CHAPTER 1: HISTORY OF THE SITE AND THE PRESERVATION OF ITS LEGACY

Pier 70 represents one of the most significant historic industrial complexes in the United States. It contributed to the industrial development of the West Coast and the growth and defense of the nation. The site became a place of manufacturing and industry, due to its remote location relative to the growing population of the City of San Francisco, and its excellent accessibility by ship to relatively deep offshore waters in the bay and commercial routes in the Pacific Ocean. In the 1850s, when industrial operations were first initiated on the site, Pier 70 was known as Point San Quentin (later renamed Potrero Point), a small cape of land extending into the bay. Over time, as with other parts of the urban shoreline, adjacent shallow waters were incrementally filled. The serpentine hillsides were blasted away to create street corridors for landside movement along the bay, and piers extended over the water. Long Bridge, a wooden bridge structure completed in the 1860s in the same general location as the present day Third Street, linked portions of the Central and Southern waterfront with the more urbanized areas to the north, and reached across Mission Bay. In the 1860s, the extension of Third Street made this growing yet isolated industrial area accessible to the rest of the City. Mission Bay also became the home of rail-yards that connected San Francisco to rail transportation that was vital to the City’s once bustling break bulk cargo port.
By 1870, the alteration of the bayfront landscape was well underway. As the distinctive topographic features were graded and used to fill the Bay, the area was developed for both industrial and residential uses. Industrial development proceeded into the filled lands of Mission Bay and extended further to the south. With the fill, Pier 70 grew to about 65 acres. The Irish Hill and Dogpatch residential neighborhoods emerged during this period as workers moved to the area for the growing commercial sectors of manufacturing and industry.

Irish Hill with Union Iron Works in the background, 1890s

The Pier 70 area was used initially for gunpowder manufacturing and shipping and later for heavy manufacturing of rope and steel – activities better suited to an isolated site on the outskirts of the city. By the 1860s, the City’s early wood ship builders abandoned the crowded shoreline along Steamboat Point in the South of Market area for the deep waters and vacant lands around Pier 70. By the 1880s, the Union Iron Works established the first West Coast steel shipyard and launched the Charleston, one of the first steel hull ships constructed in the country. The Union Iron Works and its successor company, Bethlehem Steel Corporation, stood at the center of a national shipbuilding industry from the Spanish American War through World War II, producing and repairing warships that were essential to the military success of the United States.
The historic Union Iron Works/Bethlehem Steel facility at Pier 70 is the oldest American civilian shipyard with a continuous record of ship production, and repair dating from the late 19th century through the present day. The Union Iron Works shipyard operated at Pier 70 with a machine shop (Building 113), plate shop, pattern shop, foundry (Building 114), smith shops, and slipways. At the turn of the 19th century, a new era of building began with Bethlehem Steel's purchase of the Union Iron Works shipyard. This spawned a second phase of building and facility development that allowed the yard to build some of the Great White Fleet, the popular nickname for the US Navy battle fleet that completed a circumnavigation of the globe in 1909, as President Roosevelt sought to demonstrate growing American military power and blue-water naval capability. The shipyard expanded and modernized during the 1910s, including expansion of the yard's infrastructure, a new plate shop (Building 109) and new foundries (Building 115 and 116). The Union Iron Works destroyer plant utilized some of the new prefabrication methods of the period and produced three destroyers a month. The Navy prioritized submarine destroyers as the primary fleet defense against torpedo attacks from submarines, and the 66 destroyers Union Iron Works produced were a substantial contribution to the World War I naval effort. During the World War I period, Bethlehem Steel retained two renowned San Francisco architects, Frederick H. Meyer and Charles Peter Weeks, to design the new Main Office/Administration Building (Building 101) and Powerhouse (Building 102), creating a grand formal entrance to the yard at the corner of 20th and Illinois Streets. These four buildings along 20th Street form the core of the future Pier 70 historic district.
1945 Plan
A second era of modernization and development at the shipyard began when contracts were secured with the United States Maritime Commission in 1936. Upgrades included a new boiler house (Building 103) and a yard-wide transformation from riveting to welding, which helped the shipyard adapt to standardized, mass production that typified World War II ship production. During World War II, the shipyard was primarily a naval yard, and operated the New Yard shipbuilding facility (the Building 12 complex). The yard’s major contribution to the World War II effort was the repair of 2,500 ships. During World War II, the Pier 70 shipyard reached its maximum size and build-out with numerous slips, piers and wharves, and Bethlehem Steel’s Bay Area work force peaked at 25,000.

An important aspect of this long and distinguished record is the story of the generations of shipyard workers who struggled to maintain their livelihoods and craft traditions in spite of many challenges: the hostility of employers to organized labor, a volatile maritime economy that undermined job security and stable union organizations, changes in production technology and shipbuilding methods, and industrial reforms such as scientific management and wartime production speed-ups. Strong traditions of craftsman-ship survived at the shipyard even during World War II, when the yard’s program of complex naval construction and de-skilling in shipbuilding and other defense industries occurred. Women and African Americans entered the story of the shipyard during World War II, as they waged a brave struggle against prejudice to establish their rights to be hired and trained for skilled work.

Bethlehem Steel continued to build government and commercial ships at Pier 70 into the 1970s. In the early 1980s, Bethlehem went bankrupt and sold the shipyard to the Port of San Francisco. Todd Shipyards purchased much of the machinery and leased a significant portion of the site to operate a ship repair yard. After Todd Shipyards closed, the facility was operated by Southwest Marine and San Francisco Drydock. At its peak in 1945, shipyard activities utilized the entire 65-acre site. Over the years as the facility has evolved into a ship repair yard, the need for space has reduced. Today the shipyard, as described more fully in the subsequent chapter, operates on approximately 17 acres of land, including piers and wharves.

The surviving historic buildings, circulation networks and waterfront structures at Pier 70 uniquely convey the processes of steel shipbuilding and ship repair and how they evolved over time. The layout of the former shipyard was defined by its relationship to the bay and the shipyard structures used in the process of ship fabrication and repair. Ship repair activity and maritime structures such as slipways, piers, floating drydocks and gantry cranes define a unique setting. Pier 70’s historic resources and setting not only add interest and diversity to San Francisco’s waterfront, they also have been the subject of paintings, film and photography, that have extended beyond the physical realm to become a part of the City’s cultural heritage.

Today, new development within the vacant areas of the Pier 70 site is needed to generate revenues and purpose for the adaptive reuse and preservation of its historic resources. New development will also create a level of activity that is reflective of Pier 70’s historic prominence and vitality.
Workers leaving the Shipyards, World War II
The Union Iron Works Machine Shop (Building 113/114) stands on the south side of 20th Street just east of Illinois Street and is both one of the most valuable and vulnerable historic resources on the site. With its rich history and grand volume of space, it can become the civic soul of Pier 70. The building is two structures (1884 & 1885) that were joined by a connector in 1914. This two-block long industrial structure consists of the two unreinforced brick buildings, and the central reinforced concrete connector. The building comprises 90,000 square feet of floor space in a massive building, about 62 feet tall and 492 feet long by 175 feet wide. The Union Iron Works Machine Shop changed functions and floor plans several times between its construction in mid-1880s and WWII. The western portion of Building 113 originally housed the Machine Shop, while the eastern portion contained the Blacksmith and Boiler Shops. The scale and volume of this building complex has a cathedral-like space, an inviting venue for major cultural, market hall or institutional use, which is promoted in the Plan. The preservation, restoration and appropriate adaptive reuse of this landmark structure is of primary concern of the Plan. The Port will work closely with the Mayor, the Board of Supervisors and the community as well as potential development partners, outreach to potential institutions and cultural, public assembly and other such uses to determine the appropriate reuse, and secure commitments for the stabilization and rehabilitation of the building.
The Pier 70 site is eligible for listing in the National Register of Historic Places for its national significance in the area of maritime industry for the period 1884 to 1945, beginning with the initial construction of the Union Iron Works shipyard and closing at the end of World War II. Pier 70 is significant for its association with pioneering technological developments in shipbuilding, labor relations, government and private industry relationships as well as for the production of significant wartime vessels. The district is also significant for its architectural design and engineering because it includes important works of master architects. It is a largely intact historic district containing a rich collection of resources, and provides a physical record expressing continuity with past trends in industrial architecture and design.

Within the proposed National Historic District, 44 structures have been identified as eligible for listing as historic resources in the National Register of Historic Places. About half of these structures have been condemned because of structural or environmental reasons. Although a few businesses lease space in Pier 70’s functioning historic buildings, all of these resources are continuing to deteriorate and some are already in an extreme state of disrepair. The most valuable and historically significant structures along 20th Street are closed for public safety reasons, including the Union Iron Works Machine Shop (Building 113/114) and Union Iron Works Administrative Office (Building 104) which are both unreinforced masonry structures. The extensive water damage and seismic vulnerability of these structures create an urgency to act quickly.

Historic preservation offers a variety of advantages and benefits that will foster Plan implementation. Adaptive reuse of historic resources are critical to “place-making” at Pier 70, providing the foundation for an authentic, interesting and attractive development that also preserves historic neighborhood character in the Central Waterfront. Furthermore, the creation of a National Register Historic District and compliance with the Secretary of the Interior’s Standards for the Treatment of Historic Properties (“Secretary’s Standards”) open up other direct and indirect benefits to support the Plan:

• Federal Historic Rehabilitation Tax Credits and other preservation-based financial programs that can significantly reduce preservation costs would become available for the rehabilitation of the site’s resources.

• Historic preservation can provide the Port and development partners greater flexibility under local, state and federal regulations such as zoning, height and bulk standards, public trust consistency findings, building code requirements and streamlined CEQA review.

• Historic preservation has been and continues to be a significant component of the public consensus and community support for redevelopment and future build-out of the property.
Drydock repair of the Star Princess
CHAPTER 2: SHIP REPAIR, A CONTINUING LEGACY

Shipbuilding and repair have been an integral part of the San Francisco waterfront since the port was established, concurrent with the founding of the City. Over time, the shipbuilding and repair industry has continually reinvented and retooled its operations. From ship building to steel manufacturing, to mass production operations and ship repair, this industry has survived the ups and downs of economic boom and bust, periods of war and of peace, technological innovations, and volatile global maritime market changes for 150 years.

The Port of San Francisco continues its commitment to the long-term viability of the ship repair industry, as part of its core mission to support and build maritime business. As a ship repair facility, Pier 70 is somewhat unique; the Port owns the primary equipment – the drydocks and cranes – required for ship repair industry operations and leases these to an operator, BAE San Francisco Ship Repair (BAE), a subsidiary of BAE Systems. BAE currently leases 17 acres of land, with a 2-acre reversion area which reduces the leasehold in 2012 to 15 acres. BAE’s current lease extends to December 16, 2017. Together with BAE, the Port enjoys a genuine business partnership that optimizes the resources of government and private industry. The Port’s relationships with the maritime community have led to new and innovative ship repair business opportunities.

The Pier 70 Preferred Plan (the Plan) is premised on continuing ship repair at the site consistent with the Port’s mission. Furthermore, ship repair is the historical context and texture that defines Pier 70. Continuing this historic industry is itself recognized as part of Pier 70’s historic preservation strategy. By maintaining the original business that created Pier 70, the Port seeks to maintain the authentic maritime heritage that is the foundation for Pier 70 as a National Register Historic District.

The Port of San Francisco’s most marketable features in the ship repair business are its large, floating drydocks and its central-coast geographic location, which make Pier 70 an effective location for both the northbound and southbound migratory cruise and tanker fleets. The Port’s Drydock #2 is the largest repair drydock in the Pacific Americas and thus able to serve “post Panamax” vessels that are too large to transit through the Panama Canal. Through a unique partnership among Princess Cruises, BAE and the Port, Drydock #2 was recently upgraded to enable BAE to open a new business line, repairing the newest generation of very large cruise vessels. This improvement also opens new business opportunities for ultra-large tanker vessels that cannot be serviced elsewhere along the West Coast of the Americas. This type of innovation and retooling of the facilities and operations within the shipyard has been essential for the survival of the industry. It has created hundreds of jobs for the region’s maritime trade unions and contributed to the economic development of the City and region.
Ship Repair Area Master Plan (includes lease area and proposed building and access modifications)
The Port will continue to work in partnership with BAE to ensure that ship repair continues to be an important part of the Port’s maritime program.

The Port’s floating drydocks are the focus of the ship repair work, supported by building and construction-related crafts that are housed or take place in shops and lay-down areas on land within BAE’s leasehold. The Port’s drydocks are floating facilities that are lowered into the water to receive vessels, then raised by pumping the water out to expose the full hull of the vessel, enabling repair. The dominant ship repair activity in the drydocks includes underside repairs of ship hulls, structural steel modifications, and engine machinery repair. The vast majority of repair activities, such as sandblasting, welding, and painting, occur on or in the vessel while it is drydocked. Some repairs, though not the majority, require parts and equipment to be disassembled, repaired, and painted in the shops on site. Other outfitting may include repairs or new installation of electrical, piping, and ventilation systems, as well as insulation of heating, cooling, and fluid systems and ship’s cargo or living spaces. All of the activities mentioned above are supported by a continuous flow of material moving on and off the site. Typically, while ships are in drydock for mechanical or hull repair or maintenance, ship owners will utilize the “down time” to conduct internal upgrades or modifications to ship, cargo or living cabins. These types of internal upgrades are particularly common in the repair of cruise ships.
Job-specific materials are ordered and delivered to the site. If protection from the elements is required, materials will be warehoused; otherwise they are staged in lay-down areas in the yard. Typical materials received in support of shipyard operations include paint (as many as 20 pallets at a time for a large job) and sandblasting abrasive (as much as 1,000 tons in a day). Other materials include large timbers for construction of drydock blocks, unprepared steel plate, pipe and shapes and sheet metal. Small boat storage may also be provided for ships where boat davits are being maintained, repaired and tested. Most of the new materials are typically shipped a few days prior to being used or installed. Lastly, large quantities of waste and debris are removed from ships and temporarily stored for truck pick-up. For large cruise ship repair/retrofit projects, as many as 50 bins a day may be hauled out of the shipyard during initial phase of repair activity.

Ship repair operations employ a highly skilled and well-compensated workforce. BAE currently employs an average of 250 skilled crafts- men in ten trades year-round. During peak periods of repair activity, the yard provides jobs for an additional 1,000 – 1,500 people. Often, cruise vessel crews ranging between 1,500 – 2,000 people live on board during repairs and join other tourists in the city during their off hours. BAE is working with local unions and the City of San Francisco’s “City Build” program to provide skilled training and support of apprentice programs for people in under-employed neighborhoods in the city, to recruit and retain a skilled workforce.

Over the past 15 years, the Pier 70 ship repair facility has made a successful transition from being highly dependent on defense work
to being highly competitive in the commercial ship repair market. When the Bay Area military base closures occurred in the early 1990s, this facility lost nearly 80 percent of its business. Revenue at the site dropped to $21.9 million in 2001, a dramatic drop from the 1996 high of $40.8 million. Today ship repair revenues are approximately $33.8 million, with incremental growth expected. Since 1995, the core business of the ship repair operation at Pier 70 has shifted to a mix of tanker, cruise, tug and barge, plus emergency cargo ship repairs. A steady resurgence of defense and government vessel repair work has occurred over the past four years. Defense work in 2006 accounted for nearly 57 percent of gross revenues, up from a low of 35% in 1996.

The San Francisco ship repair market niche includes commercial container barges, U.S. Coast Guard, U.S. Army and ships controlled by the Maritime Administration and the Military Sealift Command. In addition, the relatively new business line of cruise ship overhauls has been successfully pursued. The majority of vessels calling on the shipyard are dominated by those customers with few options as to where they will dock, given the cost of moving the vessel out of their market base. Competing options include Victoria (Vancouver) and Portland (Oregon), which have dry-docking capacity similar to Pier 70’s.

While BAE continues to analyze the San Francisco market, the company believes an ideal customer base would be 25% cruise ships, 30% merchant ships, 30% government/military vessels, 15% barge and bay traffic. This mix ensures year-round work by diversifying clientele and ship repair services.

The shipyard’s benefits to San Francisco include $18.2 million in material purchases, $3.2 million in local taxes, over 400 indirect jobs and approximately $35 million in indirect regional economic activity.

BAE, as the current operator of the ship repair facilities at Pier 70, is responsible for operating and maintaining the facilities and pays the Port rent based on its gross revenues. Over time, the Pier 70 land area leased for ship repair has been reduced through a series of lease amendments, which has occurred due to deterioration of buildings and industry changes. BAE now leases approximately 17 acres, including 17 structures and two floating drydocks. Nearly all of the facilities in the shipyard today were constructed in the late 1800s and early 1900s to support shipbuilding, with the exception of the drydocks. To maintain business, the industry has continuously refined and enhanced its equipment, yard, facilities and operational requirements to meet ship repair business needs. This Plan recognizes the ongoing need to accommodate industrial facility changes to keep the Pier 70 ship repair yard competitive and efficient.

The Plan embraces ship repair as an integral part of Pier 70’s activities and sets aside the land that it requires. It also proposes circulation improvements that will facilitate access to the ship repair uses and establishes land use policies that are compatible with the ship repair activity allowing to continue and flourish.
CHAPTER 3: CONTEXT FOR CHANGE

The prospect of adaptive reuse and infill development of Pier 70 comes at an opportune time, following 30 years of positive change along San Francisco’s seven-mile waterfront. Over this period, the City has established its position at the forefront of innovative land use and transportation planning. Along the waterfront, it has advanced innovative approaches to sustainable transit and pedestrian-oriented infill development that has helped to knit together the fabric of the City and reconnect it to the Bay. Today, South Beach and other areas of the Embarcadero waterfront are examples of the type of public/private partnerships that have created new growth opportunities in a City that highly values its traditional neighborhoods, historic resources and visual and aesthetic qualities.

Although there have been many positive changes along the San Francisco waterfront over the years, Pier 70 represents a new and unique opportunity. There are few other places on the West Coast where continuing water-dependent maritime industry and the scale and mix of historic architecture can be integrated with new shoreline open space, and transit-oriented infill development that reflects the best of urbanism and sustainable land use practices.

Planning Context

Historic rehabilitation of Pier 70’s historic structures and protection of the ship repair industry are long-standing policies in the Port’s Waterfront Land Use Plan. The Port’s first efforts to improve Pier 70 started in 2000. At that time, development of the 300-acre Mission Bay project was beginning on former Southern Pacific rail properties, just north of Pier 70, following many years of community planning. Mission Bay is a significant infill development, approved for 6,000 units of new housing, 4.4 million square feet of office, laboratory, multimedia and manufacturing space, a 43-acre medical research campus for University of California, San Francisco (UCSF), and 41-acres of public open spaces. At its northern edge, King Street, once the site of the elevated I-280 Freeway, had been transformed into a high-density mixed-use transit corridor extending from the Embarcadero in the South Beach neighborhood. Standing at the junction of the Embarcadero and King Street, Pacific Bell (now AT&T) Ballpark opened its doors in 2000, as the new home of the San Francisco Giants.

With the hope that these developments signaled a connection between Pier 70 and San Francisco’s growing downtown hub, in 2001 the Port Commission issued two Requests for Proposal for two distinct areas within 14 acres of Pier 70. The Commission accepted proposals from the San Francisco Arts Future Consortium for a major center for visual and performing arts in the rehabilitated Union Iron Works Machine Shop, and AMB Development Corporation for a warehouse distribution complex which included historic rehabilitation of Buildings 101, 102 and 104. Unfortunately, the Arts Consortium was forced to terminate negotiations when its major financial partner withdrew from the deal. And, after significant study, AMB determined the cost of clean-up, historic rehabilitation and open space requirements rendered the project infeasible.
In 2002, the Port considered other proposals, including the relocation of The Exploratorium to Pier 70. That organization ultimately abandoned the proposal due to uncertainty about evolving land use policies for the remainder of Pier 70 and the Central Waterfront, highlighting the need for a comprehensive approach to address feasibility and the development of a Master Plan.

In 2005, the Port and Mayor Gavin Newsom partnered with San Francisco Planning and Urban Research (SPUR) and EDAW, a local land use planning firm with a summer internship program to prepare a “Concept Vision Plan” for Pier 70. The Vision Plan was developed through many community forums and workshops and reflected the significant community interest in the future of the area. It set forth principles of historic preservation, sustainability and integration with the surrounding neighborhoods, and called for continued ship repair, a marina, office space, a public market, arts and a series of open spaces. Many of the ideas and possibilities revealed in that Concept Vision received enthusiastic response from government and community stakeholders alike, and have influenced the development of this Plan.

The experiences, lessons and inspirations from each of these public planning efforts led to the development of master plan goals for Pier 70 by the Port’s Central Waterfront Advisory Group (CWAG). Having watched and participated in each of the prior efforts, the CWAG understood both the public’s desires for improvements at Pier 70 and the requirements to realize them. The CWAG goals became the basis for the public planning process that led to this Plan for Pier 70.

In the meantime, great change was underway in the rest of the Central Waterfront adjacent to Pier 70, in large part responding to accelerated development in Mission Bay. UCSF broke ground on the Mission Bay campus in 1999, which triggered robust development throughout Mission Bay. To date, UCSF has completed about 1.5 million square feet of development, about 55 percent of its build-out capacity. Nearly half of the development houses research activities; nearly a third is housing; and a quarter houses support activities. Bioscience development is now underway. Along with residential development, office space, and UCSF’s campus buildings, three privately developed, life science projects with 800,000 square feet of lab and research space have been completed. UCSF recently acquired 14.5 acres of additional land on the south end of Mission Bay for a new 1.6 million square foot hospital. About 2.8 million square feet of entitled space remains for build-out at Mission Bay.

These rapid changes brought new development pressures to Potrero Hill, Dogpatch and industrial areas within the Central Waterfront, between Mission Bay and Islais Creek, and public demand for the City to revisit its land use and zoning controls. The San Francisco Planning Department responded by undertaking a detailed planning study for the Central Waterfront, which ultimately was incorporated into the Eastern Neighborhoods Program and approved by the Board of Supervisors in 2008. Eastern Neighborhoods updated policies and rezoned several neighborhoods and districts in southeast San Francisco, balancing protections for industrial activities while also identifying areas for new infill transit-oriented development, public open space and other community benefits. The
Planning Department conducted a highly integrated interagency process to coordinate with major public transit improvements also underway. This was timely, for it allowed concepts emerging for the Pier 70 Plan to also be considered and integrated with Eastern Neighborhoods. The completion of the Muni Third Street light rail line (T-Line) from the Embarcadero waterfront south to the Bayview neighborhood is a driving force to promote sustainable infill development that responds to pressing climate change and environmental issues.

Economic Context

To understand the economic context for Pier 70, it also is important to consider the overall Economic Strategy for the City. In 2007, San Francisco prepared its first Economic Strategy, identifying industries that have the potential to create jobs that align with the skills and education of San Francisco’s residents. The two key sectors that drive the San Francisco economy are the knowledge sector and the experience sector. The knowledge sector is generated by companies that create economic value because of the knowledge and know-how they develop for their customers. Pier 70 can accommodate knowledge sector industries, including biotech, environmental products and technologies, fashion, financial and professional services, digital media, information technologies, and publishing, film and television. The experience sector encompasses the visitor industry in the broadest sense and includes companies that create economic value based on the quality of the visitor experiences they provide, whether in hospitality, arts and culture, museums, or other sources of recreation and entertainment.

Within the knowledge sector, San Francisco has come to specialize in smaller firms in emerging industries, which tend to create jobs mainly for workers with a university education. The City’s Economic Strategy establishes two priorities for the knowledge sector: continue to grow a more diverse set of knowledge-based and high-tech start-ups, and encourage these companies to stay in San Francisco as they grow.

Within the context of the City’s Economic Strategy, Pier 70 offers both a unique opportunity for new office, research and development uses as well as the potential to expand the visitor experience and recreational activities. These uses fit well with adaptive reuse of historic buildings and can help to activate new public open space areas on the waterfront. Pier 70 can host recreational uses similar to those currently found in Fort Mason and the Marina Green on the northern shoreline of San Francisco.

Notwithstanding Pier 70’s unique characteristics and opportunities, it is important to note that in San Francisco, as elsewhere, real estate development has been driven by economic cycles. Over the past 25 years, the variations in the level of development in the City may be categorized by three business cycles: (1) the 1980s speculation-based growth followed by the recession of the early 1990s, (2) the dot-com boom of 1995 to 2000 followed by the bust of 2001 to 2003, and (3) the current cycle starting in 2004, during which real estate values rose at unprecedented rates followed by a significant downturn that continues today. These cycles are important to recognize as development efforts at Pier 70 will likely span more than one future business cycle.
Although the market analysis was undertaken in 2007 before the recent significant shifts in the real estate and capital markets, it provides an overall context for Pier 70. The following is a brief summary along with an evaluation of potential land uses to be considered for the Pier 70 area.

**Biotechnology**

Building on the Mission Bay cluster, San Francisco could increase its share of bioscience jobs from about 3 percent to between 7 and 10 percent of new Bay Area bioscience jobs. Anticipated bioscience growth in San Francisco will require between 2.5 million and 4 million square feet of space through 2030. Over the next five to 10 years, Mission Bay is likely to capture the majority of demand for bioscience space in San Francisco. Pier 70 is well-positioned to capture a significant portion of the balance of demand as sites in Mission Bay are developed.

**Medical Office/ Support**

A significant amount of ancillary development is typically associated with hospital locations. Many doctors staffing the hospital require off-hospital medical office space to house private practices. Also, services for which a hospital typically contracts, such as laundry and food preparation, may locate close to the hospital site. The market assessment estimates demand for medical office space in the area will range from 61,000 square feet for Phase I of the Mission Bay’s hospital development to 137,000 square feet at full hospital build-out.

**General Office and Corporate Campus**

Pier 70’s location and site amenities will attract interest from general office tenants. Office spaces with waterfront views and amenities are in high demand in the City. Annual office absorption in 2007 in San Francisco for the subarea around Pier 70 was about 40,000 square feet. Assuming new or rehabilitated historic buildings at Pier 70 would capture a large portion of future absorption over a 10-year period, 300,000 to 500,000 square feet of office may be expected for development at Pier 70. Pier 70’s size and unique character make it an attractive location for a potential campus-style development suitable for a single user or multi-tenanted buildings.

Pier 70’s historic buildings can become office/lab space with unique character and amenities, well positioned to attract emerging indus-
tries such as “cleantech” and digital arts/media. Several buildings at Pier 70 have potential to accommodate office tenants, including Buildings 101, 104, 12 and 14. A high proportion of these spaces could be constructed with views to command premium rent.

**Retail/Service Commercial**

Though site access and visibility are not ideal for a major retail center, limited neighborhood and worker-serving retail uses, suitable tenant types would include small-scale eateries, grocery and sundry stores. A limited amount of neighborhood-serving retailers such as dry cleaners, salons, and other personal service businesses may be supportable close to Illinois Street, particularly if residential is built. The amount of market support for retail, restaurants, and commercial space at Pier 70 will depend on the final mix of users. A major cultural user that draws students or visitors to Pier 70 will bring with it more diners and shoppers than strictly office users. Similarly, as the parks and open spaces develop, new populations will come to Pier 70. The demand for retail will follow as buildings are rehabilitated, parks are built, and a new jobs complex is created.

**Exhibition or Museum Space**

Museum space or other types of exhibition space, such as film or performance art, are uses that could preserve the vast interiors of the Pier 70 industrial structures while providing a valued public amenity. Demand for these types of uses is likely to come from an existing San Francisco institution desiring larger facilities or a new location. The Union Iron Works Machine Shop and Building 6 and 12 may be appropriate buildings for such uses.

**Production, Distribution, Repair (PDR)**

Land uses generally termed “industrial” are zoned in San Francisco under the designation PDR. Locating new PDR uses at Pier 70 would complement the original design of many buildings and maintain Pier 70’s industrial character. Planning Department analyses indicate that PDR demand in San Francisco is driven by certain businesses that need to be located relatively close to their customers. While the area between Pier 70 and Pier 80 is zoned largely for PDR uses, it is likely that PDR uses would also seek to remain or locate at Pier 70, given the location of the drydock. Also, some buildings may be too costly to convert to non-PDR uses, making the best adaptive reuse option a continuation of industrial uses. Building 2 and Building 6 may be good examples of those that may be best suited for PDR, types of uses.

**Waterfront Commercial**

Currently, public access to the waterfront at Pier 70 is severely limited. The Plan calls for the introduction of significant new waterfront open spaces that could facilitate new opportunities for waterfront commercial uses. An aquatic center or a small-vessel marina and ancillary café or restaurants are examples of waterfront commercial uses that would activate the open spaces by attracting recreation and dining patrons. Based on occupancy levels and the waiting list for slip leases at the South Beach marina, demand for marina slips in the area is strong, but an outside funding source, such the California Department of Boating and Waterways, would likely be needed. Marina development would need to avoid conflict with the shipyard’s ability to operate safely and efficiently.
20th Street in the future - a pedestrian and bicycle oriented place
CHAPTER 4: BRINGING TOGETHER THE PAST, PRESENT AND FUTURE

The vision for Pier 70 brings together the legacy of the past and the vitality of the existing ship repair operations with sustainable and economically viable infill development that will re-establish its meaning and significance in the City. Furthermore, the vision provides for an inviting and compatible mix of activities that co-exist well with ship repair activities and fit appropriately to the adaptive reuse of historic buildings. It also calls for the creation of significant open space and public access areas along the shoreline and establishes a fabric of buildings, streets, courtyards and pedestrian ways that contribute to the distinctive characteristics of the historic district and an interesting and attractive public realm.

Pier 70 will provide space for the expansion of San Francisco’s economy created by innovative, knowledge-based industries as well as for new uses within restored historic structures. Landmark buildings, such as the Union Works Machine Shop offer unique opportunities for cultural, institutional and other public-oriented uses that are appropriate to its grand cathedral-like space. These kind of uses can provide new meaning, identity and activity that both respects the integrity of the historic structure and creates a significant focus for Pier 70 and the City. New development on the site should be organized to provide for the functional requirements of new and existing uses and to complement the character of the Pier 70 National Register Historic District. The Plan should create building/open space relationships that enhance the historic qualities of place and promote public access, open space and recreational activities that benefit from the unique waterfront setting. The character and quality of the buildings, open spaces, and infrastructure development should also reinforce the visual and aesthetic qualities that make San Francisco a great place to live, work and visit.

Through the course of more than 60 public meetings and workshops during the Pier 70 public planning process, not only did the community find consensus in a vision and goals for the future of the site, the public discussions also helped define the direction for historic preservation, land use, urban design, open space, and the transportation objectives and policies set forth in the Plan. The input received reflected in a broad diversity of perspectives and was also informed by the planning, urban design, preservation and economic analyses undertaken by the Port and its consultants. The goals in the Plan are targeted to individual topic areas but it should be noted that they are overlapping and have significance for more than one Plan element.

Goals

The following summarizes the vision of this Plan as defined through the community outreach and participation effort:

Create a vital and inviting district at Pier 70 that integrates historic rehabilitation, activates new waterfront open spaces, creates a new jobs center that generates revenues critical to realize public benefits, and supports a continuing ship repair industry.
The public discussions reflect a broad diversity of perspectives, and planning, preservation and economic analyses undertaken by the Port and its consultants. The goals that have been articulated to support this vision for the future of Pier 70 are as follows:

1. **Create a Pier 70 National Register Historic District and rehabilitate its extraordinary historic resources.** The creation of a National Register Historic District formally recognizes Pier 70’s historic resources, and actively promotes their preservation and adaptive reuse, by opening access to preservation funding sources and streamlined governmental review and entitlements.

2. **Preserve the long-term viability of the maritime ship repair industry.** To maintain and embrace ship repair as an integral part of Pier 70, the Plan sets aside land necessary for this industry and design parameters to ensure new development is compatible with the operational requirements to support viable ship repair operations.

3. **Create major new shoreline open space that extends the San Francisco Bay Trail and Blue Greenway to and through Pier 70.** The Plan sets a blueprint for a major new public access and open space system for Pier 70. Two new waterfront parks are defined, connected to a network of internal pedestrian-scaled courtyards and passages, and Irish Hill. They extend into the Historic District and complement the character of Pier 70’s industrial historic setting.

4. **Extend the City street grid to enhance public access and integrate Pier 70 with the Central Waterfront.** The street system is an important part of the organizational framework for existing and new uses. It provides orientation and structure to the urban experience, access and visibility to the Bay and proposed shoreline open space, and corridors for utility services and sustainable infrastructure.

5. **Provide sites for office, research, emerging technologies, light industry, commercial and recreational uses to expand San Francisco’s economic base and generate revenues to fund public benefits.** The Plan identifies sites for a significant amount of new infill development that is compatible with the scale and character of the Historic District, and meets the functional requirements for a range of new uses. Pier 70’s economic strategy includes public funding resources which will rely on creating a strong economic base to meet the preservation, open space and environmental commitments defined in this Plan.

6. **Develop a thriving district that recalls Pier 70’s historic activity, accommodates ship repair operations, and invites visitors to work, learn and play along the City’s waterfront.** The Plan promotes a diverse mix of uses including retail, arts and cultural activities, public-oriented institutions and recreational uses which, juxtaposed against Pier 70’s ship repair operations, creates a unique new public waterfront destination.

7. **Promote development that is pedestrian-oriented and fosters use of alternative, sustainable transportation modes and...**
practices. The City street grid will be a limiting factor for vehicle access to Pier 70, which dictates the need to actively plan and incorporate alternative transportation modes and practices into the design of development and public realm improvements at Pier 70.

8. **Promote sustainable mixed-use infill development and economic vitality that places jobs near existing housing to reduce the carbon footprint of regional growth, and includes climate adaptation strategies appropriate to this waterfront location.** Pier 70's goals for historic preservation, environmental remediation, and open space and public access themselves establish a strong framework for sustainability. Coupled with the opportunity for significant transit-oriented infill development near major job centers and expanding residential neighborhoods, Pier 70 offers a model for sustainable development.

9. **Remediate environmental contamination to enable use and public enjoyment of Pier 70 and its waterfront, and improve environmental quality.** As in typical of many industrial areas in waterfront settings, a considerable amount of clean-up is required in order to meet environmental quality standards that are appropriate to the new uses and public-oriented activities desired for the area.

The goals established in the Plan are based on a diverse set of public interests. Therefore they will provide the metric used to evaluate specific development proposals, implementation strategies and further plan refinements. They are the foundation on which the Plan elements are built and are described in the chapters which follow: Historic Preservation (Chapter 5), Land Use and Adaptive Reuse (Chapter 6), Form and Character of Infill Development (Chapter 7), Open Space and Public Access (Chapter 8) and Transit, Circulation and Parking (Chapter 9). Each of these elements present objectives and policies and applicable criteria to further define the potential location, intensity, scale and character of infill development and criteria for the character of buildings and public spaces associated with the existing and future uses. It is important to note that the Plan elements describe a preliminary approach for further public discussion and policy input. Flexibility is retained to allow the incorporation of additional information that is continuing to be developed by the Port and to allow for input from private development partners based on specific proposals and implementation programs.

Chapter 10 describes the implementation strategy. It includes the regulatory and public policy requirements as well as public and private financial considerations that will be required to realize the Plan. Development at Pier 70 will need to respond to the economic cycles that affect real estate development and the significant costs of environmental remediation, historic preservation and public improvements that are a part of the program. To be successful, a significant level of development is required in order to provide the revenues necessary for the provision of public benefits. At the same time, it is urgent to move the Plan forward because the public is losing the physical buildings and artifacts that are integral to the history and identity of Pier 70. In summary, the vision and goals, elements and implementation strategy are the stepping stones that, with additional public and policy input, will guide the future transformation of the Pier 70 area.
Shipyard aerial, 1945