples of historic ship programs than room in this report will allow, but for purposes of example the Maritime Museum of San Diego has achieved favorable results with at least three of the most common genres that would seem applicable to the historic ships at South Lake Union.²⁴ Each of these genres represents a different level of time commitment on the part of the students, intensity, and expense.

Docent led tours

Docent led school tours are not markedly different than any group tour, with the exception that they are designed to address grade specific state standards for curriculum. These are the types of programs most people associate with grade school field trips. They can accommodate a lot of students and be offered at minimal cost, sometimes at no cost at all. Currently, SDMM is providing docent led school tours to about 10,000 children annually.

Living history

The SDMM's living history dockside courses are patterned after those developed by Ocean Institute of Dana Point, Ca, which currently also offers living history courses on the topsail schooner *Spirit of Dana Point* and the brig *Pilgrim*.²⁵ Living history relies on the natural and developmental tendency of children ages eight to eleven to role play. The historical ship provides the period setting for tightly scripted courses that are an intensive mix of theater and instruction. Set in the time period appropriate to both the ship and the history subject matter addressed in state standards, students, their teacher, their parent chaperones, and museum instructors live “in character” and “in period” for the entire imaginary voyage, which according to scenario may be four hours, five hours, or an eighteen hour overnight experience.²⁶ *Star of India*, for example, addresses a different emphasis on immigration and migration for California history, American history, or world history, depending on grade during an imaginary voyage from Europe to

²⁴ SDMM does have additional programs such as “water toy workshop” for early elementary, “History and Oceanography of San Diego Bay,” and “educational sails” on the *Californian*, but the three genres cited in the main text are the best known.

²⁵ <http://www.ocean-institute.org/index2.html>

²⁶ The course activities are conducted in the presence of museum visitors, who often find the spectacle an entertaining and unexpected bonus. Elementary age participants are more or less able to ignore the incongruous presence of museum visitors and keep “to period.”

California in the year 1874. In another scenario, the 1847 replica revenue cutter *Californian* becomes a ship on the eve of the American Revolution.²⁷ Prior to a living history course, the students have been prepared for weeks beforehand with lessons about the historical era and events using materials and lesson plans provided by the Museum.

During the course of their voyage, the students are presented with the technical challenges of setting sails, loading cargo, launching and rowing a boat, preparing meals, doing navigational problems and standing watch. They are also challenged with a set of ethical dilemmas rooted in life at sea and unfolding historical events as posed by the museum instructors, each playing the role of one of the ships officers, each a character with a particular basis of authority and personal agenda. These experiences are powerful, and indeed sometimes transformational in the memories of the students and even the adults who accompany them. The largest single donation in the Museum's history (the funds to purchase the *Californian*) came unsolicited in the immediate aftermath of one of the *Star of India* overnights by one of the participating parents. SDMM ships currently provide living history courses to about 250 classrooms and 7500 children each year. Schools have come from as far away as Hawaii and Maine to participate.

Character building

Tall ships have long been noted for their ability to teach the meaning of teamwork, personal responsibility, and commitment because the importance of those qualities are so obvious on a square rigger at sea and once understood, so transferable to other circumstances. The SDMM's own *Californian* Challenge, often characterized as a "youth at risk" program is patterned after the remarkable success of Los Angeles Maritime Institute, which currently operates the twin brigantines *Irving Johnson* and *Exy Johnson*.²⁸ In SDMM's variant, the students come to the *Californian* over a succession of afternoons on a weekly basis, where they engage in a number of activities designed to acclimate them to the ship and its terminology and to expose them to an escalating series of physical and intellectual challenges, including going aloft, rowing a boat, abandoning ship into a liferaft, solving navigational problems, and mastering an arcane and unfamiliar technical language, all of which *look* difficult and exotic but which they can master once they overcome the appearance of difficulty and learn to trust in their instructors and shipmates. The object of these activities is to build their expertise and teamwork as a crew to do something which looked at first sight impossibly formidable: take a 19th century man-of-war to sea for a day and accomplish a mission.

Even in such small doses these experiences are educational and transformational because they remove children from their normal environment with its prevailing assumptions and attitudes and drop them into an entirely different place where other values prevail and they can reinvent themselves in a new context. Authority becomes an operational construct rather than just a social one, nothing is accomplished without teamwork, and the objectives of education and the acquisition of skills have real and immediate consequences rather and abstract and deferred ones. These programs also work because ships have ever served as objects of identity and devotion. Important historical ships possess that capacity most of all. The rationale for such experiences

²⁷ The *Californian* overnight scenarios are followed in the morning by an actual underway trip in about half the cases.

²⁸ <http://www.lamitopsail.org/>

and potential for them to affect young people's lives is easily grasped by the general public. SDMM's capacity to accommodate *Californian* Challenge programs is typically funded through grants and donations two years in advance.

Institutional Educational Partners

The types of educational programs described above have the ability to draw participants region wide and beyond, ultimately a market beyond the institution's capacity to accommodate. Even so, SDMM has also found it helpful to establish partnership relationships with archetypical educational institutions as a way to pilot programs, publicize their availability, and project awareness of the institution's educational mission. In San Diego's case formal partnerships have been developed with the history department of a prestigious local university, a nearby award-winning magnet charter school specializing in math, science, and high technology, and a neighborhood urban school that has achieved a national reputation for remarkable results with a student body composed entirely of homeless and runaway children. In each case, the profile of the partner institution, the reputation of the museum, the characteristics of the students, the innovative nature of the experiences, and the exotic and visual allure of the ships have worked to mutual advantage for all the partners. This potential certainly exists with the Lake Union Historic ships and in some measure is already being addressed.

Exhibit Strategies

Though there are infinite variations on theme, most maritime museums have tended to a few well established strategies and blends of these strategies in their interpretation of historic ships.

Collections exhibits. Collections exhibits consist of systematic or hierarchical displays of thematically related objects for purposes of comparison and contemplation. Because the focus is on the objects themselves and it is presumed that the audience already possesses some background information about what they mean there is minimal interpretation. Such exhibits commonly found in maritime museums include model ships, paintings, scrimshaw, china trade porcelain, charts, and navigational instruments. Collections exhibits need not be lineal in arrangement.

Narrative exhibits. Narratives exhibits strive to tell a story and usually they are founded on some unstated thesis. In narrative exhibits, artifacts are a form of communication and evidence included for their place in the storyline rather than for their beauty, intrinsic value, or rarity. Narrative exhibits usually incorporate a wide array of objects, including photographs, paintings, personal items, newspaper clippings, video clips, audio elements, and letters. Because narrative exhibits are similar to publications they frequently employ publication techniques such as sidebars and pull quotes. Much of the information is conveyed through labeling: banners, headings, subheads, title statements, and text panels, allowing the visitors to experience the exhibit at whatever level of detail matches their interest. A typical narrative exhibit occupying 1500 square feet may be expected to contain 200-500 elements and 150-200 exhibit labels, and would take a visitor about 15-20 minutes to progress through while reading about 30% of the content. Narrative exhibits are lineal and must take the space configuration and traffic patterns into account.

Immersive exhibits. Immersive exhibits recreate another place or time to a level of convincing detail within the facility. They may consist of spaces within a museum building, an entire historic building, an entire ship, parts of the ship, a shipyard, or an entire landscape such as a seaport setting. Because immersive exhibits share many of the qualities of theatrical sets, suspension of disbelief is important and signage is minimal. Often docents, which may be in period costume and may speak in first person, can be extremely effective substitutes for the lack of interpretive signage. Because part of the experience is to wander around the reconstructed portion of a past world, the experience is usually not lineal.

Guided tours. In tour exhibitions, visitors wander through a restored or replica ship, building, or landscape as guided by a printed program, audio guide, docent led walking tour, or simply by following their own inclinations. Signage is minimal, the experience may be lineal or not depending on circumstance, and may be punctuated by encounters with the other forms of exhibit.

Excursions. Some historic ships have the advantageous capacity to actually take people out on the water for modern day experiences which thereby connect to similar experiences of the past. Excursion exhibits are different than immersive exhibits because ships do operate in the present and things always happen which don't conform to the script. The present is always a part of the experience, but because the experience is real, there is no need for theatrical constructions to sustain the suspension of disbelief. Because ships must operate according to route and rules of the road, the experience is usually lineal and in fact may simply be a water bound version of the guided tour. On the other hand, visitors may also have the opportunity to operate simple traditional watercraft themselves for a less directed experience.

Needless to say not only is it possible to deploy some or all of the above strategies within an interpretive scheme, they can be blended in endless variation according to the best and most engaging way to maximize resources.²⁹

In some respects the historic ships as they are now presented at South Lake Union constitute an outdoor collections exhibit, but unfortunately the ambient *informed* audience for such an exhibit can be assumed to be small. With the possible and limited exception of *Swiftwure*, there does not seem to be room in any of the vessels for full scale narrative exhibits, emphasizing the importance of somehow addressing this function within the program for the armory building. On the other hand, the historic ships do provide immersive environments, excellent platforms for guided tours, and some of them would work well for excursions (indeed, *Virginia V* and the Center for Wooden Boats are already doing this).

²⁹ For example, at this writing in Maritime Museum of San Diego's *Star of India*, there is currently a collections style art exhibit on the or'lop deck, a narrative exhibit on the 'tween decks, immersive exhibit areas in the fo'c'sle, saloon, forward hold, and weather decks. Concurrently, docents lead tours through the same areas where fourth and fifth grade living history classes are being conducted "in period." From the weather decks, it is possible to watch *Pilot* and *Californian* passing by on their frequent excursions.

Exhibit Techniques

Some of the exhibit techniques used by professional designers have been mentioned previously.

Labels

As mentioned above, the use of labels and text panels varies according to the exhibit strategy. In some cases, such as immersion exhibits, sometimes the best solution is to have no labels at all. It has been the prevailing understanding among exhibit designers that the average museum visitor will be willing to devote no more than 30 seconds in reading a museum label, and depending on their density, will probably choose not to read most of them. However, it's also understood that labels, even when they're not read, communicate the relationship between elements of an exhibit that makes the presentation meaningful. It's important to note that in addition to information about the artifacts and their relationship, labels also convey institutional presence and professional values, so that standards in signage which address materials, typefaces and sizes, colors, way finding and thematic symbols, length and reading level of interpretive labels should prevail throughout the site.

Book on the wall syndrome

Collections and narrative exhibits are susceptible to the tendency of curators to provide more information than the visitor can absorb, leading to the impression that the museum experience is essentially an exercise in reading books on a wall. In practice, excessive information can compete with the artifacts and conceal significant themes. Curators also have the tendency of any author or subject matter expert to assume they know best what the visitor is interested in and needs to know. The result can be an exhibit designed for an audience of experts, not the general public.

A technique which can avoid this tendency, especially in narrative exhibits, is to use a "story first" focus group exercise early in the exhibit planning process. The purpose of the exercise is to anticipate the background knowledge and kinds of questions that an interested but non-expert audience might have about the subject, and to use the artifacts in support of the narrative thread rather than to wrap the story around the artifacts. In following this technique, a representative group of people is introduced to the subject or the basic storyline, perhaps by viewing a feature film on the subject (*Tugboat Annie*, for instance, for the *Arthur Foss*), listening to someone with personal experience in the life of the vessel (a fisherman for the *Twilight*, a fireman for the *Duamish*), or the presentation of a slideshow accompanied by readings from personal letters, memoirs, or newspaper clippings associated with the historic vessel. Any technique which will convey a sense of the historic moment, drama, and unique qualities of the subject will do. During the presentation, each individual in the focus group is asked to write down all the questions that come to mind in a free associative process. A "question and answer" period follows, which stimulates yet more questions that are also noted. Once the duplicate questions are eliminated, the resulting combined list is used to generate "30 second answers" that become the actual text panels which in turn suggest what artifacts which will need to be presented in support. (This is the reverse of the normal exhibit design process, where the artifacts are determined first) The questions themselves are never expressed in the labels - if the process works like it should,

people touring the exhibit will seem to experience having their questions answered almost as they were thinking of them. Obviously, this technique is more applicable to narrative style exhibits than others, but probably all strategies can benefit from efforts to learn what the audience wants to know about a subject as opposed to what subject matter experts think they should want to know.

Interpretive publications

Various types of printed publications can augment the information presented in labels and assist in furthering the institutional mission. In addition to showing visitors where things are, maps structure the visitors experience, convey the conceptual scheme, and in cases where the interpretation is lineal, get people moving in the right direction. Information in programs and handouts can help people organize their visit to take in scheduled events, performances, and demonstrations, provide background, and supplement the information in the exhibit labels or make up for lack of them. Foreign language handouts can provide translated versions of exhibit labels. Illustrated guide books can give information in greater detail and act as souvenirs. All of these can be used in promotional packets and press kits or packaged for use in other forms of outreach. Electronic versions of these materials can be posted on the organization's web site. A brief case statement, membership applications, etc. can be inserted into all of these materials. As with labels, it is important to note that consistency in style is an attribute of credibility.

Audio guides

Audio guides can add to interpretation through:

- Recorded first person narratives and oral history
- Explanations where no labels are possible, or supplements to those in place
- Sounds appropriate to the subject (engine noises, enunciator bells, orders to the helm)
- Foreign language translations
- Regulating speed and direction of traffic flow
- Accompaniment to walks or waterborne excursions in individual watercraft such as kayaks or rowboats.

Audio guides can have drawbacks. Recordings broadcast through speakers can be disruptive. Hand held wands and other commercial quality listening devices are expensive and subject to damage and theft, managing the distribution and collection of devices adds another administrative task, and audio content is expensive to create and inflexible in ability to accommodate ongoing changes. Recorded tours also seem to be less popular than labels as a way of learning about the artifacts.³⁰ However, the technology is rapidly becoming more practical and it may soon be commonplace for people to download interpretive audio files into their iPod or palm device from the organization website before their visit or at a kiosk on site, or use their personal equipment to listen to specific files transmitted by wireless network or via cell phone.

³⁰ Antenna Audio, the leading producer of museum audio guide content, estimates that when audio guides are provided to museum visitors at a modest additional charge rather than provided as part of the admission, typical response rate is less than 5% of attendance.

Video stations and computer kiosks

Film clips and recorded interviews can add important information to exhibits, and computer stations allow visitors to explore the subject in greater depth than one would ever consider trying to cover with labels. However, just as its possible to inundate an exhibit with too many labels or labels that are too long, it pays to remember that people come to museums to see and touch material culture, not read about it or watch it on video. None of the historic ships at South Lake Union seem especially well suited to video stations, but exhibits in the buildings might make use of them.

Docents and interpreters

Several years of exit surveys taken by visitors to the Maritime Museum of San Diego indicate that the most often cited aspect of a positive museum experience is the opportunity to hear about the subject from a knowledgeable person who loves the topic. Likewise, when visitors do not have the chance to hear from a docent because none are available, having them always there is the most frequently suggested improvement. In the ships, docents would be particularly effective for interpretations of engine rooms and special equipment.

Performance Spaces

As is evident in the histories of the historic ship owning organizations, people enjoy the atmosphere and the context of historic ships and enjoy coming to them for public events and performances. These include concerts, folk music (including chantey) festivals, fireworks displays, tall ships festivals and mock sea battles, and wooden boat shows, arts and craft festivals, etc. Other popular events produced by maritime museums include “Movies before the Mast” projected on screens hoisted into ships rigs, summer pops symphony concerts, and theatrical productions. In the workshop discussions *Arthur Foss*, *Virginia V* and *Duamish* were all mentioned as possible venues or performers in public performances. The proposal to reconstruct the *Wawona* as a piece of monumental sculpture also seems to lend itself well to this kind of use.

The production of one signature public event each year can help in “branding” an organization, activity, or location. In the case of Lake Union Park with its several tenants, the joint production of an event as a common enterprise may help solidify a unified “sense of place” in the public mind.

Public events in general can provide important ways for museum ship organizations to raise awareness, integrate themselves within the life of the community, and demonstrate public benefit. In some cases they can be significant fundraisers. However, most museums find that public events are also consumptive of staff and volunteer time, compete with normal programming for marketing efforts, and often generate less revenue for investment of resources than private events, educational programs, or normal admissions.

Recommendations

The following recommendations are consistent with options discussed during the workshops, tours of the ships, and individual meetings with the historic ship owning organizations Board members, leadership of the other organizations at Lake Union Park and community leaders. As will be seen, in many cases feasibility is difficult to determine at this point as many of these options fall outside the exclusive influence of individual historic ship owning organizations.

Recommendation: Encourage MOHAI's relocation to South Lake Union and partnership in an interpretive strategy that presents the historic ships as both extensions of the museum experience and narrative devices to link MOHAI's main themes. Concurrently, the ships should also be considered part of an overall marketing strategy to stimulate attendance and increase the flow of gate revenues.

Feasibility: As of the meeting in March 2007, it appeared as though MOHAI had taken concrete steps to investigate the relocation option including a survey of the armory building and assessment of the cost associated with its adaptive reuse. Their financial ability to make the relocation was in turn dependent on some additional outside factors including disposition of another piece of property, their own feasibility study, etc.

Recommendation: Review the organizational bylaws, mission statements, collections policies, exhibit policies, codes of ethics, organizational charts, and strategic plans to see if these documents define an intellectual space consistent with the circumstances and goals of the organization.

Feasibility: This is an eminently feasible recommendation which is probably already part of the strategic planning process and should be undertaken with the idea of articulating a set of principles of "institutional style" that will help in further decision making, including prioritizing among various options in the presentation of exhibits, educational programs, and public events using the ships.

Recommendation: Integrate the historic fabric of *Wawona* within a monumental sculpture of partially new composition and materials and which preserves her lines and sense of grandeur.

Feasibility: The preferred recommendation from the *Wawona* summit was to stabilize the ship for movement ashore under cover or within a building, there to retain her in some form of equilibrium for several years until plans and resources materialized for her restoration. The cost to complete the relocation was estimated at \$1,250,000 (plus or minus \$250,000). This did not take into account the cost to purchase or rent the building and to adapt it for this use. Considering the cost of the later, it may be that the subsequent recommendation to transform the *Wawona* into a monumental sculpture could be undertaken at comparable expense, with the bonuses of immediate public benefit, a manageable construct, and a determined future. It is impossible within the scope of this report to estimate the cost for such an undertaking because the details of the sculpture were still being determined at the time of the March 2007 meeting.

Recommendation: Complete the *Arthur Foss*'s restoration to operable mechanical condition. Continue with the successful "Engineer for a Day," "Diesel Engine Theory," and Tugboat Overnight Experience" courses. Create a handout which tells the *Arthur Foss* history and interprets her various spaces and equipment (and do that as well for the other ships). Consider the possibility of building living history programs incorporating the *Arthur Foss*.

Feasibility: At the time of the November 2006 meeting, it was estimated that the *Arthur Foss* was several months away from returning to operable mechanical condition. Since this project is the basis for an educational program, the speed of the restoration is progressing in manner to maximize the educational opportunities of the process. The ship is scheduled for haul out and survey (the survey also being part of the educational program) in summer 2007, after which a more complete assessment of the work required will be available. The courses enumerated above constitute a new educational paradigm for Northwest Seaport, combining education and preservation in mutually productive ways. In keeping, creation of interpretive materials such as a ship's program or guide, labels, wayside signage, etc. could be pursued in collaboration with the museum studies programs of local universities (and indeed, at the March 2007 meeting it appeared that such collaboration was being put into effect). The actual cost of producing text and printed materials is minor. What is more important, is that they are part of a well conceived strategy which encompasses all of the historic assets of the site. See the later recommendation regarding living history programs.

Recommendation: Move *Swiftsure* to a more prominent location within the site as practicable. Return her light to active service. Complete the planned restoration in sequence as practical, beginning with deck, and deck structures, then moving into crew and engineering compartments. Install cases and lighting in the open space down below for conversion into gallery space for temporary or rotating exhibits. Create means of safe public ingress and egress, either through a gangway ramp or topside penetration. Implement program for interpretation by docents or guides.

Feasibility: It appears that restoration of the *Swiftsure* could proceed fairly rapidly and economically if an aggressive volunteer program were in place. Based on superficial examination, it appeared as though restoration of decks and houses, preparation, painting, cleaning, and restoration of interior compartments and spaces could be accomplished with less than 8000 man hours. To extrapolate, a well organized volunteer corps composed of an average of 25 individuals meeting one weekend day every other weekend could accomplish the task in a little over two years. In addition, this project might require an additional \$30,000 - \$40,000 in material costs, some of which might be solicited in kind. Costs to provide public access, restore and animate the engine, restore the light to service, etc. are dependent on variables not determined at the time of this report. Feasibility of moving the *Swiftsure* from her present location behind the building to the bulkhead on the southwest side of the site was discussed with Northwest Seaport Board members. The move is technically feasible but would require the approval of the Seattle Department of Parks and Recreation as well as the other stakeholders.

Recommendation: Return *Twilight* to active service. Investigate feasibility in acquiring a USCG Certificate of Inspection to operate as a passenger carrying vessel to allow her use in providing excursions as an extension of the Museum experience.

Feasibility: *Twilight* seems to represent the best chance to get one of the historic ships moving about on a regular basis in a public program quickly, bringing a bit more life to the site in the near term. From superficial examination and description of her mechanical condition it does not seem that returning *Twilight* to operational condition would be very difficult or expensive, though a precise estimate of costs is difficult without a survey. However, obtaining a COI to carry passengers for hire may prove more difficult and time consuming and require substantial retrofitting/replacement of systems. It is recommended that Northwest Seaport retain the services of a marine surveyor familiar with the CFR's and Coast Guard certification process to provide an assessment of feasibility.

Recommendation: Continue with the policy embraced by all of the historic ship owning organizations of working to create a collective vision for Lake Union and develop interpretive strategies in conjunction with MOHAI that emphasizes the interwoven histories of all the vessels. Programs that involve all of the organizations, such as the Engineer for a Day course should be used as collaborative models in going forward.

Feasibility: On a strategic level this is initially a political consideration to continue on the pathway of consensus already achieved. However, as exhibits and programs are being implemented each of the organizations will be required to surrender some degree of autonomy in order to produce a consistent presentation.

Recommendation: Identify regional educational institution archetypes that might serve as partners in helping to develop programs for the historic ships (university programs in museum studies, marine archeology, university education departments, magnet schools, vocational programs, etc.).

Feasibility: To an extent, efforts were already under way at the time of the March meeting to establish the kind of partnerships with regional educational institutions described. The operative concept, however, is to subscribe *archetypical* institutions at the university, secondary, and primary level. Each of these institutions should have established a strong reputation for innovation in education, outreach, and partnering with regional cultural institutions.

Recommendation: Begin planning to acquire a small, traditional, square rigged ship for living history and sail training. Supplement the sailing ship programs with a rowing launch.

Feasibility: This augmentation to the existing fleet will require either the participation of an existing ship and training program that would find it advantageous to relocate to the site, or a capital campaign to purchase or (preferably) build one. If the latter, the site could function admirably as a shipyard/classroom/outdoor museum during the course of construction. Elsewhere, as in the construction of the twin brigantines *Irving Johnson* and *Exy Johnson* at Los Angeles Maritime Institute, the construction of the *Amistad* at Mystic Seaport, the construction of *Susan Constant* and *Godspeed* at Jamestown Settlement, and the planned construction of the *San Salvador* at the Maritime Museum of San Diego, the construction of a period ship can be a rejuvenating experience for the community and the organization. In fact, the ship in some

respects emerges as a byproduct of community rediscovery and buy-in to the mission of the organization.

However, these are large projects and would require a substantial capital campaign, with at least 50% of construction costs raised before the public phase of the campaign could begin. To give some idea of cost, the 200 ton displacement *San Salvador* replica is expected to be completed for \$5,000,000, with approximately 25% of the expense raised during time of construction, now set at 14 months. (For comparative purposes, complete rehabilitation of the *Californian* after 20 years of hard service cost approximately \$500,000).

A substantial rowing vessel would be considerably less expensive. We estimate that the HMS *Surprise's* launch *Thorne* could be reproduced for approximately \$55,000 while the launch *Robert Sharpe* used by SDMM living history programs was constructed over the course of a year as a course in boatbuilding in the hold of *Star of India* for approximately \$35,000.

Recommendation: Continue with existing educational programming (such as the “Engineer for a Day” course that involves all of the historic ship owning organizations) and move quickly to implement educational programming for elementary age students that addresses state standards and utilizes the histories and attributes of the ships themselves.

Feasibility: Some progress in this direction is already being made. However, simply interpreting the ships and their historical context to make them or the principals by which they operate understandable, or to provide vocational experience is not necessarily the most powerful use of the resource. Rather, the most compelling educational programs and the ones that achieve the greatest perceived benefit to the community are the ones that aspire to be transformative. Two models, living history and “character building” are each the respective forte of award winning sailing educational institutions on the west coast: Ocean Institute and Los Angeles Maritime Institute respectively. Of the two, living history (elementary age) is probably the most appropriate for the present collection of historic ships at South Lake Union. However, proper living history programs are the most complex type of elementary age educational experience to produce, despite appearances. If the historic ship owning organizations intend to go this route, then it is recommended to consult with Ocean Institute or some other organization that specializes in assisting with the development of living history programs.

Recommendation: Develop an interpretations needs business plan for each of the vessels, including projected operating revenues and expenses. Develop a campaign strategy to raise the necessary funds for the capital projects associated with each as well as an overall fundraising plan to manage sequencing.

Feasibility: This is really part of the strategic planning process now under way, of which this report is a component. The historic ship owning organizations have already demonstrated a renewed capacity for strategic planning, so this element should be eminently feasible.

Recommendation: Develop an interpretive plan that assigns strategies and methodologies for the interpretation of each of the historic vessels. Emphasize “story first” techniques. Develop programs and handouts for the interpretation of each of the historic vessels.

Feasibility: The interpretive plan for the vessels is very much dependent upon integration with programming for the armory building as the ships function as “immersive” extensions of the museum experience.

Recommendation: Develop style sheets and implement standards for banners, signs, labels, fonts, colors, iconography, way-finding symbols, and publications. Determine what density of labeling, if any, is appropriate to external and internal areas of each of the vessels as well as the nature of labels and wayside signage on approach and view corridors to the individual ships.

Feasibility: Again, this is simply an organizational step in keeping with selection of logos, letterhead, etc. The real feasibility lies in the ability to apply a set of standards across the site and all of the tenant organizations, contributing to the impression of credibility and the sense of a seamless experience on the part of visitors.

Recommendation: Consider programming for *Yakutat* that would occasionally bring her to the Lake Union site in order to contribute her presence to the sense of collection “critical mass” and to provide another example of an operable vessel. Alternatively, she might also partner in CWB’s summer Cama Beach programs or other operations that would see her used effectively as an emissary vessel to extend awareness for the historic ships and programs at Lake Union. Like *Twilight*, explore the possibility of obtaining a US Coast Guard Certificate of Inspection in order to use the vessel for educational and volunteer appreciation purposes as well as an extension of the museum experience.

Feasibility: It would appear that there is room to bring *Yakutat* to the Lake Union site. It is not clear at this writing what advantages in programming or visibility would be lost in relocating her from her present location, but at least as part of a collection in one group, energy would not be dissipated by trying to maintain vessels at different locations.

Recommendation: All the South Lake Union organizations join together to produce a signature annual public event.

Feasibility: The production of such a public event is not only well within the capacity of several of the organizations which already have amassed expertise in this area but is in great measure already being accomplished with the Lake Union Wooden Boat Festival which runs over July 4th under the direction of the Center for Wooden Boats. To the degree possible, the annual event should be undertaken with the objective of “branding” Lake Union Park as a cohesive entity which includes all of the organizations in seamless cooperation.

Recommendation: Embark on an outreach program to involve as many of the maritime *and* arts and culture organizations within the service area of Lake Union Park as possible, including partnerships which utilize the historic ships as part of their own programs or as platforms for events and exhibits which go beyond the normal subject area of maritime heritage.

Feasibility: Ultimately the future of the historic ships at Lake Union Park will reflect the degree to which they are regarded as indispensable by the surrounding community. In turn this will

simply be an expression of the reach and density of critical pathways in the social network they extend. The construction of such networks obviously proceeds most quickly and efficiently when they move through organizations rather than through individuals on a one by one basis. This recommendation is eminently feasible: the Center for Wooden Boats and the historic ship owning organizations are already doing this. The recommendation is to the degree possible subordinate and subsume the individual outreach strategies to a collective effort.

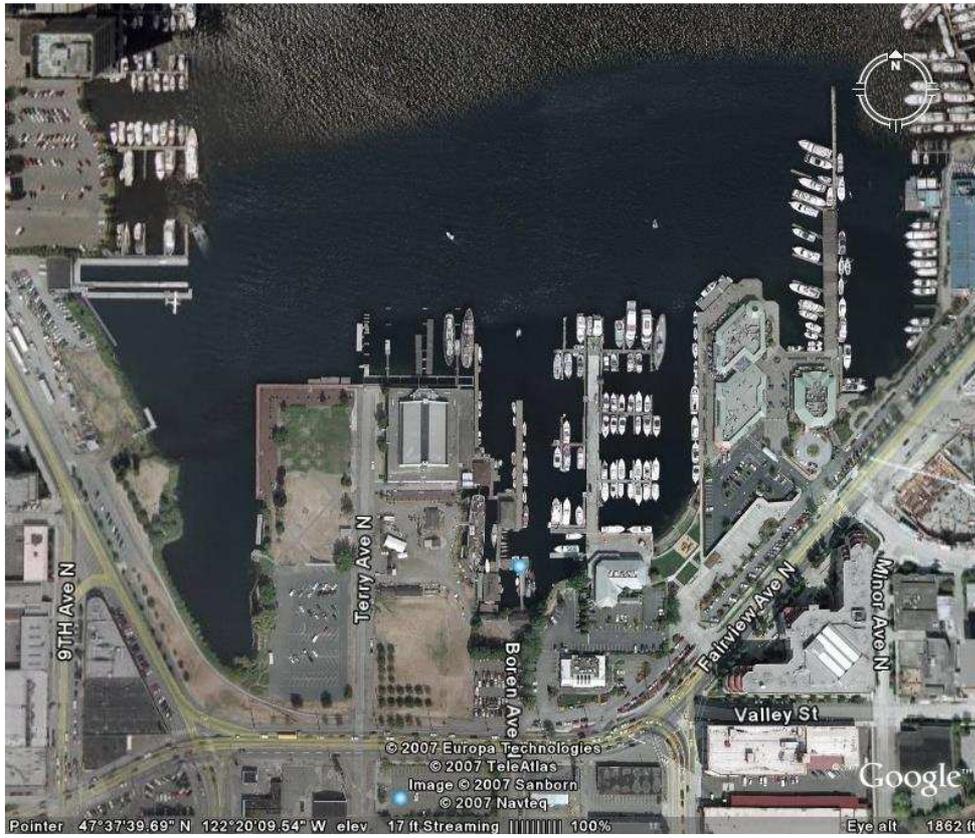


Figure 1 Lake Union Park, Seattle



Figure 2: Viking ship replicas at Roskilde, Denmark



Figure 3: Peabody-Essex Museum, Salem



Figure 4: Skudelev site wreck in framework, Roskilde, Denmark



Figure 5: Schooner *Wyoming* sculpture at Maine Maritime Museum



Figure 6: Exploration ship *Gjoa* in front of *Fram* Museum, Norway



Figure 7: *Pilot* about to get underway, San Diego



Figure 8: *Californian* setting fores'l, San Diego



Figure 9: Scow schooner *Alma*, San Francisco