SUSTAINABLE WATERFRONT REVITALIZATION:
BALTIMORE, SAN FRANCISCO, AND SEATTLE

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By

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ABSTRACT

Sustainable Waterfront Revitalization: Baltimore, San Francisco, Seattle

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The urban waterfront areas of the United States have grown increasingly neglected and derelict due to changes in traditional industrial uses and their physical severance from the downtown core. A revived interest in urban living has brought downtown property values up, including waterfront areas, and has jump-started a movement towards waterfront revitalization. In an effort to understand the specific characteristics that make some waterfront revitalization projects more sustainable over time than others, this paper employed a case study approach. Baltimore's Inner Harbor, San Francisco, and Seattle's Central Waterfront were selected for analysis based on three specific perspectives: recreation; development; and tourism. Using criteria determined from the literature review in conjunction with key player interviews and documentary evidence, the three case study waterfronts were analyzed for their ability to sustain revitalization. The results indicate that waterfronts must provide a balance and mix of uses, assimilate with the surrounding city, provide connections between attractions and with the city and region, continuously reinvent themselves, provide attractions that draw both locals and tourists, and have a clear identity. These findings, while quite broad, are intended to provide a foundation that will be relevant to any city undertaking new waterfront revitalization projects.

Keywords: Waterfront; Revitalization; Planning; Development; Port; Sustainable; Baltimore; San Francisco; Seattle

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CHAPTER 1: INTRODUCTION

Cities across the globe are embracing a renewed interest in their waterfronts. As the traditional roles of the waterfront continue to change from primarily industrial uses to those of public access and renewed integration with the downtown core, planners are faced with many challenges. What types of issues will planners face when confronting waterfront revitalization today? Why have some cities seen success in their waterfront revitalization efforts, while others have failed? How can planners ensure that the projects they promote will become a sustained part of the urban fabric? Most importantly, the process of revitalization needs to be sustainable over time in order to be truly successful.

This thesis will attempt to answer the question: *what makes urban waterfront revitalization sustainable over time?*

Since revitalization and sustainability can be understood from different angles and have different meanings to different stakeholders, this thesis will concentrate on looking at sustainability in urban waterfront revitalization from three major perspectives:

The *development* perspective

The *tourism* perspective

The *recreation* perspective

These three perspectives will guide the definition of this thesis' objectives and the research development, including the theoretical framework, the definition of

criteria for measuring success in urban waterfront revitalization, the survey, and the final product.

The final product of this research will be a discussion of the results of the case study research, including an extensive literature review, documentary evidence, and key player interviews as a means of promoting triangulation of the results. The results will lead to a further understanding of sustainable contemporary urban waterfront revitalization. They should also enable the author to pinpoint and outline specific criteria that are common to each revitalization study area that have enabled the area's sustainability over time. Besides addressing the validity, limitations, and applicability of the methodology and the results, the conclusion will include a discussion on a planning/design framework for sustainable urban waterfront revitalization. The purpose of this discussion will be to serve as general guidance for cities in the assessment of their own initiatives, policies, and projects.

1.1 Objectives

There are three primary objectives of this thesis:

Objective 1 : to understand what makes the process of urban waterfront revitalization successful and sustainable over time.

Objective 2: to develop a method for comparative assessment of successful urban waterfront revitalization projects.

Objective 3: to develop a planning/design framework for sustainable urban waterfront revitalization.

1.2 Sustainable Waterfront Revitalization

Urban waterfronts have long been the hub and heart of cities the world over. They exist in some form or another in nearly every major city, have the capacity to change dramatically over time, and can greatly impact a city's identity. Initially, Urban waterfronts were primarily concerned with the dedication of their ports to the movement and transport of goods. Over the course of the last century, with more and more American waterfront towns taking on less of a trade and transport role, many of these urban waterfronts have fallen into disrepair. Piers lie vacant and fenced off, buildings are boarded up, congested freeways and high speed arterials block off pedestrian access to the water, and many of the public spaces that do exist are underfunded and under-maintained.

Different cities have taken very different approaches to these problems. Ultimately, this transition away from purely commercial interests poses an unprecedented opportunity for revitalization of depressed, yet extremely valuable, property, and can be a driving force for citizen involvement, civic pride, and a physical and social reconnection of our downtowns with our waterfronts.

Older waterfronts are typically located adjacent to downtown areas, as the waterfront was traditionally the hub of the local economy and industry. Because of this, revitalization of a city's waterfront is often tied directly to the revitalization of a city's downtown, and vice versa (Ryckbost, 2005). For the purpose of this thesis, revitalization will be defined as "an integrated set of long-term actions designed to radically improve a critical situation in selected inner city areas that are key to a city's development" (Strzelecka, 2008, p.249).

With a decrease in crime, increasing traffic congestion between cities and suburbs, and desire for a more carefree, yet sustainable lifestyle, people are returning to the once depressed downtowns of U.S. cities in high numbers (Christie, 2006). This has brought about a greater need for accessible public space in downtown areas, and waterfronts are seen as a prime opportunity for addressing this need.

When discussing the topic of urban waterfront revitalization, the question emerges about how to make such revitalization sustainable over time. Every effort must be made to ensure that today's revitalization projects will also prove successful in the future. The most widely accepted definition of sustainability speaks to this concern: "sustainable development is development that meets the needs of present generations without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987).

Urban waterfront revitalization is a contemporary phenomenon, as it has only been widely employed as a systematic planning approach since the mid 1960s. In this period, several cities in the US and around the globe have engaged in such attempts with various results. The relative success obtained in these projects reflects differently to the different stakeholders, and may be fundamentally grouped into three categories: development, tourism, and recreation. Therefore, there is a need to develop different assessment tools and criteria to measure the effectiveness of planning initiatives in urban waterfront revitalization and their sustainability over time.

1.3 Summary of Chapters

Perspectives

In order to identify a set of criteria for a successful waterfront revitalization project, three perspectives were selected for literature review. These perspectives include recreation, tourism, and development. From the results of the literature review, criteria were established for comparison with completed revitalization projects in each of the three case study cities.

Methodology

This thesis employs a multiple-case study approach. The three case studies include Baltimore, Maryland, San Francisco, California, and Seattle Washington.

Baltimore

Baltimore, Maryland has been one of the major seaports in the United States since the 1700's. Much like many ports across the country at the time, the waterfront began to fall into disrepair after WWII with the birth of containerization. The Inner Harbor in particular found its piers and docks becoming derelict shells of their past, and downtown Baltimore was quickly losing its residential population in the flight to the suburbs (Visit Baltimore, 2011).

The revitalization of Baltimore's Inner Harbor was dramatically influenced by the Charles Center Project, a 22-acre urban renewal project of Baltimore's inner city begun in the late 1950's. This project employed an early public-private partnership model, and proved wildly successful with four large office buildings completed by 1963 and several more slated for completion soon after (Millsbaugh, 2003).

Buoyed by the success of the Charles Center Project, Baltimore embarked on an ambitious revitalization plan for its Inner Harbor in 1964, with the creation of the Inner Harbor Master Plan. Over the next 20 years the Harbor was completely transformed; a critical mass of high-profile attractions had been built, including the World Trade Center, the Baltimore Convention Center, the National Aquarium, James Rouse's Harborplace (a festival marketplace), and the Hyatt Regency Baltimore, the Inner Harbor's first waterfront hotel. By the late 1970's, the Inner Harbor had not only achieved its goal of becoming a playground for Baltimoreans, it had begun attracting tourists in large numbers (Millspaugh, 2003).

The overwhelming success of the Inner Harbor project has spurred revitalization of Baltimore's downtown core. In 2000, 40 or more downtown projects had begun construction or reached completion. Further, the city has shown a great desire to assure the Inner Harbor's future success. Baltimore has hired an urban design team from New York to create a new plan for the Inner Harbor, with specific goals of "strengthening connections between the waterfront and the central business district, to preserve and enhance the public spaces, to create additional gateways to the waterfront, and to ensure traffic flow and parking options" (Millspaugh, 2003).

San Francisco

San Francisco, California is a port city of nearly 800,000 residents. It gained its initial prominence as a result of the Gold Rush of 1849, when hopeful prospectors flooded into the city on their way to the Sierras. The port continued to see success through World War II, when San Francisco became one of the major logistics centers on the West Coast. After the War, however, the vibrant port took a downturn. Containerization was becoming the new method of shipping, and San Francisco simply could not compete with Oakland's access to available land and federal

grant monies. The port began to decline steadily, and the finger piers and historic Ferry Building fell into disrepair. In 1968 the Burton Act was passed, transferring control of the port from the Harbor Commission to the city. The San Francisco Port Authority became the Port of San Francisco, with a commission made up of five mayoral appointees (Brown, 2009).

During the 1980's, the Port of San Francisco was slowly coming to the realization that its role had changed. Maritime uses had significantly declined, and primary revenues were coming from waterfront restaurants (Brown, 2009). In 1990, the Port released its new strategic plan, which detailed proposed improvements to cargo facilities as well as a redevelopment plan for the waterfront. The redevelopment plan called for various mixed-use projects as well as a hotel. The public expressed great fear that their waterfront would become overrun with hotels, blocking out views and preventing public access. As a result, the citizens of San Francisco successfully passed Proposition H, a moratorium on all waterfront development of Port property and banning all future development of waterfront hotels (Brown, 2009) until a new master plan involving "maximum feasible public involvement" (Brown, 2009, p. 44) was completed. This development moratorium was in place until the public adopted the new land use plan in 1997. The construction of AT&T Park and the restoration of the Ferry Building followed shortly after (Brown, 2009), and new projects continue to appear, further contributing to the evolution of the San Francisco waterfront.

There are currently eight major development projects and opportunities underway at the Port, including the proposed relocation of the Exploratorium from the Palace of Fine Arts to Piers 15-17, the Pier 27 Cruise Terminal Project, and a variety of projects in preparation for the 2013 America's Cup races (Port of San Francisco,

2011). Public-private partnerships continue to be a widely used tool by the Port for waterfront development, injecting capital investments into Port properties while providing public access and open space improvements, furthering the Port's goal of reconnecting the city to its waterfront (Port of San Francisco, 2011).

Seattle

Development of the Seattle waterfront began in 1852 when it was chosen as the site for the first steam powered sawmill in Puget Sound. It was a vibrant hub of energy for many years, but the World War II and post-war years bore marked similarities to San Francisco during the same time period. Seattle was a shipping hub during the War, but afterwards the waterfront began to decline. In the 1960's the Port of Seattle committed to containerization. It constructed vast piers and Harbor Island south of the traditional downtown waterfront to make way for the transformation (Seattle Waterfront, 2011). During the 1970's, emphasis was placed on turning the waterfront into a vibrant tourist and recreation area, and the construction of an aquarium, parks, and a waterfront streetcar line helped bring this goal into fruition (Seattle Waterfront, 2011).

Most recently, the elevated Alaskan Way Viaduct has become an increasingly contentious debate amongst Seattleites, involving numbers of referendums, proposals and alternatives. Damage from the 2001 Nisqually earthquake has rendered the structure relatively unsafe in a future earthquake, and as a result, the Viaduct will need to come down. It is the problem of what to replace the roadway with that is the hot topic of conversation in Seattle at the moment, and ultimately, what the future Seattle waterfront will look like as a result.

In early 2009, the construction of an underground tunnel was endorsed by the Mayor of Seattle, Greg Nickels, and the Governor of Washington, Christine Gregoire (DiBenedetto, 2009). Funding for the estimated \$4.24 billion plan is expected to come primarily from the State, with additional contributions from the County, and the Port (DiBenedetto, 2009).

In the near future, the city of Seattle will get its waterfront back. It will no longer suffer the “noise, blight, and dirt” (Schneider, 2006, p. 2) from the Viaduct. The opportunity for visual and physical access to the waterfront will be returned to the citizens of Seattle, and, supported by the Central Waterfront Plan, will become “the city’s most memorable place” (City of Seattle, 2011).

Interviews

Interviews were conducted of professionals in the fields of recreation, tourism, and development. Two interviews were conducted in each case study city, and the responses were used in conjunction with the established criteria for analysis of waterfront revitalization projects.

Documentary Evidence

In addition to the interviews and perspective criteria, the results of the analyses were compared with relevant statistics and data in order to provide triangulation. Evidence came from a variety of sources, including city tourism organizations, public economic and development agencies, downtown associations, and chambers of commerce.

Conclusions

In addition to a discussion of the validity, limitations, and applicability of the following study, the concluding chapter offers a summary of findings based on the results of the case study analysis. General conclusions indicate a broad range of essential components for successful revitalization projects, and include: balance and mix of uses; assimilation with the surrounding city; connections; continuous reinvention; attractions that draw both locals and tourists; and identity. The chapter concludes with a discussion of the future of sustainable waterfront revitalization.

CHAPTER 2: URBAN WATERFRONT REVITALIZATION

2.1 Waterfront Development History in the U.S.

The Industrial Waterfront

Urban development of the waterfront in the United States can be traced back to colonial times. In the beginnings of American colonization, the emergence of a city had a direct relationship to the location and quality of its port (Wrenn, 1983, p. 6). Three of the oldest five seaports in America are still thriving, metropolitan cities- Boston, MA, New York, NY, and Philadelphia, PA. These safe harbors provided access to all of the opportunities that the New World pledged. They served as the hub of activity for the receipt and shipment of cargo and supplies, as well as for the exchange of information and ideas (Wrenn, 1983, p. 4).

Besides their function as centers for commerce, early port cities were also the center of social interaction and entertainment. This changed dramatically with the Industrial Revolution, steamships, and railroads. Increased levels of commerce led to an increase in the amount of storage required, and as a result, citizens were consistently being pushed away from the waterfront as industry increased, and wharves, railroad tracks, and warehouses moved in, blocking the water's edge from the street (Torre, 1989, p. 6).

With the widespread growth brought on by the Industrial Revolution, America began to see the formation of governing bodies, such as public port authorities or commissions, as a response to the increasingly complex problems and issues

associated with waterfront and shoreline management. Federal regulations such as the Rivers and Harbors Act of 1879, as well as state and city regulatory programs, began to appear.

Other, less desirable outcomes of the Industrial Revolution were starting to emerge as well. Environmental degradation was becoming a serious problem as there were no pollution controls in existence and pollutants, garbage, and raw sewage were typically just thrown out to the rivers and sea. Also, cities were becoming increasingly closed off from their waterfronts by the growing rail yards and warehouses (Wrenn, 1983, pp. 14-18). The advent of the automobile only helped to exacerbate this problem.

The Declining Waterfront

After World War II, the automobile culture rapidly expanded. With more and more people leaving the cities for the suburbs, the waterfront began to change again. Trucks and highways began to impact the rail systems, new freeways were constructed along the waterfront, cruise terminals and piers were abandoned for airplanes and airports, and the need for commuter ferries was disappearing with the construction of new roads and bridges (Breen & Rigby, 1994, pp. 12-13).

The containerization of cargo - as opposed to the traditional break-bulk method (Figure 2.1) - was another new phenomenon that reshaped the waterfronts of America's port cities. This new

Figure 2.1. San Francisco longshoremen unloading break-bulk cargo. (Source: *sfpl.org*, retrieved on June 12, 2011)

method of cargo shipment placed great importance on access to large swaths of open land, as back-up space for containers became a new requirement (Figure 2.2) (Breen & Rigby, 1994, p. 13). Many of America's port cities did not have access to the land necessary, and the ports began to move elsewhere. As a result, many of the old finger piers from the break-bulk years fell into disrepair. Railroad yards were growing more and more deserted, and the old waterfronts became rundown. (Breen & Rigby, 1994, p. 13).

Figure 2.2. Port of Seattle container facilities.
(Source: http://farm4.static.flickr.com/3384/3603325493_a8e4cbaec3.jpg, retrieved on June 12, 2011).

In 1956 the Federal-Aid Highway Act was passed, authorizing the construction of a 41,000-mile interstate highway network spanning the entire United States. The new highway system was intended to ease traffic problems, allow for a quick escape from cities under nuclear attack, replace “undesirable slum areas” with clean stretches of concrete, and make coast-to-coast travel easier. Unfortunately, the growing decline in traditional waterfront uses coupled with the large expanses of waterfront land available for cheap meant that many urban waterfronts fell prey to the interstate highway system. These cities found their waterfronts severed from the city by new stretches of large, often elevated, concrete highway structures (Breen & Rigby, 1994).

Revitalization Begins

The City Beautiful Movement can be credited as the beginning of an interest in waterfront redevelopment. Flourishing in the 1890's and early 1900's, the City Beautiful Movement was a response to the unsavory conditions of overcrowding and abominable living conditions within U.S. cities. During its peak of popularity, a handful of cities waterfronts benefited from the movement's focus on civic beauty and pride and its emphasis on public spaces and parks. The Chicago Lakefront, the banks of the Charles River in Boston, Detroit's Belle Isle, and Philadelphia's Fairmount Park are particularly good examples of waterfront parks and public spaces from this time period. (Breen & Rigby, 1994, p. 12).

The Works Progress Administration (WPA) also played a role in the early days of waterfront redevelopment. Established in 1935 as a job-creation program for those out of work during the depression, the WPA had a much more widespread impact on waterfronts than the City Beautiful Movement. While its projects were not as grand as those of the City Beautiful, San Antonio's Paseo del Rio - a river-walk - is one of the finest examples of WPA work, as is the Aquatic Park near Fisherman's Wharf in San Francisco (Breen & Rigby, 1994).

The 1950's and 60's welcomed a new generation of federal programs benefiting the urban waterfront. The Housing Act of 1954 provided funding for the rehabilitation and conservation of deteriorating and blighted urban areas. This act introduced the term "urban renewal", which referred to public efforts to revitalize aging and decaying inner cities and some suburban communities. Many cities used this federal funding for redevelopment projects at the waterfront. In 1965 the Housing Act of 1954 evolved into the establishment of the department of Housing and Urban

Development (HUD), a cabinet-level agency. Today, HUD continues its role as a significant funder of urban regeneration projects (U.S. Department of Housing and Urban Development, 2011).

Modern interest in waterfront revitalization and development can trace its roots back to the late 1960's and early 1970's and the beginning of the historic preservation movement. Preservationists were among the first to recognize the beauty of America's abandoned waterfronts, which included architecturally significant buildings and scenic vistas. The rise of the environmental movement during this same time period was another distinct factor in the resurgence of waterfront development. The Environmental Protection Agency (EPA) and the National Oceanic Atmospheric Administration (NOAA) were created in Washington D.C. and in 1970 the first Earth Day took place. Water quality was improving significantly as a result of increased environmental legislation such as the National Environmental Policy Act of 1969 and the Water Quality Improvement Act of 1970, and many brownfields at the water's edge were transformed into parks and attractive developments (Breen & Rigby, 1994; Rafferty & Holst, 2004).

During this time, there were also large swaths of abandoned land along the urban waterfront as a direct result of the transition from break-bulk to cargo shipping and the need for expanded area. This new, often centrally located land, brought about great interest from investors and entrepreneurs, as well as local governments interested in urban revitalization. During the 1980's and 1990's, cities had begun to revitalize their once decaying and neglected downtowns, often with federal assistance from HUD such as Community Development Block Grant Programs and Urban Development Action Grants (Breen & Rigby, 1994). Once the business

districts were thriving again, interest shifted to the city's waterfront areas. (Rafferty & Holst, 2004).

Citizen activism and leadership played another important role in renewed interest in urban waterfronts. As Rafferty & Holst describe it: "Input from citizen committees, citizen leaders, or both has given many urban waterfront developments their legitimacy and spurred the essential cooperation, and perhaps even financial involvement, of local governments (2004, p. 4)."

Many other factors have contributed to renewed interest in waterfront revitalization, including: the return of traditional water uses, such as ferries and marinas; the recreation and fitness movement which lead to increased demand for public trails and open spaces; the Tall Ships celebrations of 1976; and the growth of tourism as cities scrambled to create "destinations" to capitalize on tourist dollars (Breen & Rigby, 1994).

2.2 The Contemporary Waterfront

Today, countless cities throughout the world are in the process of revitalizing their waterfronts. The United States, in particular, has seen a dramatic increase in urban waterfront development efforts since the mid-1960's. Communities are increasingly learning the value a thriving and vibrant waterfront can have for their downtowns, not just economically but socially and physically as well, and as a result are paying greater attention to the design and use of these precious waterfront lands.

Older waterfronts are typically located adjacent to downtown areas, as the waterfront was traditionally the hub of the local economy and industry. Because of this, revitalization of a city's waterfront is often tied directly to the revitalization

of a city's downtown, and vice versa (Ryckbost, 2005, p. 1). With a decrease in crime, increasing traffic congestion between cities and suburbs, and desire for a more carefree, yet sustainable lifestyle, people are returning to the once depressed downtowns of U.S. cities in high numbers (Christie, 2006, p. 1).

As a result, perhaps the most important shift in thinking about the urban waterfront today is that it is no longer seen solely as the site of transportation and industrial uses, but rather as a place for the public. The cities of today want their waterfronts to be places of public enjoyment that provide ample visual and physical access to the water. This is being realized through the increasing development of diverse mixed-use neighborhoods at the waterfront, places that serve more than one purpose and are rather places for working, living, and playing. Essentially, people want their waterfronts to be places that contribute to all aspects of life (Breen & Rigby, 1996; ULI - The Urban Land Institute, 2004, p.11). In addition to this shift in thinking, the changing role of the port, removal of barriers such as freeways and rail systems, increased environmental awareness, cultural tourism and newfound recreational opportunities, enhanced public planning processes, and the quest for a new urban identity are contributing to a new generation of waterfront revitalization.

Ports

The role of the port has been changing dramatically over the last several decades. For a time, ports were moving away from the central city as a result of changes in technology and the need for more land. More recently, however, cities have begun to appreciate the benefits of connecting seaport and urban uses, and are now making attempts to integrate the port into the urban fabric, rather than segregating it. This new integration is also seen as a potential solution to conflicts of uses between the port and the city (ULI - The Urban Land Institute, 2004, pp. 12-16).

Ports have begun developing their real estate for urban uses and are realizing their allure and appeal to tourists. Sites that were once closed off to the public are being opened up for public access and guided tours (ULI - The Urban Land Institute, 2004, p. 17). In addition, there has been continued growth not only in the cruise ship industry, but also in other water uses such as ferry systems and excursion vessels. Cruise and ferry terminals are an added benefit for the waterfront, as they provide a connection between the land and the water, in addition to providing water-related employment (Breen & Rigby, 1994; ULI - The Urban Land Institute, 2004, p. 21).

Removal of Barriers

Since the beginning of the waterfront revitalization phenomenon, there has been a desire for enhanced visual and physical connectivity to the waterfront. Cities have continued to strive for this connectivity through the removal of railroad tracks, rail yards, and elevated arteries and freeways, and are undergoing massive infrastructure and freeway removal projects in order to upgrade the appearance of their urban waterfronts. These projects are not seen solely as infrastructure projects, but also as acts of city rebuilding. The more forward thinking cities hope to achieve multiple objectives from these projects such as improved development, open space, and public access, in addition to travel (Breen & Rigby, 1996, p. 19; ULI - The Urban Land Institute, 2004, pp. 50-51).

Environment

When the environmental movement began in the early 1970's, cities began looking at their bodies of water differently. Initially, cleanup was emphasized in order to alleviate health concerns (Breen & Rigby, 1996, p. 17). More recently, as community values have begun to change and citizens are realizing the natural and cultural

benefits of a healthy waterfront, cities are eyeing redevelopment as a means of improving their waterfronts. As a result of increased awareness and education, regulations, scientific and technological progress, and positive built examples, the development community has begun to see the benefits of improving the waterfront as well. The now widely agreed upon importance of the natural and cultural systems in urban water bodies continually results in projects that stress greater ecological performance along the waterfront (ULI - The Urban Land Institute, 2004, pp. 64 - 79).

Culture and Tourism

Cultural and tourist attractions continue to have a large presence at the waterfront, and the awareness of their importance is growing (Breen & Rigby, 1994, p. 28). The ability of these attractions to generate revenue and attract people to the water help create an atmosphere of vitality. Some of the more common attractions found at the urban waterfront today include aquariums, concert venues, museums, public festivals, and exhibits of public art (Breen & Rigby, 1996). Cultural tourism and eco-tourism are also gaining momentum at the waterfront, and help provide unique cultural and recreational attractions to visitors and locals alike (Breen & Rigby, 1996, p. 16).

Closely related to cultural tourism is historic preservation and adaptive reuse, another trend in waterfront revitalization. Factories, warehouses, and derelict industrial facilities are being adaptively reused to accommodate housing, shops and restaurants, and even civic facilities (Breen & Rigby, 1996). The realization that these historic buildings have economic potential once they have been preserved and restored continues to shape the physical appearance of the waterfront. As

Breen and Rigby state “people appreciate lively sections of cities, especially areas with a bit of their heritage preserved” (Breen & Rigby, 1994, p. 28).

Recreation and Open Space

New recreational and open spaces can be found along the urban waterfront in nearly every major city. Marinas are being constructed or expanded to facilitate greater interaction with the water, while more passive spaces such as parks and promenades see continued popularity with local citizens and visitors (Breen & Rigby, 1996; Greco, 2008). New York City is a good example of this trend towards passive recreation, with a new waterfront revitalization plan that calls for 50 acres of parks and 14 waterfront esplanades (Saul, 2011). The importance of this trend cannot be stressed enough, as Ann Breen says “the great legacy of the early part of the 21st century as far as waterfront development is concerned will be the amount of acreage devoted to parks, greenways, and trails” (Greco, 2008 p. 35).

Public Planning Processes

Over the last several decades, countless cities have undertaken waterfront revitalization projects. Many of these projects have failed. It has become apparent over time that the best plans come from “balanced interests and win-win scenarios” (ULI - The Urban Land Institute, 2004, p. 16), and that these plans benefitted from a coherent overall vision. Today, many cities achieve the best results through extensive public planning processes. These processes strive to encourage public interest and engage stakeholders through well-advertised public participation programs. The Internet and social media have begun to expand the effectiveness of the public planning process and as technology continues to improve, may prove an exciting trend to watch in the coming years (ULI - The Urban Land Institute, 2004, p. 16).

New Identity

Across the world, the waterfront has become a stage for a new expression of city aspirations (Marshall, 2001, p. 9). The city is once again becoming the place people go to seek social and cultural entertainment as part of a larger community, and revitalized waterfronts are increasingly part of this experience. Today, many people work in the suburbs and live and play downtown, a trend that will hopefully continue to grow. Sustainable place making is another trend at the urban waterfront. This is the idea that developments are created to be socially, economically, and environmentally sustainable, which contributes to an overall sense of place. Many competing interests must be balanced in order to achieve a suitable outcome, and public private partnerships are widely used practices for achieving development goals (Williams, 2004).

Negative Trends

Unfortunately, the transition from industrial uses towards more public space at the waterfront has had some negative effects. There have been major losses of blue-collar jobs in many waterfront cities, particularly those which rely on factories, warehouses, transportation industries, and ports (Breen & Rigby, 1996). As these industries either move away from the waterfront or change their role, employees are often left without many options for their particular skill set. Further, while cities continue to see success in their waterfront revitalization projects, developers will continue to perceive such projects as highly desirable. There has also been a tendency for cities to overdevelop waterfront parcels as more and more public and private interests jockey for a slice of the pie (Greco, 2008).

In order to be prepared for the impact of new trends on waterfront revitalization projects cities must find a way to assess their success or failure over time. In order

to accomplish this there is a general need for an understanding of the factors that influence waterfront revitalization projects. Through the selection of three distinct perspectives on waterfront revitalization, the following chapter will provide a review of current literature in order to pinpoint a particular set of criteria necessary for successful revitalization.

CHAPTER 3: PERSPECTIVES ON SUSTAINABLE REVITALIZATION

One of the primary purposes of this thesis is to identify a set of criteria for a successful waterfront revitalization project. Many external factors influence this continued success, including the local, national, and international economy and politics. However, for the purpose of this thesis, the most important factors that are heavily dependent on local decision-making and development of waterfront projects are recreation, development, and tourism. The following discussion will highlight the key elements of each of the three factors, or perspectives, resulting in criteria relevant to the analysis of the success of the waterfront revitalization projects.

3.1 Leisure and Recreation

Nearly all large urban waterfront redevelopments have a significant recreation component. In order to begin a discussion of the importance of leisure and recreation at the urban waterfront, it is necessary to establish a definition of the two terms. According to the *Tourism and Recreation Handbook of Planning and Design* leisure is defined as “the free time available to the individual when the disciplines of work, sleep, and other basic needs have been met. It is the time which can be used in ways determined by the individual’s own discretion” (Baud-Bovey & Lawson, 1998, p.1). Recreation is defined in the same handbook as “covering, broadly, any pursuit taken up during leisure time other than those to which people have a high

commitment (overtime, second job, home study, and various maintenance jobs about the house)” (Baud-Bovey & Lawson, 1998, p. 1).

Recreation is often classified as either passive or active. Passive recreation is recreation that is not physically active, such as spectator recreation, bird watching, sightseeing, and picnicking. It can also include resource-oriented recreation, such as horseback riding and canoeing (Jensen & Guthrie, 2006, p.349). Active recreation is recreation involving somewhat intense physical activity such as sports or hunting. It also includes facility-based recreation that requires sports fields, swimming pools, or other development (Jensen & Guthrie, 2006, p. 345).

The National Survey on Recreation and the Environment (NSRE) is conducted roughly every ten years by the US Forest Service. This survey compiles information about the recreation habits of Americans, and includes between 50 and 80 different activities. The most recent summarized data available was collected between 1999 and 2002, and includes information on the most common outdoor recreation activities. Pleasure walking, family gatherings, sightseeing, picnicking, and swimming have consistently been the top outdoor recreational activities. Bicycling and nature viewing are also popular activities (Jensen & Guthries, 2006, p. 51).

Most recreational activities – active or passive – happen in public spaces. In her book *The Good Life: New Public Spaces for Recreation*, Zoe Ryan argues that the best and most sustainable public spaces “engage a broad range of users, are designed for both large and small-scale interventions and events, and are flexible to change over time, accommodating multiple activities, both programmed and unscripted” (2006, p. 16). She goes on to say, “innovative new public spaces are highlighted for their ability to be appropriated by people from diverse communities,

for encouraging multiple experiences, and for fostering social and cultural exchange” (2006, p. 16). Richard Marshall agrees, stating, “the best types of public space allow for the inclusion of multiple meanings and all levels of society” (2001, p. 4).

When discussing recreation at the water’s edge, Douglas Wrenn asserts that a rise in travel costs in conjunction with an overall increase of leisure time has increased the demand for recreational opportunities in nearby urban areas (1983, p.39). Cities have begun to look to their underutilized or decaying waterfront sites as a potential source of new recreation opportunities.

When cities incorporate leisure and recreation spaces into their waterfront projects, people are drawn to them for a variety of reasons. Belinda Dodson and Darryll Killian have found that visitors are drawn to the urban waterfront primarily to experience other kinds of people and participate in the different activities available (Stevens 2006, p. 178). Quentin Stevens believes that the very nature of urban leisure spaces have typically made them places of reduced social stratification, where “high and low, refined and base enjoyments mix together” (Stevens, 2006, p. 182). One successful enhancement to the recreation areas along the Southbank in Brisbane, Australia, is the installation of lockers and free showers, which contributes to greater enjoyment of the recreational opportunities at the waterfront by people of varied backgrounds and interest (Stevens 2006, p. 183).

Carter argues that waterfront leisure sites need to provide “adequate fulfillment of users’ fantasies about how to relax”. This is because waterfronts are used during people’s free time when they have the greatest choice in where they want to recreate (Stevens, 2009, p. 19). It is also necessary to place great importance on the materiality and human scale of a waterfront leisure setting with regard to

comfort and sensory stimulation. Waterfronts should be “felt underfoot and against the skin”, not just viewed with the eyes (Stevens, 2009, p. 19).

According to Jan Gehl, leisure spaces at the waterfront also require certain environmental conditions to be successful. His research along Melbourne’s Southbank Promenade found that it held the highest rating for shelter from wind, noise, pollution and traffic, exposure to sunshine, and quality of view among the top ten public spaces downtown (Stevens, 2006, 182), all conditions which result from its separation from the city. Gehl also argues that high quality spaces have lively edges and that there is a difference between ‘necessary’ and ‘optional’ activities; ‘resultant’ social activities evolve out of these two categories, ‘occurring spontaneously as a direct consequence of people moving about and being in the same spaces’. When planned activities are interspersed throughout a waterfront area, informal leisure activities have the tendency to appear (Stevens 2006, p. 182).

According to Peter Harnik, parks and open spaces are “increasingly being recognized and promoted as a key element in reviving downtown communities and improving the overall quality of life” (Harnik, 2000, p. 251). Parks are some of the most common types of recreation spaces found at the water’s edge, and for this reason deserve particular importance in this discussion. In their 2003 study of urban park in-fill, Andrew J. Mowen and John J. Confer found that the number of future park visitation intentions was directly related to the “perceived accessibility, convenience, compatibility, and relative advantage over existing neighborhood parks” (2003, p. 58). They also argue that parks need to be accessible to nearby residential areas and should consider how structural characteristics such as

distance, access points, transportation routes, and level/type of parking will impact the use patterns of park visitors (2003).

Frederick Law Olmsted, the 19th century landscape architect and designer of New York City's Central Park among many others, believed that parks should be easily accessible to all, should have a discernable and convenient circulation system, should have popular attractions for visitors, and should be "considered with an eye to what would occur over generations" (Garvin, 2010, p.16). Baud-Bovey and Lawson believe that urban parks should be social, structural, and ecological, and must answer the needs of the whole community, including the silent majority (1998, p. 242). Avoiding over-design, paying close attention to the diversity of the population served, developing multiple use facilities and versatile sports facilities, and defining the park's character early in the development process are all important aspects of a successful urban park (1998, pp 234-245).

In *The New Waterfront: A Worldwide Urban Success Story* Ann Breen and Dick Rigby describe the newly created public spaces – major parks, walkways and trail systems, marinas and neighborhood play areas – as the biggest change in terms of acreage and community impact, along the contemporary urban waterfront (1996, 137). In terms of the overall success of an urban waterfront development project, the provision of public recreation opportunities and leisure spaces are a fundamental piece of the puzzle.

3.2 Development

The following discussion refers to urban waterfront development, or development of any kind that is directly fronting the water in an urban area. For this section,

concern is focused primarily on real estate development at the waterfront; economic and sustainable development are discussed elsewhere in this thesis.

While the fundamental requirement of waterfront development is the same as other developments throughout an urban area – that the difference in an existing property's value and its developed value is greater than the cost of redeveloping the property – waterfront development projects face greater scrutiny from the public. Richard Marshall contributes this difference to the often highly visible and high profile locations of urban waterfront projects. Typically, the economic and political stakes are higher on the waterfront (2001, p. 7). However, once revitalized, waterfront development often achieves a higher market value, particularly for residential uses, which are sold or rented at a premium.

In his book *Urban Waterfront Development* Douglas Wrenn lists certain requirements common to all development project proposals necessary for the success of a project: either a commitment to lease or purchase the finished space at a price that will cover costs plus a return or tax benefit, or else evidence that the space will be rented or purchased within a reasonable time period after project completion; a buildable site; provision of necessary infrastructure; necessary capital to acquire land and design and build the project; and public approvals (Wrenn, 1983 p. 73). These same requirements are true of waterfront projects.

Attracting developers to the waterfront can be a difficult task. The sheer size of many waterfront projects, often numbering in the tens, hundreds, and even thousands of acres, is a deterrent in and of itself. Further, these sites may lack basic utilities such as modern streets, power, and sewer systems, and existing infrastructure, including piers, pilings, bulkheads, and seawalls requires expensive maintenance (Brown,

2006, p.15). However, while these obstacles may seem difficult to overcome, urban waterfront redevelopment also presents unique opportunities for revitalization of a city's downtown core. "The waterfront has become a tremendous opportunity to create environments that reflect contemporary ideas of the city, society, and culture" (Marshall, 2001, p. 7).

Wrenn offers some advice on incentivizing the urban waterfront for potential developers. He suggests local officials stimulate demand for private development by ensuring people will be on the waterfront through recreation and cultural programs. He also suggests reducing taxes for developers and favorably pricing public services such as water and sewer to increase the attraction of a project. Further, local governments can help facilitate development by taking steps to ease the process of acquiring land (1983, pp. 62-63).

According to Marshall, waterfront development projects are "born out of a process, one that involves all levels of government, significant sources of capital, various organizations and individuals that may all have competitive agendas" (2001, p.7). During the predevelopment stage a development entity must be established in order to bring these processes together. This can be either a group of participants from the public sector, a private sector organization, or a combination of both public and private interests. It is also during this stage that basic economic and physical conditions of the site are analyzed and a general design and development strategy are formulated (Wrenn 1983, p.75).

One of the most common types of development entities in practice today is the public/private partnership. It is particularly useful for waterfront projects as the size and scale of the projects are often too large for one entity to undertake alone.

While the interests of the public and private sectors remain essentially separate in a public/private partnership, they perform services, provide funds, or make commitments to build facilities based on a mutual agreement of responsibility. The public sector is often the initiator of these types of partnerships because they have the requisite management responsibility and may even own the property, but they lack the necessary capital to initiate the entire development project on their own (Wrenn, 1983, p. 75).

Project implementation occurs during the second stage of the development process, or the development stage. By this point, permits and approvals should have been obtained, and public and private financing responsibilities should have been agreed upon. It is during this stage that project financing and leasing are undertaken (Wrenn, 1983, p. 96). Peter Hendee Brown describes how this point in the development process can prove challenging as “the issues of scale and timing together complicate the financing of redevelopment” (2006, p. 16). City leaders expect large waterfront sites to provide return on investment through rents, fees, and/or taxes. However, because of the extremely high levels of capital required to provide the necessary infrastructure during the predevelopment stage, it can take decades before the debt is repaid and returns begin to be realized (Brown, 2006, p. 16). The ability of a development entity to manage this difficult balancing act of project financing is crucial to the overall success of a project.

According to Wrenn, it is during the post-development activities that the long-term viability and success of a project are determined. A project must be managed and maintained to fully realize its full potential. While the responsibility for maintenance and management of the project is typically delegated during the pre-development stage, formal agreements are not signed until this final stage of development.

Because of the complex nature of waterfront projects, these agreements must clearly define which party is responsible for each part of the project and also who will pay subsequent costs. Public/private partnerships usually consolidate these tasks under one entity (1983, p. 106).

In addition to the challenges of size, inadequate or non-existent infrastructure, and potential maintenance costs mentioned earlier, waterfront development projects face many other obstacles. Perhaps the largest of these is the necessity of balancing the new uses at the water's edge. Typically these include some combination of residential, commercial, tourism, recreation, and cultural attractions. Also, as a direct result of the grand scale of many contemporary waterfront projects, there is often a very lengthy time frame for development and a need for large up-front investments (Brown, 2009, pp.16-17).

Other challenges impacting waterfront development include the issues revolving around the control and ownership of waterfront property, which can be very complex. There are often many different property owners – perhaps a port authority, city agencies, private individuals, and/or the federal government – which leads to diverse and competing interests. Further, waterfront areas often fall under the jurisdiction of federal and state regulatory agencies, which can hamper development approval (Brown 2009, pp.15-16).

Finally, as Richard Marshall points out, one of the greatest challenges facing contemporary waterfront development projects is the tendency to focus on the end-product to the extent that developers “ignore the problems and possibilities faced by cities as they work to create them” (2001, p. 6). All too often waterfront projects neglect to assimilate with the larger urban context. Marshall goes further

to say “the idea of project-as-product combined with the spread of ‘architectural capital’ has led to situations where international design clichés characterize the waterfronts of Boston, Tokyo, and Dublin. The result is a kind of rubber-stamping of the ‘successful’ waterfront magic, often with limited results” (2001, p.6).

3.3 Tourism

According to the World Travel and Tourism Council, contemporary tourism is the largest industry in the world, measured by gross output, value added, capital investment, employment, and tax contributions (Bosselman, et al. 1999, p.1). Such stature has been attributed to the increasing wealth of the middle classes, changing demographics including increasing numbers of retirees, transportation improvements such as the increased size and number of airplanes and a decrease in overall travel costs, technological changes such as improved communications via the internet and wireless devices, and the overall maturation of the tourism industry (Bosselman, et al. 1999, p. 1).

The most obvious benefit of tourism to a community is economic. For developers, the benefits are seen in terms of profits. For local governments and citizens the benefits are much wider and are realized through increased employment opportunities, an expanded tax base, access to locally produced goods, an ability to finance public infrastructure improvements, and an improved standard of living, among others (Bosselman, et al. 1999, p. 3). With that said, tourism has much broader benefits than those related purely to the economy. Some of these include social and cultural benefits, including a greater appreciation of local historical structures, landscapes, and cultural heritage, which often results in conservation measures to ensure the continued protection of such assets (Bosselman, et al. 1999, p.5).

As Jorgen Ole Baerenholdt, et al. note in *Performing Tourist Places*, most environments attractive to tourists are not created specifically as tourist attractions; they typically have their own history and geography of nature, society, and culture (2003, p.11). In urban environments, this is characterized by the tendency of tourism to take the form of more education-related versus recreation-related forms of travel. Erve Chambers offers the example of historical tourism, which is more common in large cities, as a result of the greater likelihood of the presence of historical sites in large urban areas (1997, p. 69).

One of the greatest benefits of tourism in the urban environment is the ability to mix work and play, business and pleasure. This ability to combine activities in a creative and interesting way is in large part what gives the city its allure. For example, after their daytime commitments have come to a close, business travelers can spend the evening visiting friends or relatives, visiting theaters or museums, and may even bring along their families to sightsee while they are busy with work commitments (Chambers, 1997, p. 67).

While no two tourist destinations are alike Fred P. Bosselman, et al. assert that the goals of each destination are the same: to secure those benefits that the community most desires; to avoid those impacts that the community deems harmful; to share the benefits and burdens in an equitable way; and to be resilient enough to adapt the chosen strategy to future changes (1999, p.11).

While there are many benefits of tourism, as described above, there is also the potential for negative impacts on the community, the economy, and/or the environment. Addressing tourism on the redeveloped waterfront in particular, John McCarthy asserts that tourism based uses frequently fail to address the social

and economic problems of the wider city; even the immediately surrounding area is often overlooked (2004, p.61). McCarthy also points out that tension between conservation and tourism-related economic development can be a difficulty faced during the redevelopment process. Not uncommonly the need to attract investment, particularly in tourism and leisure-related uses, is directly at odds with the need to preserve the historic and environmental resources that attracted tourists and investors to the area in the first place (McCarthy, 2004, p. 62).

Typically, tourism facilities are developed by the private sector. The commercial feasibility of a project is essential, and factors such as international competition, character and image of a destination, intermediaries, the number of users limited by accommodation provided in the area, and demands on resources all play an important role in determining the level of feasibility of a project (Baud-Bovy & Lawson, 1998, p. 3). Further, the same authors assert that tourist centers need year-round occupation and a balance of employment. These should complement the region by offering a wider choice of hotels, restaurants, entertainment, and shopping (1998, p. 200).

Assessment of a place's carrying capacity, defined by McIntyre as: "the maximum use of any site without causing negative effects on the resources, reducing visitor satisfaction, or exerting adverse impact upon the society, economy or culture of the area" is another essential component of tourism development (1993, p. 23). This involves an analysis of each site and planned activity to assess the level of use tolerable to the visitor, the area's resources, and the community (Baud-Bovy & Lawson, 1998, p.11-12).

When discussing the planning and implementation of tourism development, Williams, Penrose, and Hawkes stress the need for participation of all parties concerned. This includes developers, intermediaries – those bodies, agencies, or operators who serve as the link between the tourist facility and the clientele; ex. tour operators or travel agents – and national, regional, or local public authorities responsible for the planning, decision making, investment in infrastructure, and setting up of organizational structure (1998).

It is also important that tourism development have high levels of coordination between the various components of a project. A failing in any component will immediately and severely affect the project. A lack of hotels, delays in construction, insufficient numbers of staff at tourist facilities, and poor marketing and promotion of facilities will all have a disastrous effect on the numbers of visitors coming to the site, subsequently costing the city and developers valuable tourist revenue (Baud-Bovy, 1998, p. 220). Baerenholdt, et al. concur, stating “since tourists demand complementary products – such as transport, accommodation, food, sights and activities – cooperation and networking among such specialized producers are critical” (2003, p.11).

Baud-Bovy and Lawson have also found that visitors are usually impressed by the “totality of a scene”. What they mean by this is that attractions such as historic monuments benefit from orientation centers, opportunities to experience the sights, activities, and conditions of the period, reconstruction of ruins, and visitor centers as multiple elements in a complete attraction. Karski agrees, stating that the attractiveness of urban destinations lies in the “... rich variety of things to see and do in a reasonably compact, interesting, and attractive environment, rather than in any one component. It is usually the totality and the quality of the overall tourism

and town center product that is important” (1990, p. 15-17). They also assert that monument (or attraction) ensembles are more effective and impressive than lone monuments. Of particular importance for waterfront tourism is the notion that urban monument ensembles benefit from measures for classification, protections, and improvement, but may have to be considered individually, building by building, in order to avoid the pressure of high land values, traffic problems, or the dominating presence of larger, more modern buildings (1998, p.231).

Of particular importance in the discussion of tourism development in urban areas is an understanding of the characteristics of sustainable tourism, or the conditions necessary to ensure long-term vitality of a tourism project. Grundey believes that ecologic, economic, local, and cultural sustainability must be present in order to achieve sustainable tourism (2008). Baud-Bovy and Lawson go into further detail, offering the following characteristics of sustainable tourism: a long-term view of tourism with regard for future inheritance as well as present needs; measures to ensure that consumption of tourism does not exceed the ability to provide; optimization to ensure equity in development between tourism requirements and community concerns, and investment returns and environmental safeguards; carefully planned economic growth; effective management and maintenance of quality in both development and conservation of sites and traditional values to ensure continuation of benefits” (1998, p.10).

In order to successfully implement the proposals of any tourism plan or development, tourism “products” need to be promoted. Types of promotion include: large-scale resources to finance marketing and reservation systems for hotels, franchises, airlines, etc; intermediaries to organize and facilitate arrangements, such as tour organizers and travel agents; and cooperation to extend promotion by collective

representation, such as a tourist convention bureau or a referral and marketing agency (Baud-Bovy & Lawson, 1998, p.224). Cooperation and networking between the complementary products associated with tourism is also critical, and local tourist organizations and business networks can play an important role in managing the flow of tourists to and from the region, running tourist oriented shops, and constructing facilities (Baerenholdt, et al. 2003, p. 11).

The ability of a community to adapt to changes in the marketplace is vital to ensuring the continued vitality of a place, and is particularly relevant for tourist destinations. Place marketing is a response to the understanding that “marketplace shifts and changes occur far faster than a community’s capacity to react and respond” (Kotler, et al. 1993, p. 18). Philip Kotler, et al. describe four activities of place marketing: designing the right mix of community features and services; setting attractive incentives for the current and potential buyers and users of its goods and services; delivering a place’s products and services in an efficient, accessible way; and promoting the place’s values and image so that potential users are fully aware of the place’s distinctive advantages (1993, p. 18).

Kotler, et al. continue on to list the fundamental tasks required for a place to succeed: interpreting what is happening in the broad environment; understanding the needs, wants, and behavior choices of specific internal and external constituencies; building a realistic vision of what the place can be; creating an actionable plan to complement the vision; building internal consensus and effective organization; and evaluating at each stage the progress being achieved with the action plan (Kotler, et al. 1993, p.20). In order for tourist destinations to experience long-term success, they must have the capability and expertise necessary to effectively market the place as a whole.

As is true of most things in life, too much of a good thing can be bad. This is no different for tourist destinations, whose very livelihood relies on a fine balance of elements such as facilities, number of visitors, accommodations, and transportation. In order to avoid problems such as environmental degradation, crime, and encroachment on public land related to tourism growth, Fred P. Bosselman et al. suggest strategies for managing such growth. He believes that the most successful of these include those that address local goals, reflect the character of the destination community, and respond to local conditions (1999, p.272). Strategies must be tailored to each individual tourist destination and should evolve from an effective community planning process (1999, p.273).

3.4 Conclusion: Criteria for Sustainable Waterfront Revitalization

From the discussion above, and considering the existing literature in the review of accepted recreation, development, and tourism practices, a list of criteria necessary for sustainable waterfront revitalization was compiled. The case study analyses conducted in subsequent chapters will consider these criteria, in addition to the interview responses and documentary evidence. It is important to note that this list of criteria is by no means exhaustive; rather, it provides a foundation for assessment of sustainable revitalization at the waterfront. The criteria are listed below:

Leisure and Recreation

- Engage a broad range of users;
- Be designed for both large and small-scale interventions and events;
- Be flexible and capable of accommodating a multitude of different events;
- Be flexible to change over time;
- Foster social and cultural exchange;

- Accommodate people from diverse backgrounds;
- Fulfill user's "fantasies" about how to relax and enjoy their leisure time;
- Engage the senses; hearing, sight, taste, smell, and touch;
- Provide shelter, exposure to sunshine, and quality views;
- Have planned activities in order to attract informal activities;
- Be accessible to nearby residential areas;
- Support the needs of the whole community;
- Be easily accessible; and
- Provide options for all generations of users in mind

Development

- The developers must have a commitment to lease or sell the finished project at a price that will cover costs and provide a return or tax benefit, or else evidence that the project will be leased or sold within a reasonable time period after project completion;
- The site must be buildable and have access to necessary infrastructure;
- The development entity must have necessary capital to purchase land and complete the project;
- The project must have community support;
- Local officials must stimulate development through a variety of incentives, including: providing recreation and cultural resources and programs at the waterfront; reducing taxes and favorably pricing public services; and easing the process of acquiring land;
- Establish a development entity during the pre-development stage. This can be either a group of participants from the public sector, a private sector organization, or a combination of both public and private interests;

- There must be high levels of coordination between the various components of a project;
- Use public/private partnerships whenever feasible and sensible;
- The development entity must be able to manage the complicated balancing act of project financing;
- Agreements for the management and maintenance of projects must clearly define which party is responsible for each part of the project and also who will pay subsequent costs;
- There must be a balance of uses at the waterfront;
- Developers must be aware of the lengthy time-frame and high up-front costs associated with waterfront projects;
- Waterfront developers must avoid focusing solely on the end-product and rather work to adapt to the changing conditions of the city and project; and;
- Developers must assimilate and integrate their projects with the surrounding city

Tourism

- Developers of waterfront tourism projects must make every effort to ensure their projects address the social and economic problems of the wider city;
- Developers of tourism projects must respect the needs of conservation;
- Tourist centers need year-round occupation and a balance of employment;
- Respect the carrying capacity of the site/city;
- All stakeholders must be active participants in the planning and implementation of tourism development;

- There should be high levels of coordination between the various components of a project;
- Combine multiple tourist attractions into one large attraction;
- Consider tourism with regard for future inheritance as well as present needs;
- Ensure that consumption of tourism does not exceed the ability to provide;
- Ensure equity in development between tourism requirements and community concerns, and investment returns and environmental safeguards;
- Effective management of quality in both development and conservation of sites and local values to ensure continuation of benefits;
- Tourism projects must be promoted through large-scale resources, intermediaries, and/or collective representation;
- Complementary products (hotels, restaurants, etc) associated with tourism must cooperate and network with one another;
- Must adhere to the basic principles of place marketing: design the right mix of features and services; set attractive incentives for buyers and users of its goods and services; deliver products and services in an efficient way; and promote the place's values and image, and;
- Must have a plan in place to manage tourism growth

With the criteria for successful waterfront revitalization now established, it is necessary to begin a conversation about the methodology utilized for analysis. The following chapter describes the specific methodologies used and how they will be employed to ascertain conclusions based on the comparison analysis.

CHAPTER 4: METHODOLOGY

This thesis employs a multiple-case study methodology. Robert Yin, a prominent scholar on the subject of case study research, describes case studies as “the preferred strategy when ‘how’ or ‘why’ questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within some real-life context” (Yin, 1983, p. 13). Each of Yin’s specifications applies to the questions asked in this thesis. *How* can urban waterfront revitalization be sustainable? *Why* have certain cities seen success in their waterfront revitalization attempts? The events to be analyzed at each study area have already occurred, leaving no opportunity for any attempt at control or interference by researchers.

Three case studies, in various stages of urban waterfront revitalization, have been selected for the thesis development: Baltimore, Maryland; San Francisco, California; and Seattle, Washington.

4.1 The Case Studies

Baltimore, San Francisco, and Seattle were selected for various reasons; however, the primary reason is that each represents a different generation of urban waterfront revitalization. Baltimore’s Inner Harbor development began in the late 1960’s and in many ways can be seen as complete. San Francisco’s revitalization began after the 1989 Loma Prieta earthquake, was stalled by Proposition H in the 1990’s, and continues again today. Seattle’s initial attempts at waterfront revitalization began

in the 1990's with the Bell Street Pier project, but today the city is embarking on an extensive revitalization of its downtown waterfront.

Another reason for the selection of these case studies is the widespread acceptance of these areas as successful urban waterfront revitalization examples. For the purpose of this thesis, these commonly held beliefs were challenged by the research questions, which proposed to analyze each study area from three specific perspectives. Further, each study area represents a port city that has seen its traditional industries move away. This type of transition is very demonstrative of cities across the United States that are experiencing similar changes, and as such may potentially provide a means for application of this thesis' findings in the future.

Baltimore, Maryland

Baltimore is a city of roughly 650,000 people located on the east coast of the United States. Once a thriving seaport, Baltimore's Inner Harbor fell into disrepair after World War II. Following the success of the Charles Center downtown revitalization project in the mid 1960's, city leaders turned their attention to the Inner Harbor. Over the next 20 years, the Inner Harbor was transformed into a vibrant and wildly successful attraction for both residents and tourists alike. The revitalization of the Inner Harbor is recognized by many as one of the early leaders of the waterfront redevelopment movement (Breen & Rigby, 1994).

San Francisco, California

San Francisco is a dense city of nearly 800,000 residents housed on a seven square mile peninsula on the west coast of the United States. Home to prospectors during the Gold Rush of 1849, San Francisco had a booming commercial waterfront through the end of World War II. However, much like Baltimore, its once

vibrant seaport took a downturn with the advent of containerization. Maritime uses continued to decline through the 1980's, and soon the city began to look towards revitalization. Today, San Francisco's waterfront is a bustling combination of tourist attractions, adaptively reused buildings and piers, traditional maritime uses, and public spaces. With a great deal of its waterfront yet to be revitalized, the city is at an exciting stage in its evolution.

Seattle, Washington

Located on Puget Sound on the west coast of the United States, Seattle has a population of roughly 610,000 people. While still considered a relatively major U.S. seaport, Seattle's main maritime operations left the downtown area for a location further south in the 1960's. During the 1970's revitalization of the abandoned and decaying piers began to take shape, and tourist attractions and public parks began to appear alongside more traditional maritime uses such as the state ferry system. Today, the city is embarking on a massive revitalization plan for its central waterfront that includes the demolition of its aging elevated waterfront highway. While still in its early stages, this project will transform the way that Seattleites use and connect with their waterfront.

4.2 Methods

When conducting a multiple-case study, Yin suggests the investigator utilize multiple sources of evidence to aid in affirmation or denial of the research hypotheses (Yin, 1983). Two such sources were used in this thesis: key player interviews and documentary evidence.

Key Player Interviews

Interviews are essential sources of information within the case study research process. For the purpose of this thesis, interviews were open-ended, which meant the facts and the opinions about events were of primary interest to the interviewer (Yin, 1983). Individuals close to each case study's urban waterfront revitalization effort were selected to participate in the process in the hopes that their insights would prove valuable to the criteria formulation process.

Email and phone interviews were conducted with key players in the fields of tourism, recreation, and development. Interviewees included: Paul Dombrowski, Director of Planning and Design at Baltimore Development Corporation; Tom Noonan, President and CEO of Visit Baltimore; Kathleen Diohep, Project Manager at the Port of San Francisco; Maureen Gaffney, Planner with the San Francisco Bay Trail; David Graves, Senior Planner with Seattle Parks and Recreation; and Steve Pearce, Waterfront Seattle Project Manager with the Seattle Department of Transportation.

Interviewees were asked 12 questions related to waterfront revitalization in their city. Half of the questions were asked in a way that would prompt discussion of particular projects within the interviewee's respective city, while the other half were related to waterfront revitalization in general. All of the questions were intended to garner responses that would either support the criteria compiled from the literature review or provide new insights or additional criteria. A complete list of the interview questions can be found in Appendix A.

Documentary Evidence

An analysis of relevant documentary evidence provided a means of corroborating statements made by interviewees, aiding in triangulation of the data collected (Yin, 1983). For the purposes of this study, statistical data, formal studies, and newspaper and other articles were of particular importance. City tourism organizations, public economic and development agencies, downtown associations, and chambers of commerce provided vital statistical information, economic assessments, and development project forecasts.

One of the limitations of this type of data collection is the level of difficulty involved in locating statistics from previous years. All three case study cities proved challenging in this regard, and as a result nearly all of the data only speaks to the current or very recent conditions found at the waterfront. While a more in-depth study would benefit from the comparison of pre-revitalization and post-revitalization statistics, the current data sufficed for the goals of this thesis.

CHAPTER 5: CASE STUDY ONE: BALTIMORE, MARYLAND – THE INNER HARBOR

5.1 Site History and Description

The Early Years

Baltimore had its earliest beginnings at the Inner Harbor, the site of its founding in 1729. Originally, the harbor was the center for trade of tobacco from nearby plantations; later, it was known for shipping wheat, iron, and sugar, as well as a center for shipbuilding. The Inner Harbor continued its importance as a manufacturing and shipping hub until a massive fire leveled the downtown and dock areas in 1904. While the docks and downtown district were immediately rebuilt, no attempt was made at the time to modernize the infrastructure and dock facilities (del Rio, 2011; Wrenn, 1983).

As a result of the outdated dock facilities, the Inner Harbor eventually fell into decline after World War II (Figure 5.1). Without the necessary improvements required to manage a shift from break-bulk to containerized shipping, the piers and warehouses became run-down

Figure 5.1. Baltimore's Inner Harbor, mid-20th century. *Source: Unknown.*

and abandoned. Concurrently, residents of Baltimore were fleeing the city for the new, more affordable suburbs, which only helped to exacerbate the overall decline of downtown Baltimore and the Inner Harbor. By the 1950's and 1960's, travel agents considered Baltimore "D.O.A." and its own residents described it as "the ruins of a once-great medieval city" (Millspaugh, 2003 p. 36); it had become apparent that Baltimore was in need of a plan for revitalization.

Charles Center: 1950's-1960's

Any mention of waterfront revitalization in Baltimore must first begin with a discussion of the Charles Center development. Much like other cities around the country, downtown Baltimore in the 1950's faced increasing competition from growing suburban centers. In 1954, city business leaders, growing desperate in the face of declining tax revenues, formed the Committee for Downtown, Inc, a group dedicated to finding private funding for the creation of a downtown master plan. A year later, the Committee for Downtown merged with the Greater Baltimore Committee, Inc. to create the private planning group the Planning Council of the Greater Baltimore Committee (GBC) (Lang, 2005).

As work progressed, it became apparent that planning for the entire 300-acre central business district could take years, a serious risk for Baltimore, whose economy was flailing. The group chose instead to focus on a single, much smaller project that had the potential to bring about great change and serve as the anchor for the entire master plan and downtown revitalization (Millspaugh, 2003). The Charles Center was a redevelopment proposal for 33-acres of downtown Baltimore; it would consist primarily of office space, hotel rooms, apartments, a theater, retail, public plazas, and parking. Its goal was to not only spur investment at adjacent sites but also to link the retail, financial, and government districts of the city (Lang, 2005).

The GBC hired planner David A. Wallace (later of the urban design firm Wallace, McHarg, Roberts, and Todd) to design a plan for the project site. The GBC donated this plan to the City of Baltimore and it was analyzed and endorsed by its Urban Renewal and Housing Agency. Mayor Thomas D'Alesandro Jr. provided a \$25 million city bond issue and the city council provided the power of eminent domain after the adoption of the 1958 urban renewal ordinance (Millspaugh, 2003).

With the idea of promoting high standards of design at the Charles Center, a design competition was held in 1959 to select the developer of its first office building. A bid which included a project by Ludwig Mies van der Rohe, one of the premier architects of the time, won the competition and One Charles Center opened in 1962 (Millspaugh, 2003). By 1963 three more structures had been completed, and by the late 1960's the Charles Center was largely built out (Lang, 2005) (Figure 5.2). The success of the Charles Center built confidence amongst both the public and private sectors in Baltimore, and an expansion of the redevelopment efforts to include the adjacent Inner Harbor area was soon to begin.

Figure 5.2. The Charles Center in 1969.
Source: <http://www.theubpost.com/2.10973/tour-of-baltimore-1.1529665>. Retrieved on June 12, 2011.

The Inner Harbor Master Plan:1960's – 1970's

When redevelopment plans at the Inner Harbor began, the harbor was home to rundown wharves, wholesale produce markets, mostly abandoned warehouses, and rail yards (Wrenn, 1983). However, its natural geography and close proximity

to the Charles Center redevelopment and downtown made it an ideal extension of Baltimore's downtown renaissance. Former Mayor and Governor Theodore R. McKeldin was re-elected mayor of Baltimore in 1963 and promptly hired Wallace McHarg Associates (later Wallace, McHarg, Roberts & Todd) to complete a master plan for the area. The plan was unveiled in 1964 and included four primary goals: reconstruction of the Municipal Center; the construction of office buildings on "prestigious" waterfront sites (Millspaugh, 2003); multi-family housing along the east and west sides of the Harbor; and a waterfront "playground" to serve as a center of recreation, culture, and entertainment for Baltimoreans. Plans for the Municipal Center were later scrapped when voters failed to approve important loans for the new government buildings (Wrenn, 1983).

After a \$2 million bond issue from voters, the Charles Center management team formed a private corporation, Charles Center-Inner Harbor Management, Inc (CC-IH) headed by Martin L. Millspaugh, the former deputy general manager of the Charles Center. The group was tasked with the management of the redevelopment process, guided by Baltimore's Commissioner of Housing and Development. In order to begin redevelopment of the Harbor, CC-IH had to acquire nearly 1,000 properties, relocate 700 businesses, and dispose of toxic dredge materials from the harbor. The next step was the creation of a federally funded design concept team, to offer an alternate location for a new state-proposed expressway along the waterfront. Backed by community groups, this proved a successful move, and the expressway project was subsequently abandoned (Millspaugh, 2003).

In 1968, with the property along the water's edge now in public ownership, a new bulkhead/public wharf was built, followed by a public promenade circling the Harbor (Figure 5.3). The promenade connected public recreation areas, picnic

shelters, and play areas, and open spaces were minimally landscaped to allow for a variety of uses (Wrenn, 1983). The U.S. Constellation, the oldest surviving navy warship, was anchored in the Inner Harbor, becoming its first attraction and a symbol for Baltimore (Wrenn, 1983).

By 1969, large corporations had begun committing to the construction of large office towers along the Inner Harbor, starting with the USF& G Insurance Company and followed soon after by the World Trade Center, a public-private enterprise which included Baltimore's Port Authority (Millspaugh, 2003).

Figure 5.3. The Inner Harbor promenade today.

Source: <http://baltimore.shownbyphotos.com/20070315-baltimore-inner-harbor-0108-800.jpg-large.html>. Retrieved on June 12, 2011.

The city began promoting the Inner Harbor as a place for free entertainment and activities with the creation of “Sunny Sundays” in 1970. When Mayor William Donald Schaefer came into office in 1972, he continued to promote “Sunny Sundays” while also establishing weekend cultural events at the Inner Harbor. Mayor Schaefer continued on for another three terms, eventually becoming governor of Maryland in 1987. His promotion of the Inner Harbor has been credited with transforming Baltimore citizen's attitudes of their city from one of inferiority to pride and accomplishment (Global Harbors, 2011).

In 1973, the Baltimore City Fair drew 1.5 million people to the harbor over one weekend. Festivals and other activities were increasingly held at the water's edge (Wrenn, 1983). Meanwhile, the 28-story World Trade Center was approved, and plans for a marina and finger piers were underway. Baltimore's Inner Harbor

soon became a haven for tour and pedal boats, and the home of a World War II submarine and the Pride of Baltimore, an authentic Baltimore clipper ship. The public wharf began attracting visiting ships from around the world and the 100,000 square foot Maryland Science Center was completed in 1976 (Millspaugh, 2003).

While the other goals of the master plan were quickly being realized, the introduction of housing to the Inner Harbor was much slower to start. The turning point came in the mid-1970's when the Department of Housing and Community Development began a "homesteading" program in the Otterbein neighborhood on the west

Figure 5.4. The Otterbein neighborhood today. *Source: Gerald Neily.*

side of the Inner Harbor. 104 decaying and dilapidated but historic row houses were raffled off to local residents for \$1 each, in exchange for an agreement to restore and live in them (Figure 5.4) (Live Baltimore, 2011; Millspaugh, 2003). Otterbein is now recognized as a historic preservation area, and the median home price in 2009 was \$307,000 (Live Baltimore, 2011).

International Tourist Destination 1970's – 1980's

Described by Martin Millspaugh as "the turning point for the Inner Harbor", the July 1976 tall ship celebration brought hundreds of thousands of visitors from outside of Baltimore to the Inner Harbor (Millspaugh, 2003). City officials and harbor managers began to envision the Inner Harbor as an international tourist destination.

By this time, a report by the Economic Research Associates concluded that although the Inner Harbor had an excellent setting for a major tourism industry it lacked a “critical mass” of attractions, which became the CC-IH’s next goal. In 1979, the Baltimore Convention Center opened, followed shortly by the 1980 opening of James Rouse’s Harborplace, a festival marketplace on the waterfront. The development of Harborplace, once the source of great public contention and the subject of a failed citizen referendum, became one of the most important contributors to the establishment of a critical mass on the waterfront. With the 1981 openings of the National Aquarium and the Hyatt Regency Baltimore Hotel, the Inner Harbor reached its critical mass of attractions (Figure 5.5) (Wrenn, 1983; Millspaugh, 2003).

Figure 5.5. The National Aquarium viewed from the water. Source: <http://www.ronsaari.com/stockImages/baltimore/baltimoreAquariumExterior.php>. Retrieved on June 12, 2011.

In 1982 attendance at the Inner Harbor had reached twenty million visits per year, with one third of those from out-of-town tourists. In 1984, plans were announced for twenty new public and private development projects in the Inner Harbor area (Global Harbors, 2011).

Development Continues: 1980’s – present

Throughout the 1980’s and 90’s the Inner Harbor continued its success. By 1990, the Science Center, National Aquarium, and the convention center had all built major expansions. In 1995, the CC-IH merged with two other city corporations to

become the Baltimore Development Corporation, an entity tasked with providing development assistance to companies in Baltimore (Baltimore Development Corporation, 2011).

The mid-1990's welcomed the Camden Yards Sports Complex, one of the most successful contributions to the revitalization of the Inner Harbor. The complex, three blocks from the Inner Harbor, is comprised of the Oriole's baseball stadium (completed in 1992), Ravens football stadium (completed in 1998), the converted old Camden rail station, warehouse, and office building, museums, stores, and restaurants (Figure 5.6) (del Rio, 2011).

The idea behind the Camden Yards complex originated with William Schaeffer and his efforts to keep the Orioles in Baltimore during his governorship in the 1980's. Originally just meant to be a baseball stadium, the concept evolved into an entire sports complex. The primary funding for the stadium came from the state lottery, and the stadium, known

Figure 5.6. The Camden Yards Sports Complex. *Source:* http://www.andrewclem.com/Baseball/Photos/CamdenYards_SE_entry.jpg. Retrieved on June 12, 2011.

as Oriole Park at Camden Yards, was designed by HOK architects to mesh with and be inspired by the surrounding historical architecture (del Rio, 2011).

Oriole Park is considered by many to be the first of the “retro” ballparks trend, a baseball-only stadium with design features reminiscent of the ballparks of the

early 20th century (Baltimore Orioles, 2011). The stadium has been particularly successful due to its close proximity to the harbor, accessibility via light rail, and the ability of the two stadiums to share facilities such as parking (games are purposely scheduled on alternate days to avoid traffic congestion) (del Rio, 2011).

By 2000, sixty new projects had been completed in the Inner Harbor area, including twelve hotels and a subway station (Millspaugh, 2003). More recently, the eastern area of the Inner Harbor has been developed with residential buildings, retail shops, restaurants, and hotels (Visit Baltimore, 2011). In 2003, twenty residential projects had been completed or were in process in the downtown. Downtown Baltimore and the Inner Harbor are finally being seen as desirable places to live (Millspaugh, 2003). Today, attractions such as the American Visionary Art Museum, the renovated mixed-use Power Plant building, and the nightclub and entertainment center Power Plant Live! bring residents and tourists to downtown and the Inner Harbor (Figure 5.7).

Figure 5.7. Power Plant Live!, one of the more recent additions to the Inner Harbor. *Source: http://travel.usnews.com/Baltimore_MD/Pictures/Power_Plant_Live_597/. Retrieved on June 12, 2011*

5.2 Analysis

The Inner Harbor is considered by many to be the premier model of waterfront revitalization. In 2009, the Urban Land Institute described it as “the model for post-industrial waterfront redevelopment around the world” (ULI - Urban Land Institute,

2009). It has been studied by cities around the world in the hopes that it might teach lessons and offer ideas for struggling waterfront communities. Key players in its transformation have traveled extensively in order to share their experiences and propose solutions for decaying waterfronts.

So what is it about Baltimore's Inner Harbor that makes it so special? It is simple enough to look at the harbor as a whole and understand that it works. But what in particular has led to this continued success? By comparing the experiences of the Inner Harbor to the criteria compiled from the literature review of accepted recreation, development, and tourism practices, and through the use of key player interviews and statistical data, this thesis attempts to break down the most important factors in the Inner Harbor's sustained success.

Recreation and Leisure

The Inner Harbor boasts countless opportunities for recreation and leisure. Originally intended as a playground for the residents of Baltimore and its suburbs, the harbor offers public parks flexible and capable of accommodating a multitude of different events such as the "Sunny Sundays" or city fair celebrations of the 1970's. More recently, the parks have offered events such as the Harbor Harvest, a free yoga series, and the World Cup Soccer Tournament viewing (Waterfront Partnership of Baltimore, Inc, 2011).

The waterfront parks are further enhanced by the 35-foot wide public promenade stretching for 7-miles along the unobstructed water's edge, providing easy access to the attractions of the Inner Harbor as well as an opportunity to engage the senses. As Tom Noonan, president of Visit Baltimore, observed, "people crave the water...[they] love sitting outside with their families; it is relaxing to stroll along the

water” (personal communication, May 5, 2011). The parks and promenade satisfy the need to relax, while also offering exposure to sunshine and quality views. In an interview conducted on May 25, 2011, Paul Dombrowski, director of Planning and Design at the Baltimore Development Corporation, spoke particularly of the open public access to the water’s edge and excellent views of the harbor and the city skyline as features that make the Inner Harbor special.

Tourism

The revitalization of the Inner Harbor essentially stemmed from recognition of the need to address the social and economic problems of downtown Baltimore. This recognition was crucial for Baltimore as the resulting tourism projects at the harbor created jobs, brought people to the waterfront, and restored residents’ pride in their city. The ability of developers to perceive the needs of the wider city when proposing tourism projects is one of the criteria for achieving their sustained success.

Another criteria that the Inner Harbor has been particularly adept at meeting is that of cooperation between complementary products such as hotels and restaurants. The harbor is home to dozens of shops, restaurants, and attractions, and over twenty hotels and the Baltimore Convention Center are within walking distance (Visit Baltimore, 2011). These vast tourist amenities are promoted through large-scale resources such as the website Baltimore.org, while organizations like the Baltimore Waterfront Partnership, comprised of major property owners, non-profits, and local residents, provide stewardship and maintenance of the Inner Harbor’s public spaces. Paul Dombrowski highlighted stewardship such as this as one of the most important factors in sustaining the success of revitalization projects (personal communication, May 25, 2011).

As a result of its proximity to four residential neighborhoods, the Inner Harbor has also succeeded in providing year-round occupation. Residents are just footsteps away from the harbor and the attractions it provides. As Tom Noonan stated, “you want to have a large population base living nearby for core user base” (personal communication, May 5, 2011). Although Baltimore’s population has been declining for the last several decades, it has the eighth largest population in the United States living downtown, contributing to the workforce, tax base, and vitality of the city and harbor (“Getting Denser”, 2011).

Development

Redevelopment of the Inner Harbor directly reflects many of the criteria identified from the existing development literature. In particular, the project had community support, established a development entity during the pre-development stage, supported a balance of uses, and assimilated with the surrounding city.

In 1964, the redevelopment of the Harbor received early community support for the Inner Harbor Master Plan in the form of voter-approved bonds valued at \$66 million (del Rio, 2011). This support allowed for the creation of the development entity, the private corporation Charles Center-Inner Harbor Management, Inc, and got the project moving.

The Inner Harbor provides a wealth of services and attractions for visitors and residents. It is the home of the National Aquarium, the Maryland Science Center, several historical and children’s museums, a vibrant harbor cruise industry, two professional sports teams, the festival marketplace Harborplace, countless restaurants and shops, the Baltimore Convention Center, hotels, and a growing residential population. Describing the balance of uses at the Inner Harbor, Tom

Noonan states, “The waterfront has to be a place you would want to live, visit, work, and play”. Both he and Paul Dombrowski identify the diverse blend of uses at the waterfront and their proximity to one another as the most important elements in the success of Inner Harbor over time (personal communication, May 5, 2011).

From its inception, the revitalized Inner Harbor was intended to help regenerate the central business district of downtown Baltimore. Paul Dombrowski notes that the projects of the Inner Harbor “extend the urban fabric to the water’s edge, create center city focal and activity destination points...[and] incorporate and protect the historic nature of the city (personal communication, May 25, 2011). Through its close proximity and physical and commercial ties to downtown, the Harbor has helped create a tourism market that brought 11.5 million people to Baltimore in 2009, generating \$3 billion in economic impact for downtown (Visit Baltimore, 2011). During the 1990’s light rail was constructed, connecting downtown Baltimore, the Inner Harbor, and the Camden Yards Sports Complex to the suburbs and main train station. With an average of 51,000 passengers a day, the light rail has proved particularly good at connecting residents to work hubs throughout the city and at bringing tourists in from outside of Baltimore (del Rio, 2011).

Both Tom Noonan and Paul Dombrowski spoke of the necessity of keeping waterfront projects “fresh”. They described the need for diversity and continuous improvement of ideas, and for the waterfront to keep reinventing itself (personal communication, May 5 & 25, 2011). The Inner Harbor continues to transform itself, with mixed-use projects such as Harbor East under construction and the addition of the Power Plant Live! nightclub and entertainment complex in the early 2000’s. On May 9, 2022, the Baltimore Development Corporation announced that it had received nine new proposals in response to its request for proposals for

new Inner Harbor attractions (Baltimore Development Corporation, 2011). Tom Noonan mentioned that ideas such as a giant waterfront ferris wheel similar to the Millennium Eye in London, a new NHL or NBA arena, and sand volleyball courts had all been put forward as possible new attractions at the waterfront.

One of the factors crucial to the successful revitalization of a waterfront project mentioned by Paul Dombrowski is that of high quality of design and construction of the built environment. According to Paul, this attention is part of what makes the Inner Harbor so successful and should be required of both public and private development projects. Tom Noonan also alluded to this requirement for good design when he described buildings staggered back from the waterfront as an element of successful projects at the Inner Harbor (personal communication, May 5 & 25, 2011).

5.3 Summary of Results

Revitalization of Baltimore's Inner Harbor has resulted in a new identity for the city. While Baltimore has suffered a continued decline in population for the last several decades, downtown has bucked the trend with an increase in residents; it was ranked the 8th densest downtown in the nation in 2010. Today the Inner Harbor, having successfully achieved the goals of the 1964 Master Plan, continues to evolve and reinvent itself.

The results of the analysis show that the Inner Harbor meets the majority of the criteria for recreation, tourism, and development practices. Its waterfront parks and promenade have proven to be successful additions to the harbor, with the promenade in particular serving as a main pedestrian thoroughfare and connection for both visitors and residents. The balance of uses was referred to multiple

times by Paul Dombrowski and Tom Noonan, and has played a pivotal role in the establishment of the Inner Harbor as a global tourism destination (Figure 5.8).

The Inner Harbor has been successful at assimilating with the surrounding city, particularly its surrounding neighborhoods and the downtown. The construction of the Camden Yards Sports Complex and Power Plant Live! mere blocks from the harbor have helped draw tourists and visitors into the urban fabric of the city. The Inner Harbor has stimulated investment in residential uses at the waterfront, and new mixed-use projects such as Harbor East are contributing to the increase in population downtown.

Finally, and perhaps most importantly, the Inner Harbor continues to seek out new opportunities and stimulate growth in Baltimore. As Paul Dombrowski and Tom Noonan reiterated over and over again, the key to the Inner Harbor's sustained success will be its ability to "stay fresh", to reinvent itself and change with the needs of the city. The recent request for proposals issued by the Baltimore Development Corporation is a good sign of things to come. If the Inner Harbor can continue to maintain its critical mass of attractions while also looking towards the future, it will see its revitalization sustained well into the future.

Figure 5.8. The revitalized Inner Harbor, a global tourism destination, as it appears today. *Source:* http://www.baltimore.to/baltimore_panorama.html. Retrieved on June 12, 2011.

CHAPTER 6: CASE STUDY TWO:

SAN FRANCISCO, CALIFORNIA

6.1 Site History and Description

The Early Years

San Francisco's prominence as a port city can trace its history back to the gold rush of 1849. With countless prospectors flooding into the city on their way to the Sierras, the areas between the piers became suffocated with sand, debris, and abandoned ships. As a result, and in response to a desire for more level land, enterprising San Franciscans simply excavated the sand dunes and hills in between the Bay and the heart of the peninsula, and dumped the sand over the debris, filling in the area between the piers and essentially extending the shoreline outward (Gilliam, 1980, p.102). Land speculators began to invest in this newly expanded waterfront, and even went so far as to propose a bill to the state legislature that would give them control of the waterfront in exchange for the building of a seawall. Fortunately, the Bulkhead Bill was vetoed in 1860, as it would have essentially given control of the waterfront to a few monopolists (Barth, 1975, p. 211).

This method of redrawing the boundary lines of the city offshore was a useful tool for the State, as it allowed new land to go to the city, as long as 24% of the revenue from the sale of the new land went back to the state. The state proceeded to redraw the lines one more time, before it officially took over control of the harbor under a State Board of Harbor Commissioners (Gilliam, 1980, p.102). The Port

of San Francisco continued to expand rapidly throughout the remainder of the 19th century with the completion of a 12,000-foot seawall in 1887 (Gilliam, 1980, p.102), and in 1898 with the construction of the Ferry Building - the new center of the commercial waterfront (Brown, 2009, p.39).

From the Ferry Building, finger piers were constructed both North and South along the waterfront, terminating at bulkhead buildings that faced the main industrial and rail thoroughfare, the Embarcadero (Brown, 2009, p. 39). The waterfront became increasingly industrial, with warehouses, railroad switchyards, and other shipping facilities dominating the shore (Gilliam, 1980, p. 102).

In 1906 a massive earthquake and subsequent fire swept through San Francisco. The devastation was immense, and nearly 3,000 people were killed (Figure 6.1). The waterfront was particularly badly damaged due a large part of its construction over landfill. Today, there are only two surviving buildings from before the 1906 earthquake – the Ferry Building, and the Audiffred Building, home of Boulevard Restaurant at Mission Street and Embarcadero (The San Francisco Waterfront, 2011).

In 1915, having steadily recovered from the earthquake's devastation, San Francisco was selected as the host city for the Panama Pacific International

Figure 6.1. San Francisco, after the devastating earthquake and fire. Source: <http://lcweb2.loc.gov/service/pnp/pan/6a01000/6a01900/6a01935r.jpg>. Retrieved June 12, 2011.

Exposition. The Exposition was intended as a celebration of the completion of the Panama Canal as well as the 400th anniversary of the discovery of the Pacific Ocean. The 635-acre exposition was held in what is now known as the Marina neighborhood, bounded by the waterfront to the north and Chestnut Street to the south. Palaces, courts, and state

Figure 6.2. Temporary buildings of the Panama-Pacific International Exposition. *Source:* http://www.books-about-california.com/Pages/Pennsylvania_Trip_PPIE/Pennsylvania_TripPPIE_text.html. Retrieved on June 12, 2011.

and foreign buildings were temporarily constructed of plaster-like materials and were on display during the entire eight and a half month exposition (Figure 6.2). The Palace of Fine Arts is all that remains of the exposition today; the waterfront areas have since become marinas, housing, retail, and public space (The Panama Pacific International Exposition, 2011).

The port continued to see success through World War II, when San Francisco became one of the major logistics centers on the West Coast. The war helped stimulate the shipbuilding and ship-repair industries while shipping troops and supplies to the Pacific (Figure 6.3) (Brown, 2009,

Figure 6.3. Soldiers gathered at Pier 15 during World War II. *Source:* sfpl.com. Retrieved June 12, 2011.

p.39). After the war, however, the vibrant port took a downturn. Containerization was becoming the new method of shipping, and San Francisco simply could not compete with nearby Oakland's access to available land and federal grant monies. The Golden Gate and Bay bridges also took a toll on ferry travel. The port began to decline steadily, and the finger piers and Ferry Building fell into disrepair.

Figure 6.4. The Embarcadero Freeway cut San Francisco off from its waterfront. *Source: http://www.foundsf.org/index.php?title=The_Freeway_Revolt. Retrieved on June 12, 2011.*

In 1958, the waterfront area became the designated location for the new Embarcadero Freeway. The citizens of San Francisco were furious with what the freeway had done to the skyline and views of the city, severing their connection to the water (Figure 6.4). As a result, they successfully revolted

against the plans and board of supervisors, and the Embarcadero Freeway was never finished. By 1965, the city had struck down another nine proposals for freeway construction in San Francisco, earning nationwide recognition for its citizen activism (Rapaport, 2009, p. 1).

In an attempt to streamline the conflicting uses of the bay and its waterfront, the city created the San Francisco Bay Conservation and Development Commission (BCDC) in 1965. The BCDC was charged with regulating land use around San Francisco Bay, as to “regulate new development within the first 100 feet inland from the Bay to ensure that maximum feasible public access to the Bay is provided” and to “minimize pressures to fill the Bay by ensuring that the limited amount of

shoreline area suitable for high priority water-oriented uses is reserved for ports, water-related industries, water-oriented recreation, airports and wildlife areas” (San Francisco Bay Conservation and Development Commission, 2011).

The growing dissatisfaction with the Harbor Commission following the decline of the city’s waterfront resulted in the 1968 Burton Act, which gave control of the port to the city. The San Francisco Port Authority became the Port of San Francisco, with a commission made up of five mayoral appointees (Brown, 2009, p. 40).

1970’s and 1980’s: Transition Away from Maritime Uses

In 1971, attempting to meet the demands of containerization, the Port of San Francisco built a modern container terminal at Piers 94 and 96. Unfortunately, the facilities were never widely used and the Port quickly realized that it could not compete with Oakland, who had already signed contracts with major containership lines. San Francisco’s waterfront continued to struggle throughout the 1970’s, as the poor rail access, lack of rail competition, and the city’s location on a peninsula hindered its success as a major seaport (Brown, 2009, p. 40).

Pier 39 was given new life in 1978 when it was rehabilitated as a mock fisherman’s village. Located adjacent to Fisherman’s Wharf on the northeast waterfront, Pier 39 is a 45-acre complex housing 110 specialty shops and 14 full-service restaurants (Figure 6.5). Its proximity to Fisherman’s Wharf

Figure 6.5. Pier 39, a bustling waterfront tourist attraction. Source: <http://ghirardellisquare.com/wp-content/uploads/2010/02/pier39.jpg>. Retrieved June 12, 2011.

and Ghirardelli Square helped establish the northeast waterfront as a major tourist destination in San Francisco (Pier 39, 2011).

By the mid-1980's, following the success of Pier 39, the Port had begun to realize that it needed to place greater emphasis on non-maritime uses. In response to this, in 1986 Mayor Dianne Feinstein proposed the construction of a new hotel at Pier 45. However, the citizens of San Francisco still considered the support of traditional maritime uses to be the primary function of the Port and subsequently killed the project. By the end of the 1980's, the most valuable rents were coming from the restaurants at Fisherman's Wharf, and the Port Commission decided it was time to make changes at the waterfront. Several projects were proposed, including expansion of passenger terminals, a mixed-use complex at piers 30 and 32, a hotel and conference center at pier 45, and a sailing center at piers 24 and 26. In 1989, the Port embarked on the creation of a new strategic plan and waterfront master plan, discussed below (Brown, 2009, p.41-44).

1989 - Present: Post-Earthquake Revitalization of the Waterfront

"When it became clear that the earthquake of 1989 had damaged the freeway to the point that it would have to come down, there were public celebrations, like the end of a war. People embraced and drank toasts and wept" (Solomon, 1992, p. 49).

The story of San Francisco's ongoing waterfront revitalization really began with the 1989 Loma Prieta earthquake. At the time, the city was struggling with two key issues related to the waterfront: the severing off of the waterfront from downtown by the Embarcadero Freeway, and its decreasing role as a major port city (Lockwood, 1996, p. 63). With the demolition of the Embarcadero Freeway

following the earthquake, San Francisco opened up dozens of acres of land for redevelopment along its waterfront. Striking views and the endless possibilities for “great public places along the waterfront” (Rose, 2003, p. 85) provided inspiration for a new waterfront identity.

One of the first and most important post-earthquake projects completed was the transformation of the Embarcadero. What was once an ugly and noisy raised concrete structure along the San Francisco waterfront became a pedestrian friendly, European-style boulevard, with bike lanes, landscaped sidewalks, a fully functional and highly utilized trolley system, and six lanes of traffic divided by an attractive transit median (Lockwood, 2002, p. 52). Because of the city’s gridded street system, it was relatively simple to provide access to downtown from multiple points, helping traffic adjust to its loss of the elevated freeway (Fisher, 2005, p. 16). The creation of waterfront parks and a seven-mile pedestrian promenade have further enhanced the function, appearance, and public access to the city’s waterfront.

In 1990, in recognition of its changing role and the decline of its maritime uses, the Port released its new strategic plan. The plan detailed proposed improvements to cargo facilities as well as a redevelopment plan for the waterfront, calling for various mixed-use projects as well as a hotel. The public expressed great fear that their waterfront would become overrun with hotels, blocking out views and preventing public access. As a result, the citizens of San Francisco successfully passed Proposition H, a moratorium on all waterfront development of Port property and banning all future development of waterfront hotels until a new master plan involving “maximum feasible public involvement” was completed (Brown, 2009, p. 44). This development moratorium was in place until the new Waterfront Land

Use Plan was adopted in 1997. As a result of this plan, the construction of AT&T Park – home of the San Francisco Giants professional baseball team – and the restoration of the Ferry Building followed shortly after, and new projects continue to appear, further contributing to the evolution of the San Francisco waterfront (Brown, 2009, p. 47).

One of the most successful redevelopment projects along San Francisco's waterfront and an excellent example of a public-private partnership, is the restoration of the historic Ferry Building, an adaptively reused historic building completed in 2003 that now houses a farmer's market, retail shops, and restaurants (Figure 6.6). In response to the removal of the Embarcadero Freeway, ferry ridership shot

Figure 6.6. The Ferry Building has been restored to its former glory following an extensive rehabilitation. *Source: wikipedia.org. Retrieved June 12, 2011.*

upwards and a new ferry terminal was constructed. Soon after, private developers perceived the potential of restoring the historic 1898 Ferry Building and, in conjunction with the Port of San Francisco, added a street-level pedestrian thruway and public access promenades around the entire building, making it accessible to the water for the first

time (Lockwood, 2002, p. 53). A plaza was also constructed in the roadway directly in front of the Ferry Building, making pedestrian crossings easier and reinforcing the area's function as a transfer point between multiple forms of transportation, including the trolley system, light rail, and BART station (Fisher, 2005, p. 17). This connection is further enhanced via direct pedestrian access to the modernist Embarcadero complex, one of the largest mixed-use complexes in the western

United States with four office towers and more than seventy retail shops and restaurants (Embarcadero Center, 2011). In 2003, the Farmer's Market returned to the Ferry Building, becoming one of the biggest draws to the waterfront each week (Lockwood, 2002, p. 53).

One of the more recent waterfront development success stories is Mission Bay, a new neighborhood at the south end of the waterfront incorporating a new campus of the University of California at San Francisco, several commercial developments, and a range of housing opportunities (Lockwood, 2008, pp.40-41). There are currently ten major development projects and opportunities underway at the Port, including the relocation of the Exploratorium from the Palace of Fine Arts to Piers 15-17, the Pier 27 Cruise Terminal Project, and the massive redevelopment opportunity at Pier 70, a 69-acre future national historic district once the center of shipbuilding and repair in the bay area (Port of San Francisco, 2011). Public-private partnerships continue to be a widely used tool by the Port for waterfront development, injecting capital investments into Port properties while providing public access and open space improvements, furthering the Port's goal of reconnecting the city to its waterfront (City and County of San Francisco, 2011).

San Francisco has also expanded waterfront revitalization to the north, creating new parks and public-oriented recreational facilities and connecting it to Golden Gate National Park. In the mid 1990's the Presidio, the former United States Army installation near the Golden Gate Bridge, was completely recycled into residential, retail, and office uses, while the old Crissy Airfield has since transformed into a dynamic public open space utilized by thousands of people every week (The Presidio Trust, 2011; NPS.gov, 2011).

In late December 2010, San Francisco was selected to host the 2013 America's Cup sailing races. The Cup is projected to bring over \$1 billion to the San Francisco Bay Area and to create thousands of new jobs for area residents (Falk, 2010). According to the America's Cup website, plans call for "Piers 30/32 to house the team bases, the public Race Village to be staged at Piers 27/29, regatta operations on Pier 23, and the media center at Pier 19" (34th America's Cup, 2011). Needless to say, this is an unprecedented opportunity for both the City and the Port, and the San Francisco waterfront will benefit immensely from the massive influx of funds necessary to complete the pier restoration and construction projects required for the races.

6.2 Analysis

San Francisco is a world-renowned city, known for its culture, Victorian architecture, progressive politics, and iconic skyline. Its waterfront has been undergoing a massive transformation over the last two decades, bringing with it an influx of tourism revenue and renewed appreciation for the benefits of being near the water. As the city embarks on new waterfront projects in preparation for the America's Cup races in 2013 it can look to its current and past projects for clues as to what made them sustainable over time.

Recreation and Leisure

Much like Baltimore, San Francisco is a haven for recreational activities. According to San Francisco Recreation and Parks the city boasts a total of 203 parks in addition to Golden Gate National Recreation Area (San Francisco Recreation and Parks, 2011). There is currently a vast range of parks and open spaces at the waterfront, including the Embarcadero Promenade, Aquatic Park, Chrissy Field, San Francisco Maritime National Historic Park, Fisherman's Wharf Public Open

Space, Pier 7, Ferry Building Plaza, Rincon Park, South Beach, Agua Vista Park, Warm Water Cove, and Heron's Head Park. The Port of San Francisco is currently working on the development of Brannan Street Wharf, a 57,000 square foot public park located over the water and adjacent to the Embarcadero Promenade. Brannan Street Wharf is expected to cost \$25 million, and funding has been secured from the Port, voter-approved proposition A bonds, and the federal government (Port of San Francisco, 2011). In addition to Brannan Street Wharf, the 500-mile San Francisco Bay Trail passes through the San Francisco waterfront, linking the nine bay area counties and 47 cities with shoreline biking and walking trails (San Francisco Bay Trail, 2011). Work is currently under way to improve the southern San Francisco portion of the Bay Trail under a joint project with the Port of San Francisco titled the Blue Greenway (Port of San Francisco, 2011).

Waterfront recreation in San Francisco meets many of the criteria identified through the literature review. In particular, these parks, open spaces, and other recreational uses have succeeded in fulfilling some or all of the following criteria: engage a broad range of users; are designed for both large and small-scale functions and events; are flexible; foster social and cultural exchange; accommodate people from diverse backgrounds; engage the senses; provide shelter, sunshine, and views; offer planned activities; and are accessible to nearby residential areas.

One of the best examples of a project meeting these criteria is Chrissy Field in the Golden Gate National Recreation Area. Originally an airfield, Chrissy Field was completely restored in 2001. Kathleen Diohep, Project Manager at the Port of San Francisco, considers Chrissy Field to be one of the most successful waterfront revitalization projects in the city (personal communication, May 25, 2011). The 100-acre shoreline park features a restored tidal marsh, a two-mile scenic promenade,

restored historic airfield, beaches, and community environmental facility (Figure 6.7) (Golden Gate National Parks Conservancy, 2011). Chrissy Field is capable of reaching a broad range of users because of its diversity of uses, including both indoor and outdoor recreation. Small-scale functions can easily be held at one of the many picnic tables or beaches, while large-scale events such as the 5K run Relay For Life are also easily accommodated (SF Gate, 2011).

Because of its many amenities and diversity of recreational uses (popular uses include walking, jogging, cycling, windsurfing, and kite flying), Chrissy Field is highly flexible for user's needs, in addition to fostering social exchange between people from a variety of backgrounds (Figure 6.8). Tourists and locals alike enjoy Chrissy Field's resources.

Kathleen Diohep pointed to Chrissy Field's ability to meet the need for more open space in such a dense part of San Francisco as another factor in its sustained success. Chrissy Field is adjacent to the Marina neighborhood, the converted housing of the Presidio, the Golden Gate Bridge, and the Richmond neighborhood

Figure 6.7. Chrissy Field before its restoration.
Source: <http://www.nps.gov/prsf/historyculture/images/crissy1.jpg>. Retrieved June 12, 2011.

Figure 6.8. Joggers and cyclists enjoying Chrissy Field's recreation opportunities. *Source: wikipedia.org. Retrieved June 12, 2011.*

to the south of the Presidio. While the Presidio offers excellent opportunities for hiking and cycling, Chrissy Field provides a much more flexible, versatile open space in the form of the beaches, promenade, and restored airfield. Views from Chrissy Field offer visitors a chance to experience both the city and the bay, including Alcatraz, the Golden Gate Bridge, and Marin, while the smell of the sea, sounds of the city and water, and feel of the sand and grass further engage the senses.

In an interview conducted on May 20, 2011, Maureen Gaffney, planner with the San Francisco Bay Trail, identified connectivity as one of the most important elements in the success of a revitalization project. She offered Chrissy Field as a particularly good example of connectivity, and described its variety of bicycle and pedestrian paths (along the waterfront for sightseers and families; street side class one facilities for bicycle commuters) as part of its successful connectivity with the rest of the waterfront and city (personal communication).

In addition to Chrissy Field, the Bay Trail and Embarcadero Promenade both help connect people with the San Francisco waterfront. While the Bay Trail is an alternative commute corridor and offers more of a regional focus, the Embarcadero Promenade has been one of the most successful features of San Francisco's recent waterfront revitalization. Constructed in stages (the final piece at Pier 43 is currently in the planning stage), the Embarcadero connects Fisherman's Wharf at the northeast waterfront with the Ferry Building and AT&T Park to the south (Port of San Francisco, 2011). The Promenade is wide enough to accommodate pedestrians, joggers, cyclists, and strollers. The Embarcadero Promenade connects with nearby cable cars and trolleys in the northeast waterfront, while

Embarcadero Station, serviced by both the regional BART and local MUNI transit systems, is located across from the Ferry Building towards downtown.

Development

Over the last several decades, the San Francisco waterfront has hosted a number of major redevelopment projects. Some of the more well known projects include Pier 39, the Ferry Building, Mission Bay, and AT&T Park. While each of these projects meets some of the criteria identified from the literature review, the rehabilitation of the Ferry Building best exemplifies these criteria. Both Kathleen Diohep and Maureen Gaffney referred to the rehabilitation of the Ferry Building as one of the most important factors in “opening up the waterfront” to the rest of the city (personal communication, May 20 & 25, 2011).

In 2003, the four-year rehabilitation of A. Page Brown’s historic 1898 Ferry Building was completed. The project was made possible by an “unprecedented” public/private partnership led by the Port of San Francisco and Mayor Willie L. Brown, Jr. In addition, a nearly ten-year public participation process led to the invaluable support of the project by local citizens and stakeholders (ULI - The Urban Land Institute, 2011). This public support and use of public/private partnerships provided the momentum and financial support crucial for the success of the project. After an intense public competition, the development entity Ferry Building Investors, LLC - comprised of Equity Office Properties Trust, Wilson Meany Sullivan, Banc of America Historic Capital Assets, LLC, Primus Infrastructure, and the architectural firms SMWM, BCV, and Page & Turnbull – was selected to complete the renovation (Ferry Building, 2011).

While the discussion of the Ferry Building renovation has already described three criteria necessary for sustainable waterfront revitalization (community support, public/private partnerships, and establishment of a development entity), perhaps the Ferry Building's most significant contributions to the San Francisco waterfront are in the form of balanced uses and assimilation and integration with the surrounding city. When the Ferry Building was renovated, it was designed to house a 65,000 square foot locally oriented public food market (Figure 6.9). The upper levels of the building provide 175,000 square feet of office space and the hearing room for the San Francisco Port Commission (Figure 6.10). In addition, a 30-foot wharf was constructed on the bay side of the building, providing visitors with views of San Francisco Bay, the Bay Bridge, and Treasure Island.

Because of its diversity of uses, the Ferry Building attracts locals and tourists alike. The Embarcadero Promenade passes in front of the building, while Rincon Park to the south provides opportunities for recreation. Mixed-use Embarcadero Center lies across the street and on Tuesdays, Thursdays, and Saturdays the

Figure 6.9. Locals and tourists alike flock to the Ferry Building farmer's market. *Source:* http://www.pps.org/great_public_spaces//one?public_place_id=951&type_id=0. Retrieved June 12, 2011.

Figure 6.10. The interior of the rehabilitated Ferry Building. *Source:* <http://www.cooltownstudios.com/2008/07/03/sfs-ferry-building-marketplace-inspires-urban-life>. Retrieved June 12, 2011.

Ferry Building Farmer's Market draws between 10-15,000 locals and tourists to the waterfront (Ferry Building, 2011).

In 2010, Golden Gate Ferry Services transported nearly two million passengers between Larkspur, Sausalito, and the Ferry Building Terminal (Golden Gate Bridge Highway and Transportation District, 2011). This steady stream of commuters and tourists provides a vital link between the Ferry Building, San Francisco's downtown, and the region. In addition, across the street is Embarcadero Station, a main transit hub for BART and MUNI. While the Ferry Building has re-established itself as a transportation hub, it has also engaged the residents of the city by drawing people to the waterfront. The Ferry Building has been particularly good at serving as both a tourist attraction and a local hangout.

Tourism

According to San Francisco Travel, San Francisco received 15.9 million visitors in 2010. These tourists brought \$8.3 billion into the San Francisco economy and helped support 67,122 jobs in the hospitality and tourism industries (San Francisco Travel, 2011). San Francisco's waterfront, with attractions such as Fisherman's Wharf and Pier 39, AT&T Park, and the Ferry Building, played an important role in the establishment of San Francisco as a worldwide tourist destination. In 2007, Fisherman's Wharf in particular was estimated to generate 14.1 million visitors per year, ranking it the seventh most popular tourist destination in the country and first in San Francisco (Baedeker, 2011).

Because of its popularity as a tourist destination in San Francisco, Fisherman's Wharf appears an obvious choice for analysis. The home of San Francisco's fishing fleet, the Wharf includes shopping complexes Pier 39, Anchorage Square,

the Cannery, and Ghiradelli Square. It also includes the Aquarium of the Bay, the Wax Museum, Ripley's Believe It or Not! Museum, and the World War II submarine USS Pampanito. There are eleven hotels within the vicinity of the Wharf (Fisherman's Wharf San Francisco, 2011). The multitude of attractions have taken advantage of their close proximity to one another, creating the large critical mass of tourist attractions known as Fisherman's Wharf (Figure 6.11).

Figure 6.11. Fisherman's Wharf, one of the most popular tourist destinations in the country. Source: <http://www.visitingdc.com/san-francisco/fishermans-wharf-picture.asp>. Retrieved on June 12, 2011

In addition, the attractions at Fisherman's Wharf are supported through the Fisherman's Wharf Community Benefit District (FWCBD), established in 2005. The FWCBD's purpose is to "preserve and enhance [the Wharf]...while integrating modern efficiencies to enrich the experiences of visitors from both near and far" (Fisherman's Wharf San Francisco, 2011). The FWCBD provides a forum for cooperation and networking between Wharf businesses and attractions, while also managing their development and conservation. In addition, the FWCBD operates and maintains the website visitfishermanswharf.com, which adheres to the basic principles of place marketing, particularly through promotion of the Wharf's value and image.

Although Fisherman's Wharf meets many of the criteria for sustainable waterfront tourism, the residents of San Francisco have long viewed it somewhat negatively. Locals have tended to shy away from the Wharf perceiving it as a place solely for

the enjoyment of tourists, describing it as “tacky, crowded, and outdated” (Selna, 2008). This highlights a failure of the Wharf to ensure equity in development between tourism requirements and community concerns. However, in order to help change local perception of the Wharf, San Francisco’s planning department has been developing a plan focusing on the redesign of Jefferson Street, one of the central axes of the Wharf. The 2010 draft public realm plan incorporates the ideas of Wharf stakeholders and offers new streetscape designs, design guidelines for new development, a new parking and circulation plan, and new and refurbished public open spaces at Fisherman’s Wharf (Figures 6.12 & 6.13). According to the Fisherman’s Wharf Public Realm Plan website, the plan will “both help solidify the Wharf’s future economic vitality, as well as strengthen its connection to the city” (San Francisco Planning Department, 2011).

In addition to Fisherman’s Wharf, the Port of San Francisco welcomes between 60 and 80 cruise ships calls and 200,000 passengers annually (Port of San Francisco, 2011). In 2010, AT&T Park had the ninth highest Major League Baseball attendance in the country, with over three million fans. As of June, 2011, AT&T

Figure 6.12. Fisherman’s Wharf Public Realm Plan conceptual drawing. Source: http://www.sf-planning.org/ftp/CDG/CDG_fishermans_wharf.htm. Retrieved on June 12, 2011.

Figure 6.13. Fisherman’s Wharf Public Realm Plan conceptual drawing. Source: http://www.sf-planning.org/ftp/CDG/CDG_fishermans_wharf.htm. Retrieved June 12, 2011.

Park jumped to third in overall attendance for the year, presumably as a result of the San Francisco Giant's 2010 World Series championship victory (ESPN-MLB, 2011). With the pending move of the Exploratorium to the waterfront, America's Cup races, and the completion of a variety of other smaller projects, tourism at San Francisco's waterfront will continue to expand.

6.3 Summary of Results

While the City and the Port of San Francisco have made serious progress in revitalizing the waterfront, there is still a great deal of work to be done. Decaying piers and piersheds in need of demolition, adaptive reuse, or redevelopment dot the waterfront from north to south. The 2013 America's Cup races provide San Francisco with a great incentive to embark on new waterfront projects.

San Francisco is at an exciting stage in its waterfront revitalization. Buoyed by the success of many of its past projects, the city can look to these projects for clues as to what makes waterfront revitalization sustainable over time. In particular, San Francisco should pay close attention to the accomplishments of Chrissy Field, the Bay Trail, and the Embarcadero Promenade when it discusses recreation and public open spaces. The Ferry Building has proven an exceptional model for development with its use of public/private partnerships, connections to the city and region, and exciting mix of uses. Fisherman's Wharf has created such a successful tourist environment it was ranked the seventh most popular attraction in the nation. The Wharf also offers the city a valuable lesson in the need for attractions that draw both locals and tourists.

Perhaps the most fundamental factor in the success of these projects relates to their ability to connect with one another and with the rest of the city across the

length of the San Francisco waterfront. The Embarcadero Promenade and the Bay Trail provide a safe and relaxing way for locals and visitors to enjoy the experience of being near the water while also connecting a variety of destinations. In addition, the waterfront is accessed by a broad range of transit, including BART, MUNI, cable cars and trolleys, busses, and ferries. As the waterfront continues to revitalize, these connections will only further enhance the experience of being near the water for both locals and visitors alike. The Ferry Building may have “opened up” the waterfront for the residents of San Francisco, but the Embarcadero Promenade and Bay Trail will be the reason they explore further once they have arrived.

CHAPTER 7: CASE STUDY THREE: SEATTLE, WASHINGTON – CENTRAL WATERFRONT

7.1 Site History and Description

The Early Years

The history of the Seattle waterfront began in 1852, when Henry Yessler chose Seattle as the site for Puget Sound's first steam powered sawmill. The lumber from this mill was eventually shipped to San Francisco and as far away as Hawaii, helping spur the city's economic growth, including the financing of new piers along the waterfront (Dorpat & Crowley, 2000). In 1889, a devastating fire swept through the City and destroyed everything in its path, showing no mercy for the waterfront. However, reconstruction was swift, and within a year the piers had been reconstructed and waterfront activities returned to normal (Seattle Waterfront, 2010).

Similarly to San Francisco, a gold rush struck Seattle in 1897. The steamship Portland arrived at the Seattle waterfront with claims of more than a ton of gold on board from Canada's Yukon Territory. The Klondike Gold Rush had begun and would last for the next two years, making Seattle known as the "Gateway to Alaska". The influx of prospectors brought great wealth to the waterfront, and financed a small fleet of steamships (known as the "mosquito fleet") and ferries in the city. It was also around this time that the Great Northern Railroad was completed, connecting

Seattle to St. Paul Minnesota and helping solidify the city as a major international port (Dorpat & Crowley, 2000).

The Port Authority of Seattle was established in 1911 in response to a growing discontent with the railroad and shipping monopolies. The Port would help direct attention to harbor development and improvements important to the public rather than private entities. Landfill was a commonly used practice at the time and Seattle was filling in its tide flats in much the same way as San Francisco did. Improvements began to slow down after World War I, but federal aid during the Great Depression funded the installation of a seawall and the replacement of wooden planked Railroad Avenue, the main waterfront access road, with Alaskan Way. (Dorpat & Crowley, 2000).

Development during World War II and post-war years was similar to San Francisco's during the same time period. Although Seattle was a shipping hub during the War, afterwards the waterfront began to decline for two reasons. First, much like the Embarcadero Freeway, the elevated Alaskan Way Viaduct was constructed in the 1950's, cutting off yet another city from its waterfront. Second, the Port of Seattle had not yet committed to containerization and was beginning to feel the effects of its antiquated port facilities. Improvements to the waterfront essentially came to a halt after the completion of the Alaskan Way Viaduct in 1953 (Dorpat & Crowley, 2000).

Finally, in the 1960's, Seattle found that unlike San Francisco, it had room to expand its port facilities. The Port of Seattle committed to containerization and constructed vast terminals south of the traditional downtown waterfront and at Harbor Island to make way for a huge transformation; this was ultimately the greatest determining

factor in Seattle's continued success as a port. As a result of this commitment to containerization, Seattle was ranked the sixth largest port in the United States in terms of container counts in 2010 (Port of Seattle, 2011).

A New Identity for the Central Waterfront

Due to the relocation of major port facilities to container terminals, the downtown waterfront became open for revitalization by 1970. During the 1970's, the city and the Port became interested in providing public recreation and tourist opportunities at the waterfront. In 1974 Piers 57 and 58 were opened to the public, featuring a waterfront park, public access, shops, and restaurants (Port of Seattle 100 Centennial, 2011). In 1977, the Seattle Aquarium opened at Pier 59, the nation's seventh largest (Figure 7.1).

Since its opening, the aquarium has welcomed over twenty million visitors, with record-breaking attendance in 2009 (SeattleAquarium.org, 2011). A waterfront streetcar was installed in 1982 connecting the new aquarium, parks, and tourist attractions with the Pioneer Square district just south of downtown (HistoryLink.org, 2011).

Figure 7.1. The Seattle Aquarium viewed from the east.

Source: http://upload.wikimedia.org/wikipedia/commons/thumb/0/02/Seattle_-_Pier_59_-_01.jpg/250px-Seattle_-_Pier_59_-_01.jpg.

Retrieved June 12, 2011.

In 1985 the Port of Seattle began planning a large revitalization scheme. Over the next fifteen years the Bell Street Pier was renovated to welcome cruise ships (it

has since been renovated again and reopened in 2003), Bell Harbor International Conference Center and Marina, the Marriott Waterfront Hotel, the Odyssey Maritime Discovery Center, World Trade Center offices, Waterfront Landings condominiums, public plazas, and seafood restaurants were constructed at the waterfront (Seattle's Central Waterfront Plan, 2003).

In 1999, the Seattle Art Museum raised \$17 million to purchase Seattle's last remaining central waterfront property. The goal was to create a park honoring both art and the urban environment, offering stunning views within close proximity of downtown (Figure 7.2) (Hart, 2007, p. 56). Financing for the construction of the park came from several sources, including the City of Seattle, The Trust for Public Land, and private donations (Hart, 2007, p. 56). In addition to the various sculptures that give the park its name, a bicycle path, a pavilion, and an amphitheater help to round out the site. Since its opening in January 2007, the Olympic Sculpture Park has garnered wide acclaim, described as "artistic and creative...it's really a park that embodies what Seattle is all about" (Hart, 2007, p. 57).

Since its completion, the concrete elevated highway known as the Alaskan Way Viaduct - a main North/South thoroughfare - was an accepted piece of Seattle's urban fabric. In February 2001, this changed. The 6.8 magnitude Nisqually earthquake severely damaged the viaduct, bringing

Figure 7.2. The Olympic Sculpture Park filled with visitors on a beautiful northwest day. *Source:* <http://www.seattlemet.com/assets/0004/5699/20070709114244.jpg?1282581558>. Retrieved on June 12, 2011.

visions of another Embarcadero Freeway disaster to the minds of local Seattleites (Schneider, 2006, p. 1). Much like San Francisco, the elevated Alaskan Way Viaduct became an increasingly contentious debate amongst Seattleites, involving heated arguments about which of the alternatives proposed by the expert project team should be approved. To make matters worse, it was also discovered that the aging seawall would need to be replaced.

What had originally been a question of civic engineering and cost became a conversation about the future of Seattle's waterfront. Seattle began to look towards other cities for a solution, and the San Francisco Embarcadero was increasingly put forward as an example. A new Central Waterfront Concept Plan offering the mayor's recommendations was completed in 2006 (City of Seattle, 2011). Mayor Greg Nickels was a strong advocate of an underground tunnel option, stating: "Removing the Viaduct would do for Seattle what removing the Embarcadero Freeway did for San Francisco" (Ritter, 2007, p.1), and "Replacing the Viaduct with a tunnel is a once in a lifetime opportunity to reclaim our waterfront" (City of Seattle, 2011).

In 2007, a public advisory vote was held and both of the viaduct alternatives on the ballot were voted down. Recognizing a need to reach a solution, Governor Christine Gregoire promoted a collaborative effort involving stakeholders, citizens, experts, and government officials. In 2009, based on the findings of the partnership team, Governor Gregoire, Mayor Greg Nickels, and King County Executive Ron Sims recommended a hybrid bored-tunnel option and it was subsequently approved by the State legislature (Washington State Department of Transportation, 2011). Funding for the estimated \$4.24 billion plan is expected to come primarily from the

State, with additional contributions from the Port of Seattle (DiBenedetto, 2009, pp.1-2).

In late 2009, the new mayor elect, Mike McGinn, assured voters that while he was not a proponent of the tunnel and preferred the surface streets option, he would not attempt to veto its approval or encumber the construction process in any way. However, in February 2011, he reversed his stance and vetoed the tunnel project. Although his veto was swiftly overturned by the City Council, this action itself underscored the level of political contention between the citizens of the city, the Council, and the State. It is clear that the debate over how to replace the Alaskan Way Viaduct is far from over, and citizens groups recently won the right to send an anti-tunnel referendum to voters (komonews.com, 2011; Lindblom & Thompson, 2011).

Even with the battle over the tunnel solution continuing to rage, Seattle has made progress in realizing its vision of a world-class waterfront. In 2009, the City passed an ordinance establishing the Central Waterfront Partnerships Committee, a partnership between government, local communities, and civic groups tasked with “identifying common principles, developing a thoughtful overall approach, and recommending the tools needed to ensure the waterfront is developed and maintained as a public space for all of Seattle” (City of Seattle, 2011).

In the fall of 2010, James Corner Field Operations was selected from four finalists as the designer of a post-viaduct waterfront. James Corner Field Operations, a landscape architecture firm known for its successful redevelopment of the High Line in New York City, envisions connections between the future tree-lined surface roadway, parkland, and Elliott Bay and plans to create more active space at the

waterfront, including sidewalks, bike trails, mini-beaches, and landscaping (Figure 7.3) (Lindblom, 2010). The firm will work closely with the Central Waterfront Partnerships Committee and will be involved with all public outreach and meetings. A conceptual design plan is anticipated in 2012, with a final design decided in 2015 (Gutierrez, 2010; Lindblom, 2010).

Figure 7.3. James Corner Field Operations conceptual diagram of the central waterfront. *Source:* <http://www.seattlepi.com/local/article/After-the-viaduct-New-waterfront-vision-unveiled-1387743.php>. Retrieved on June 12, 2011.

7.2 Analysis

In many ways, Seattle has only very recently begun to look towards revitalization of its waterfront. While the city and Port have undertaken a few projects over the last twenty years, the major effort at revitalization will be in the coming years. However, Seattle is a creative and innovative city, and, although less widely known for its waterfront revitalization projects than Baltimore or San Francisco, offers plenty of opportunity for criteria-based analysis.

Recreation and Leisure

Seattle prides itself on its proximity to a wealth of outdoor recreational activities, including sailing, hiking, skiing, and cycling, and is home to over 400 parks totaling over 6200 acres of parkland (City of Seattle, 2011). However, of the over 400 parks, only four are found at the waterfront, and include Myrtle Edwards Park, the Olympic Sculpture Park, Waterfront Park, and Piers 62 and 63. Seattle's waterfront offers little else in the form of public recreation, other than access to scenic vistas, the Washington State Ferry System, and proximity to Pike Place Market.

Of the four waterfront parks, Olympic Sculpture Park is perhaps the best for analysis of recreation and leisure at the Seattle waterfront. Described by Steve Pearce, Waterfront Seattle Project Manager with the Department of Transportation, as one of the most successful waterfront revitalization projects in the city to date, the 9-acre park is located on the waterfront just north of downtown on the former site of a petroleum transfer facility (personal communication, May 12, 2011). The park showcases permanent and revolving exhibitions of sculptures at the shoreline of Elliott Bay, providing visitors with an opportunity to experience public art in an outdoor setting. Admission to the park is free, and the park's visitor information center estimates attendance to be 750,000 people per year (personal communication, 2011).

The very nature of the park makes it capable of accommodating a variety of events; it serves not only as a park with green spaces for lounging and recreation, but also as an art gallery. In addition, the park hosts a number of events throughout the year, particularly in the summer. For example, between June and October, the park will host a series of outdoor evening concerts called "Picnics in the Park", a "Dancing 'Till Dusk" series, and yoga and zumba classes (Museum Publicity, 2011). These

events foster social and cultural exchange while providing exceptional views of Puget Sound and engaging the senses in other ways.

Olympic Sculpture Park also benefits from its proximity to the downtown, Belltown, and Lower Queen Anne neighborhoods, engaging a range of local users while also connecting to the broader region. The park provides a multitude of access points and is navigated on foot by following a z-shaped path that crosses over a major arterial and train tracks, eventually meeting up with the water and the Boeing Company Bicycle Path along the shore (Seattle Art Museum, 2011).

Development

There have been few redevelopment projects at the Seattle waterfront over the last twenty years. Of these, perhaps the largest was the Bell Harbor project, undertaken by the Port of Seattle in the mid-1990's. Bell Harbor is comprised of a conference center, cruise ship terminal, office, and short-stay marina. Opened in 1996, the 100,000 square foot Bell Harbor International Conference Center has served over one million guests and has received a number of awards for its conference facilities (Bell Harbor International Conference Center, 2011). For conference attendees and visitors, there are two hotels within immediate proximity of the conference center providing a total of 568 guest rooms at the waterfront (Marriott & Edgewater, 2011).

Bell Street Pier Cruise Terminal is an eleven-acre complex along the downtown waterfront. In addition to its function as a cruise terminal, Bell Street Pier also houses restaurants and a recreational marina. According to the Port of Seattle, 2010 was a record cruise ship season for number of calls and passengers. Between its two cruise terminals (a larger terminal is located at terminal 30) the

Seattle cruise industry generated \$425 million in business revenue, \$18.9 million in state and local taxes and 4,447 jobs in 2010. The Port attributes this success to the partnerships formed between the Port, Cruise Terminals of America, cruise lines, local community, and regulatory agencies (Port of Seattle, 2011).

At the time, the Bell Harbor project contributed significantly to the provision of balanced uses at the waterfront. Before the conference center and cruise terminal were constructed, the downtown waterfront was primarily a mix of specialty shops and tourist attractions. The addition of the conference center and cruise terminal bring people to the waterfront in large numbers and has stimulated additional development. Because there is very little residential development along the waterfront the conference center attendees staying at nearby hotels provide much-needed nighttime activity for the area.

Figure 7.4. The Bell Street Pier Cruise Terminal following its 2003 renovation. The viaduct is in the background. Source: <http://www.portseattle100.org/the-port-then-and-now/pier-66>. Retrieved on June 12, 2011.

Unfortunately, the Bell Street Pier Cruise Terminal did fail to meet one of the criteria in particular. When the Port first began the terminal's renovation in the mid-1990's, they were unable to foresee the extent of the demand for large cruise ship berths. Between 1993 and 2002 the number of cruise ship passengers disembarking in Seattle went from 10,820 to 244,905 (Seattle's Central Waterfront Plan, 2003). As a result, the terminal was renovated again in 2003, undoubtedly at large cost to the Port (Figure 7.4). According to

Steve Pearce, the terminal is still much too small and the giant cruise ships of today block off the waterfront.

In addition, Steve Pearce mentioned that he believes the Port may have lost money on the Bell Harbor project. There was a significant public financing component that failed to generate much money for the city, and he believes that this has lead to the Port pulling back from new revitalization projects. He said that this was a particularly difficult problem, because the city really needs the Port “at the table” for discussions regarding new projects at the central waterfront (personal communication, May 12, 2011).

Tourism

While the cruise ship industry brings large influxes of tourist dollars into the local economy, the waterfront itself offers little in the way of tourist attractions. Besides the novelty of being near the water, wandering through trinket and souvenir shops, or eating at restaurants, the waterfront provides little in the way of attractions other than the Seattle Aquarium. Fortunately for the waterfront and its visitors, the Aquarium is flourishing. The seventh largest aquarium in the country, it was expanded by 18,000 square feet in 2007 with \$42 million of new exhibits, gift and food services, and event facilities. Since 1977 the aquarium has seen 20.8 million visitors, including a record-breaking 836,720 in 2009. The Seattle Aquarium is the Puget Sound region’s third largest paid visitor attraction (Seattle Aquarium, 2011).

David Graves, planner with Seattle Parks and Recreation, believes that tourism is essential to revitalizing the waterfront. He describes the waterfront today as being packed with people, both tourists and locals (personal communication, May 9, 2011). Perhaps this is due to the complementary shops and restaurants, two

hotels, conference center, office space, and residential housing. The website seattlewaterfront.org provides an essential online marketing resource for tourists, expanding the reach of these attractions through promotion and dissemination of information. However, there does not appear to be any organized group like that of the FBCBD to support cooperation and networking between waterfront stakeholders.

Figure 7.5. Seattle's central waterfront viewed from the water. *Source: <http://www.redbubble.com/people/cascoly/art/1907309-panorama-seattle-waterfront-skyline>. Retrieved on June 12, 2011.*

7.3 Summary of Results

The few waterfront revitalization projects Seattle has undertaken have seen mixed results. The Olympic Sculpture Park meets the majority of the criteria detailed for recreation projects, yet has few other attractions to connect with at the waterfront. The Aquarium appears to be a success for the waterfront as well, yet also suffers from a lack of nearby attractions that might make the waterfront a true tourist destination. What little development has occurred over the last two decades has failed at creating a new identity for the city's waterfront. As Steve Pearce pointed

out, all of these projects had a myopic viewpoint, their own reasons for being, and their own mission statements (personal communication, May 12, 2011).

In order for Seattle to see its projects succeed, the waterfront will need a lot of different uses to generate activity. In Steve Pearce's opinion this mix of uses must include residential, which there is currently very little of at the waterfront. He also argues for grassroots support and involvement from people outside government in creating projects that meet the needs of local residents. According to Steve, the Central Waterfront Partnerships Committee is not pursuing the revitalized central waterfront as a place for tourists. The intent is instead to make the new waterfront a place that invites locals, providing them with a way to interact with and experience the water (personal communication, May 12, 2011).

What Seattle must keep in mind in the coming years is that the new waterfront must have its own unique identity. As it stands today, the Seattle waterfront lacks obvious connections, attractions, and the unique qualities that make one realize they have arrived at a destination. As both David and Steve mentioned, particular emphasis should be placed on connecting the downtown central business district to the waterfront (Figure 7.5). Seattle's hilly topography makes this a tricky design challenge, but one that must be overcome in order to establish a flow between the two destinations. If this can be achieved, Seattle can rely on its progressive citizens and politicians to ultimately become the waterfront destination it has sought for so long to be.

CHAPTER 8: CONCLUSION

8.1 Validity, Limitations and Applicability

Today, people across the country are returning to the city. They continue to bring new energy and vitality to America's once depressed downtowns, and are more and more frequently focusing their attention towards revitalization of the waterfront. With this new influx of people, cities are becoming more aware of the resulting impacts of a denser downtown population. Of particular importance is the increased need for public space and recreation. As cities search for available land in their downtown neighborhoods, the waterfront, with its all too often neglected and decaying property ripe for revitalization, has increasingly become the solution to this problem.

As cities across the country embark on new waterfront projects, there is a perceived need for an understanding of the processes that lead to successful revitalization over time. Developers often choose to follow a standard development model, yet fail to realize the specific requirements of building at the waterfront. Parks and open spaces are often included as major components of revitalization schemes, yet do not always serve the purpose they were intended for. Often, attracting tourism becomes a chief element in an overall vision, yet some attractions fail while others succeed.

As this thesis has shown, there is a broad range of factors and criteria at play in the overall success of a revitalization project. By carefully reviewing the existing

literature on three of the dominant perspectives in waterfront revitalization – recreation, tourism, and development – this thesis explored the more specific criteria involved in creating a successful project over time. Once the criteria were identified, they were triangulated with responses from key player interviews and site-specific statistical and economic data. The ability to provide triangulation of the result of each case study analysis was crucial to the establishment of specific findings.

As with any research study, there are inevitably limitations. While unfortunate, these limitations offer the author an opportunity to learn from what might have been done differently and help highlight areas that might benefit from further research. This thesis struggled with four issues in particular: selection of only three perspective criteria; inability to fully utilize all of the perspective criteria during analysis; lack of available data; and low interview response rates.

One of the initial limitations of this study is that it reviewed waterfront revitalization from only three perspectives. This was due in part to the author's own research interests and also as a result of time constraints. Literature review and subsequent criteria formulation and analysis take a great deal of time, and limitations are necessary in order to achieve the desired results in a realistic timeframe. While recreation, tourism, and development are certainly three prominent perspectives on waterfront revitalization, there are several others, including the national and international economy and local, state, and national politics.

In addition to the limitations on perspectives, there was also an issue with analysis using several of the perspective criteria. The problem relates to the relative subjectivity of many of the criteria; for example, one criterion for recreation asserts

that projects must “fulfill user’s ‘fantasies’ about how to relax and enjoy their leisure time”. It is difficult to ascertain what user’s ‘fantasies’ actually are without first surveying a sample of the population. Once this was completed, a sample of users would have had to be surveyed based on their perceptions of each individual site. Needless to say, this would have taken countless hours and would have required extensive travel, all for the sake of one criterion.

Another limitation was the difficulty in procuring documentary evidence. A great deal of current information is available online and in the literature, but there is very little information more than a decade old readily available. This proved a particularly unfortunate limitation, as there was little, if any, opportunity to compare pre- and post-revitalization statistics.

Finally, key player interviews served as a major research component in this thesis. The original intention was to interview as many key players from each case study as possible, ideally at least four per city. Although countless inquiries were made, ultimately only six interviews were conducted. A handful of people actually agreed to complete an interview yet failed to follow through on their promise. In addition, several respondents, particularly those in Seattle, did not respond to all of the questions. Seattle’s interviewees found it difficult to offer examples of successful completed projects in their city, preferring instead to look towards the new revitalization project only now in its earliest phases. This made triangulation of the research in Seattle particularly difficult.

Although there were limitations intentionally and unintentionally placed on this thesis’ research, the results are still highly applicable to cities undertaking new waterfront revitalization projects. Because the criteria established were typically

quite general, they provided greater flexibility during analysis. In addition, while the interview responses tended to be more specific, it was possible to identify some of their major themes. This enabled a more comprehensive approach to formulating conclusions.

It has never been the intent of this thesis to provide an overly specific “list” of requirements for successful waterfront revitalization. First of all, this would never work. No two cities are alike, and therefore there can never be exact replication of a project. Instead, this thesis is intended to provide some general observations that might prove useful to cities considering waterfront revitalization. It is intended as a starting point, and it is up to each city to mold their projects into something that fits with its own unique character.

8.2 Findings

As mentioned earlier, the findings of this thesis are quite general. However, they are nevertheless important results and provide a foundation for cities considering new waterfront revitalization projects. Baltimore, San Francisco, and Seattle are three very different cities that share a common bond over waterfront revitalization. Each offers a unique perspective on what the most important factor in success of a project over time truly means, yet some similarities between the cities’ most successful projects were identified as well. Based on the results of the case study analysis, this thesis offers the following general findings:

Balance and Mix of Uses. This was a common thread throughout the case study analyses. Projects such as the Inner Harbor and San Francisco Ferry Building proved exceptionally good at providing a range of uses while not over-saturating the market in any particular area. The Inner Harbor prides itself on its “critical mass”

of attractions that offer locals and tourists alike an opportunity to experience the waterfront in many different ways. The Ferry Building has succeeded at reuniting San Francisco with its waterfront, offering a variety of retail, office, restaurant, and recreational opportunities at the waterfront while also benefiting from its proximity to local neighborhoods.

Assimilation with the Surrounding City. Baltimore's Inner Harbor was initially chosen for revitalization in an attempt to help resuscitate the city's nearby central business district. Today, the Inner Harbor blends seamlessly into the downtown and continues to generate new attractions such as the Camden Yards Sports Complex and Power Plant Live! nearby. San Francisco's Ferry Building also assimilates with downtown San Francisco, "opening up" the waterfront to the city. Downtown office workers come to the Ferry Building in search of a lunchtime meal while mothers with children stroll along the waterfront carrying fresh produce from the farmer's market. Unfortunately, Seattle's waterfront continues to suffer from a lack of assimilation with its surrounding city. The Seattle waterfront is very much cut off from the rest of the city as a result of the visual barrier of the Alaskan Way Viaduct. When the Viaduct is torn down, Seattle will gain a wonderful opportunity to mesh the attractions of downtown with the waterfront.

Connections. Both Baltimore and San Francisco have constructed wildly successful public pedestrian promenades. These promenades serve not only as a recreational/open space feature, but also as a vital connection between the numerous waterfront attractions of the city. Baltimore's waterfront promenade has proven so successful it was recently extended to include nearby waterfront neighborhoods. In addition to the success of their promenades, both cities also offer excellent connections to the rest of the city and region. San Francisco has

proven particularly good at this, providing locals and visitors with a plethora of alternative transit options, including the regional BART and local MUNI trains, cable car and trolley service, busses, bicycle lanes, and ferry service. San Francisco also offers connection to the broader region through the 500-mile long bicycle and pedestrian Bay Trail. Seattle's lack of any real connection between attractions at the waterfront has severely hindered its success. The Olympic Sculpture Park and the Seattle Aquarium appear to be successful attractions, yet the waterfront is still without identity because there are no clear connections between the two. Additionally, Seattle is not known for its alternative transportation, and there are few opportunities to connect with the waterfront other than by car, bus, bicycle, or on foot. Another hurdle Seattle must overcome is that of visual connection between downtown and the waterfront. The city's steep topography makes visual connection between the two difficult and will require a creative and well-executed plan to achieve the desired results.

Continuous Reinvention. Both Tom Noonan and Paul Dombrowski believe that a "fresh" identity is vital in sustaining revitalization over time. Baltimore's Inner Harbor, well beyond completion of its Master Plan goals, continues to seek out new attractions and promote exciting waterfront events for locals and tourists. As Tom Noonan stated, it is essential that cities continuously reinvent themselves..."think of it as Waterfront V. 1.0, Waterfront V. 2.0, etc". San Francisco's waterfront has recently begun to re-think a piece of its own identity, hoping to challenge the image of Fisherman's Wharf as a tourist-only destination with the 2010 Draft Fisherman's Wharf Public Realm Plan. The Seattle waterfront is desperately in need of a fresh perspective; As Seattle embarks on a new central waterfront design, it will be reinventing itself almost from the ground up.

Attractions that Draw Both Locals and Tourists. The Inner Harbor has been successful at providing a variety of attractions that appeal to both locals and tourists. However, San Francisco has truly excelled at this. Chrissy Field and the Ferry Building offer services that attract both locals and tourists, either for relaxation, shopping, sightseeing, or simply to experience being by the water. Perhaps the city was able to learn from the mistakes of overly tourist-saturated Fisherman's Wharf and was able to avoid them when developing more recent projects such as Chrissy Field and the Ferry Building. Seattle has also done a good job of attracting locals and tourists to Olympic Sculpture Park. The park is in close proximity to several neighborhoods and so serves as a place of recreation for locals, yet is also iconic and unique in a way that draws visitors to it.

Identity. Perhaps the single largest determining factor in a waterfront's success over time is its identity. The Inner Harbor and San Francisco both have strong, clear identities. Seattle does not. Its waterfront lacks any sense of arrival at a destination, other than the knowledge that one is close to the water. There is no mass of attractions, no cohesive marketing campaign, and lacks a unifying streetscape such as a promenade. Baltimore has capitalized on its history and attractions and runs a number of large marketing campaigns. San Francisco has also succeeded in crafting an identity for itself, in large part due to the renovation of the historic Ferry Building and construction of AT&T Park.

8.3 Concluding Remarks: Towards Sustainable Waterfront Revitalization

As revitalization of urban waterfronts continues, cities must make every effort to make their projects sustainable pieces of the urban fabric. Waterfronts across the world face challenges from sea level rise, financing, stewardship and maintenance among others. Conservation practices will become increasingly important and good

projects will ensure their inclusion. Cities and local governments should continue to search for creative ways to finance projects. Local citizens and organizations can promote stewardship of the waterfront through group clean-up days while project developers must ensure funding for continued maintenance of properties. Establishing projects that meet the needs of diverse users and the continuously changing needs of the city will be paramount.

In the future, new waterfront revitalization projects can benefit from the findings of this thesis. Many cities have succeeded at waterfront revitalization on many levels, but are still missing a piece of the puzzle that is holding them back from greatness. Ideally, this thesis can help these cities identify that missing piece.

Baltimore and San Francisco can offer a variety of lessons to cities undertaking new waterfront revitalization projects. Baltimore, with its wildly successful Inner Harbor, is often referred to as the premier example of waterfront revitalization. San Francisco, while still relatively new to revitalization, has already realized a number of successful projects, including the Ferry Building and Chrissy Field rehabilitations. Projects in these cities, on opposite ends of the United States, share some essential similarities behind their success.

Of the six broad components essential to the success of urban waterfront revitalization – balance and mix of uses; connections; assimilation with the larger city; identity; continuous reinvention; and attractions that draw both locals and tourists – Baltimore and San Francisco have succeeded in incorporating them all into their projects. It is the experiences of cities like these that can provide Seattle and other cities like it with the toolkit necessary to survive the harsh realities of development in the 21st century.

In addition to the literature review and documentary evidence, responses from the key player interviews proved essential during the case study analyses. The ability to hear from professionals in the field who have experienced first hand the complexities of revitalization at the waterfront added a depth to the analysis that would otherwise have been impossible to achieve.

Although this thesis was limited by a number of factors, it achieved its goal of identifying “*what makes urban waterfront revitalization sustainable over time*”. It is the hope of this author that the findings of this thesis will provide a starting point for cities embarking on new waterfront revitalization projects in the years to come.

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APPENDIX A: INTERVIEW QUESTIONS

Recreation

1. Which are the most successful waterfront revitalization projects in your city?
2. What do you think makes these waterfront places special?
3. How do these projects relate to the larger urban context?
4. Can you name the most important elements in the success of these projects over time? Why do you think they contributed to this success?
5. What were the roles of tourism, recreation, and development in these projects?
6. How important do you think these factors were in sustaining revitalization?
7. What do you think are the most important factors in sustaining the success of revitalization projects in general?
8. What do you think are the greatest challenges for waterfront projects today?
9. What do you think the biggest challenges will be in the future?
10. What do you think are the most important aspects of recreation/tourism/development necessary for successful waterfront revitalization? Why?

11. What would you describe as an ideal balance of uses at the waterfront (ex. residential, recreation, office, and tourism)?
12. What do you think makes a waterfront revitalization project sustainable (successful over time)? Why?

Additional Questions:

13. Can you offer any data relevant to my project, such as number of recreation opportunities present at the waterfront before and after revitalization?
14. What kinds of information do you think would be useful to me and where do you suggest I look for it?

Development

1. Which are the most successful waterfront revitalization projects in your city?
2. What do you think makes these waterfront places special?
3. How do these projects relate to the larger urban context?
4. Can you name the most important elements in the success of these projects over time? Why do you think they contributed to this success?
5. What were the roles of tourism, recreation, and development in these projects?
6. How important do you think these factors were in sustaining revitalization?
7. What do you think are the most important factors in sustaining the success of revitalization projects in general?
8. What do you think are the greatest challenges for waterfront projects today?
9. What do you think the biggest challenges will be in the future?
10. What do you think are the most important aspects of recreation/tourism/development necessary for successful waterfront revitalization? Why?

11. What would you describe as an ideal balance of uses at the waterfront (ex. residential, recreation, office, and tourism)?
12. What do you think makes a waterfront revitalization project sustainable (successful over time)? Why?

Additional Questions:

13. Can you offer any data relevant to my project, such as number of projects completed or revenue before and after revitalization?
14. What kinds of information do you think would be useful to me and where do you suggest I look for it?

Tourism

1. Which are the most successful waterfront revitalization projects in your city?
2. What do you think makes these waterfront places special?
3. How do these projects relate to the larger urban context?
4. Can you name the most important elements in the success of these projects over time? Why do you think they contributed to this success?
5. What were the roles of tourism, recreation, and development in these projects?
6. How important do you think these factors were in sustaining revitalization?
7. What do you think are the most important factors in sustaining the success of revitalization projects in general?
8. What do you think are the greatest challenges for waterfront projects today?
9. What do you think the biggest challenges will be in the future?
10. What do you think are the most important aspects of recreation/tourism/development necessary for successful waterfront revitalization? Why?

11. What would you describe as an ideal balance of uses at the waterfront (ex. residential, recreation, office, and tourism)?
12. What do you think makes a waterfront revitalization project sustainable (successful over time)? Why?

Additional Questions:

13. Can you offer any data relevant to my project, such as pre-Inner Harbor visitor numbers vs. today's Inner-Harbor visitor numbers?
14. What kinds of information do you think would be useful to me and where do you suggest I look for it?

APPENDIX B: INTERVIEW RESPONSES

Tom Noonan, President and CEO, Visit Baltimore

1. Which are the most successful waterfront revitalization projects in your city?

There have been several waves of tourism. Harborplace and the National Aquarium were the beginning. This was when the Inner Harbor began to change from a seaport to tourism industry. Tall ships came in the late 1970's, after which William Schaefer began talking about changing the waterfront. This was followed by the Convention Center in 1979, and then the third stage was, Camden yards and ...stadium. Even though not on the water, they were close enough to enjoy the amenities of the revitalized Inner Harbor

Baltimore has a tight tourism campus: Federal Hill, Fells Point, and downtown are all on the waterfront. Buildings are staggered back from the waterfront. Science center. Convention center, on or near water, surrounded by variety of uses.

People crave the water. Ex. Dallas' Trinity River Project: river flowing through downtown, very narrow. Now they are building an 8000 acre park downtown, and creating new water elements (lakes). Dallas is a great example of a city recognizing the importance of water downtown.

2. What do you think makes these waterfront places special?

People love sitting outside with their families; it is relaxing to stroll along the water. One of the four elements. Serene kind of place.

3. How do these projects relate to the larger urban context?

If you look at Baltimore, major education, medicine, federal govt. didn't have strong tourism industry. Now tourism is the # 2 industry in Baltimore. Tourism is a whole other industry for Baltimore, and an economic development tool. A development tool to build that industry, create a new city. Harbor East (new development, very successful) – Morgan Stanley, Four Seasons, Marriott, high-end retail, restaurants; the land was reclaimed, it was a clean-up project; now it is hip and trendy.

4. Can you name the most important elements in the success of these projects over time? Why do you think they contributed to this success?

A blend of projects and proximity to one another. American Visionary Art Museum, Ritz Carlton, water fountain, Harborplace, USS Constellation, shopping, museums and attractions. The waterfront in Baltimore has so much to offer. Currently there are nine RFP's out for different new projects...sand volleyball, Millenium-Eye type thing; space needle type thing; orbs, new elements.

5. What were the roles of tourism, recreation, and development in these projects?

All part of process...everyone has a seat at the table. Each group has a role to play, a say in decisions, and they bring their expertise.

6. How important do you think these factors were in sustaining revitalization?

Tourism in the harbor – if you could take one snapshot of Baltimore, it would be of the Inner Harbor; couldn't say that 30 years ago. The new industry on the water is the whole reason Baltimore has revitalized.

7. What do you think are the most important factors in sustaining the success of revitalization projects in general?

You have to keep it fresh. You want to have diversity. You must always be looking at how you can improve yourself. Tom gives example of Tourism 1.0, 2.0 – different versions of waterfront revitalization; You must keep reinventing yourselves. For example, there are nine RFP's out at the moment. Other future possibilities include a Convention Center expansion that would be near or adjacent to a new NHL/NBA - type arena. The city is always looking to add new uses.

8. What do you think are the greatest challenges for waterfront projects today?

Keeping it fresh, clean, and safe. Need to make it a jewel of the city, a place you would bring your family.

9. What do you think the biggest challenges will be in the future?

Budgets. Who has the money for private/public development. It is cyclical. People talk about projects during low periods, get ready to pounce when the market improves. City and state budgets are very tight. Need to look for funding mechanisms. Sometimes there is a chance to do a tourism improvement district.

10. What do you think are the most important aspects of recreation/tourism/development necessary for successful waterfront revitalization? Why?

It needs to be close by, safe, and continually fresh and refreshing. You want to have a large population base living nearby for core user base. Baltimore has the sixth or seventh largest downtown population in the nation. It is a city of neighborhoods, including four around the waterfront.

11. What would you describe as an ideal balance of uses at the waterfront (ex. residential, recreation, office, and tourism)?

The waterfront has to be a place you would want to live, visit, work, and play. There needs to be housing, parks for kids, schools for children, etc. so that families will want to live there. Have to provide a strong education component, so families won't feel they must escape to the suburbs for quality education.

12. What do you think makes a waterfront revitalization project sustainable (successful over time)? Why?

If it creates jobs. The project then leads to someone buying a house, sending their kids to school. It creates an industry, a there, there. You need to have something desirable, that other parts of the city might not have.

Additional Questions:

1. Can you offer any data relevant to my project, such as pre-Inner Harbor visitor numbers vs. today's Inner-Harbor visitor numbers?

Send him an email.

2. What kinds of information do you think would be useful to me and where do you suggest I look for it?

Vibrant cruise industry... 5 or 6 operations, sea dog – history/thrill ride. Cruise ship industry. Near boston and new york, dc, Carolinas, philly, easy train ride, cheap flight, easy one day drive. What other communities are nearby to draw people from? About numbers numbers numbers, local ves. Regionl vs. national.

Paul Dombrowski, Director of Planning and Design, Baltimore Development Corporation

1. Which are the most successful waterfront revitalization projects in your city?

There are a number of successful projects done since the 1970's, with the world renowned mixed use Harborplace as the centerpiece. That opened in 1980, but the redevelopment began a few years prior with the Maryland Science Center, a seniors housing complex, etc.. Successful projects have since followed the waterfront to the east, in the latest major mixed-use development called Harbor East'; with several high-end residential and marina developments along Boston Street to the Canton area. Other major projects were completed following the water along the harbor's southern shoreline, e.g. Harbor View residential complex; adaptive reuse of a former soap products manufacturing complex now known as the Tide Point office complex; etc..

2. What do you think makes these waterfront places special?

The open public access to the water's edge made possible by a mandated public waterfront promenade; diverse uses; excellent views of the harbor and the city skyline from various vantage points; attention to design; the creation of spaces and facilities for residents, tourists, workers.

3. How do these projects relate to the larger urban context?

They extend the urban fabric to the water's edge, create center city focal and activity destination points, created a tourism industry that did not previously exist, incorporated and protected the historic nature of the city.

4. Can you name the most important elements in the success of these projects over time? Why do you think they contributed to this success?

Diverse uses, the perception that everyone is welcomed and "owns" the waterfront, attention to design of both public and private built environment.

5. What were the roles of tourism, recreation, and development in these projects?

Tourism and recreation have played absolutely major roles as the creators and sustainers of the success of the waterfront areas. There simply was no tourist industry in Baltimore prior to the development of Harborplace. The redevelopment of the waterfront and its public spaces brought international attention to the city, and with it the millions of visitors annually.

6. How important do you think these factors were in sustaining revitalization?

Very important in the sustainability of our redeveloping of the downtown, which has now produced the fastest growing residential development in the city...a hugely important spinoff of the waterfront's success.

7. What do you think are the most important factors in sustaining the success of revitalization projects in general?

Maintenance of all built elements, diversity of offerings, constant evolution and refreshment of the venues & attractions, uniform attention to quality of design, perception of safety and security, pedestrian amenities and efficient traffic movement.

8. What do you think are the greatest challenges for waterfront projects today?

Ample public sector funding availability to build and maintain required infrastructure, maintaining high quality design and construction of all projects, maintaining safety and security, protecting views and view corridors that compete with private development pressures.

9. What do you think the biggest challenges will be in the future?

Promoting the need for evolution/change/renewal of areas and facilities to maintain ongoing interest and excitement with the waterfront and its environmental importance; identifying feasible public/private partnership involvement in important projects; and carefully assessing the place of families in the center cities and their waterfronts (i.e., should we begin to more fully address school and playarea possibilities to attract and hold families with children?)

10. What do you think are the most important aspects of recreation/tourism/development necessary for successful waterfront revitalization? Why?

These activities generate local, regional and global interest in the area, and are the best forms of advertising the quality and attraction for the area. Furthermore, the economic fallout and benefits derived from successful waterfront revitalization cannot be overstated.

11. What would you describe as an ideal balance of uses at the waterfront (ex. residential, recreation, office, and tourism)?

This is hard to answer, as I don't think there is an ideal balance applicable to all waterfronts. Each is an individual situation that needs attention to its uniqueness in order to discern the most appropriate and feasible mix of uses, density, public spaces, institutional venues, etc. In Baltimore an unquestionable value derives from mixed uses, with emphasis on tourism; however some areas of the waterfront are most attractive as residential development sites.

12. What do you think makes a waterfront revitalization project sustainable (successful over time)? Why?

See above...I am a solid believer that the city, including its waterfronts, must be thought of as an organic being, needing provision for change, adaptation, refreshment and evolution, in order to ensure sustainability. Also, the recent trend toward forming downtown residential uses and neighborhoods is a very promising one in building and maintaining sustainability.

Additional Questions:

1. Can you offer any data relevant to my project, such as number of projects completed or revenue before and after revitalization?

Re: number of projects and before/after revenue would be a big task, since there are many individual projects.

2. What kinds of information do you think would be useful to me and where do you suggest I look for it?

The question you raise immediately above re: public/private investments, economic impact of various developments (property taxes, payroll taxes, jobs created, etc), etc would be interesting & useful information. I don't know of any one source for that. It will require a lot of digging and contacting the "institutional memories" of some of the players over the years.

Maureen Gaffney, Planner, San Francisco Bay Trail

1. Which are the most successful waterfront revitalization projects in your city?

Tearing down Embarcadero freeway, wasn't even billed as a revitalization project. Net effect was the largest the city had seen. Following on the heels is the rehab of the ferry building, had been directly cut off by embarcadero freeway. This was major, and opened up the waterfront.

2. What do you think makes these waterfront places special?

The Bay itself, being near the water. A lot of energy at the sf waterfront, very different experience at other parts of the Bay. A great place for people watching, a lot of great commerce, seeing large ships come in, sort of magical...

3. How do these projects relate to the larger urban context?

Bay Trail is an alternative commute corridor as well as a recreational corridor. Almost a release valve in a way, a place for people of dense sf to access this special kind of open space.

4. Can you name the most important elements in the success of these projects over time? Why do you think they contributed to this success?

Connectivity. A continuous, unbroken path. One of the most important elements. Unobstructed.

5. What were the roles of tourism, recreation, and development in these projects?

No response.

6. How important do you think these factors were in sustaining revitalization?

No response.

7. What do you think are the most important factors in sustaining the success of revitalization projects in general?

Connectivity, continuous path with adequate width for the use it would see, attractive landscaping, signage, enough width to be able separate uses (ex. bicycles vs. pedestrians). Chrissy Field is a great example of this, natural surface, closer to street there is a separated class one facility for two way bike traffic and pedestrians, and also a bike lane in the street for the bicycle commuters. Waterfront option for folks with kids, folks riding for fun

8. What do you think are the greatest challenges for waterfront projects today?

Sea level rise.

9. What do you think the biggest challenges will be in the future?

Sea level rise.

10. What do you think are the most important aspects of recreation/tourism/development necessary for successful waterfront revitalization? Why?

No response.

11. What would you describe as an ideal balance of uses at the waterfront (ex. residential, recreation, office, and tourism)?

No response.

12. What do you think makes a waterfront revitalization project sustainable (successful over time)? Why?

No response.

Additional Questions:

1. Can you offer any data relevant to my project, such as number of recreation opportunities present at the waterfront before and after revitalization?

Port or Parks and Rec.

2. What kinds of information do you think would be useful to me and where do you suggest I look for it?

No response.

Kathleen Diohep, Project Manager, Port of San Francisco

1. Which are the most successful waterfront revitalization projects in your city?

Crissy Field and the Ferry Building area.

2. What do you think makes these waterfront places special?

Crissy: the shoreline, park setting, commercial rec. the running path is really used.
Ferry building: embarcadero promenade, historic preservation, farmers' market/artisan food retail. Really helped create that trend. Most successful farmers mkt in country

3. How do these projects relate to the larger urban context?

Crissy -- needed open space in very dense area of the city. Ferry Building amenities drawing people to waterfront -- creating a place to stroll, almost a european feel ... just next to the cbd.

4. Can you name the most important elements in the success of these projects over time? Why do you think they contributed to this success?

Crissy: Massive philanthropy. National park management, Golden Gate Parks conservancy. Enourmous vision to reimage an area that had WWII warehouses and raise the funds needed. Ferry Building: creation of the highest office rent district in the Clty. That gave the economics needed to fund historic preservation. Massive public investment in removing embarcadero freeway and creating the embarcadero.

5. What were the roles of tourism, recreation, and development in these projects?

Crissy: great mix of national and local serving park and recreation. viewing of Golden Gate Bridge. Use of commercial recreation -- climbing gym etc, Sports Basement, allowed for rehab of historic buildings. Ferry Building: tourism and a local draw. Not fisherman's wharf both locals and visitors. recreation is strolling/ biking. Development has been historic rehab, rather than new buildings.

6. How important do you think these factors were in sustaining revitalization?

Crissy: recreation/tourism is what will sustain. Ferry Building: rents from office uses is what is needed to continue to invest in public spaces.

7. What do you think are the most important factors in sustaining the success of revitalization projects in general?

Vision, leadership, public/private partnerships where synergy can be created; funds

8. What do you think are the greatest challenges for waterfront projects today?

High costs of substructure; local opposition. Parking/transportation can be a challenge if in a dense area.

9. What do you think the biggest challenges will be in the future?

Maintenance/re-investment

10. What do you think are the most important aspects of recreation/tourism/development necessary for successful waterfront revitalization? Why?

No response.

11. What would you describe as an ideal balance of uses at the waterfront (ex. residential, recreation, office, and tourism)?

No response.

12. What do you think makes a waterfront revitalization project sustainable (successful over time)? Why?

No response.

Additional Questions:

1. Can you offer any data relevant to my project, such as number of projects completed or revenue before and after revitalization?

No response.

2. What kinds of information do you think would be useful to me and where do you suggest I look for it?

No response.

David Graves, Senior Planner, Seattle Parks and Recreation

1. Which are the most successful waterfront revitalization projects in your city?

Seattle struggles with central waterfront. Especially decisions about what to do. James Corner leading design effort, starting process. Public very present, 1000 people at last meeting. Finally seeing some movement forward. Central waterfront packed with people today, tourists and locals. Ferry terminal also there.

2. What do you think makes these waterfront places special?

Water a huge draw. A sense of authenticity. Pier in Santa Monica, Monterey Bay aquarium, connection to history... Cony Island. Sense of it is a real place. Unique character.

3. How do these projects relate to the larger urban context?

Relation back to larger city. Harbor steps...connects from SAM to waterfront and Coleman dock. Hill climb connection to Pike Place Market. Design needs legible.

4. Can you name the most important elements in the success of these projects over time? Why do you think they contributed to this success?

Will be connections between the waterfront and the city. It can be hard to get there unless you know what you're doing. Grade, heights can be difficult. Getting people to and from is part of the experience.

5. What were the roles of tourism, recreation, and development in these projects?

All play a role. If tourists don't come, it's hard. Tourism is a big draw...family coming in from out of town. Attractive place that people come to. You want to take them more than once is key. Repeat visits are crucial. Also something for locals as well.

Recreation. Bike trail, running at lunch hour, walk up and down Alaskan Way. Look to Stanley Park in Vancouver, recreation destination in and of itself.

Development. Having residents close by. Without them there is no one there in the evening. Day to day activity is a big part of it.

6. How important do you think these factors were in sustaining revitalization?

All equally important. Interconnected. Not just one thing.

7. What do you think are the most important factors in sustaining the success of revitalization projects in general?

Political will. A big project that happens over time. Having a vision that people have bought into. Can return to over time. Viaduct doesn't come down until 2016...how do we keep public engaged for this time. Master plan...overarching vision of where we'll be in 10-20 years. A combination of goals, drawings, thoughts of where to go.

8. What do you think are the greatest challenges for waterfront projects today?

Cost. Politics. Which administration is driving the bus. How do you keep continuity over changing administrations? Do they throw it out, or do they accept the view of the people and keep moving it forward. Getting everyone onboard.

9. What do you think the biggest challenges will be in the future?

How do you operate and maintain it? Look at successful models such as central park, have conservancies. How are you a good steward of the waterfront? How do you maintain and operate in a way that is good over the year. OM are the first to get cut.

10. What do you think are the most important aspects of recreation/tourism/development necessary for successful waterfront revitalization? Why?

Tourism: repeat business. Encourage to see something different.

11. What would you describe as an ideal balance of uses at the waterfront (ex. residential, recreation, office, and tourism)?

Maritime as well; shipping containers and argosy cruises. The businesses that give a sense of authenticity. People come to waterfront and part of attraction is all the different things going on. Gives sense of being a dynamic place. Residential is a huge component; doesn't need to be right on waterfront but adds a sense of ownership and variety of users.

12. What do you think makes a waterfront revitalization project sustainable (successful over time)? Why?

People need a reason to be there other than t-shirt shops. Alaskan Way is a great long promenade, sculpture park. Ferry terminal. Anchors. Commuters going back and forth. There is reason people return over and over again.

Additional Questions:

1. Can you offer any data relevant to my project, such as number of recreation opportunities present at the waterfront before and after revitalization?

Don't have a good grasp of their own parks. Aquarium gets about 800,000 visitors a year, can really only track at places that charge admission. Expanded a couple of years ago, increased activity space. Gives people a reason to go there other than aquarium. Ivars or Elliots; Edgewater; Boston Aquarium before and after Big Dig.

2. What kinds of information do you think would be useful to me and where do you suggest I look for it?

No Response.

Steve Pearce, Waterfront Seattle Project Manager, Seattle Department of Transportation

The projects discussed below are not part of a concerted strategy. Steve has worked on waterfront for about 15 years, he has a planning background.

1. Which are the most successful waterfront revitalization projects in your city?

Olympic sculpture park, project of SAM, needed cooperation from city. Bridges over roads, allowing use of public right of way...seawall modifications to achieve design goals. Needed a lot of strong cooperation from the city, mayor at the time a strong advocate. Successful for design, imageability, iconic quality. Use standpoint – hasn't been so successful as a sculpture park because exhibits don't rotate very often. Continuous stream of users for first time, fewer repeat visitors. Connects to neighborhoods, is a place for people to walk dogs. Essentially a poster child for the Seattle Central Waterfront project now.

Bell Harbor is the Port's central waterfront project from the 1990's. Essentially, there were warehouses and old wharves that were underutilized. Port thought of itself as a sort of development entity. Bell Harbor – includes a convention center, cruise ship terminal, office, short-stay marina, and residential condominiums, Marriott. To some extent it walls off the waterfront – cruise ship terminal is much too small – giant cruise ships today, block off the water. Now there is a second cruise ship terminal. View deck on top of building on waterside, closed whenever there is a cruise ship in, which is most weekends in the summer. A little dead- office and hotel uses don't generate much activity, cut off from downtown. This will be fixed with the new Central Waterfront Project. A lot of business for hotel is from

convention center. Don't allow housing on water, next door to mainline railroad, has a solid wall on that side. Not the greatest looking thing, brings some activity but also brings some complaints. Used to have concerts on the pier – now not safe for large crowds. Impression is the Port lost money on the project. Significant public financing component, didn't generate a lot of money, has lead to Port pulling back from this kind of thing. Really want the Port at the table for new project.

Aquarium project – historic pier. Grand plan to build a much bigger aquarium eventually, this is the first stage. Had it been left to Parks and Recreation they wouldn't have had money to pull it off. Gave it to the Seattle Aquarium Society for day-to-day operation and running.

All had a myopic viewpoint, own reasons for being, own mission statement. Three elements that help create a framework for the grand plan.

2. What do you think makes these waterfront places special?

No response.

3. How do these projects relate to the larger urban context?

Connection to the neighborhood from the sculpture park. Connect to downtown once viaduct is down. Also to connect people to water in general, slope and topography are a problem, need to have hillclimb assists

4. Can you name the most important elements in the success of these projects over time? Why do you think they contributed to this success?

Grassroots support and involvement from people outside government. Galvanizing support to act, and then also in operations. Operated by trusts and conservancies created specifically for fundraising and attention to the waterfront. Parks dept. stretched thin, lots of expectations for the large new city park. Have to ensure a good annual operating budget – sense is that it is better to create an entity to do this.

Strong vision and a strong design. People wanted to see a world-class designer hired, galvanizing local support. Really important to have a champion for these projects outside of the government, ex. Friends of the Highline. Generate initiative to get the project done, raising funds, being stewards of project once it is done.

5. What were the roles of tourism, recreation, and development in these projects?

Not for tourists – they may come as a result of local success, but tourism is not a main factor in the new development plans. Recreation - desire for linear recreation along waterfront, large park, connection for people to downtown, trying to design staying places for people as well. People don't want active recreation as a priority. Walking, biking, boating – kayaking, sailing – people open to these items in a much more subtle and individual way.

6. How important do you think these factors were in sustaining revitalization?

No response.

7. What do you think are the most important factors in sustaining the success of revitalization projects in general.

No response.

8. What do you think are the greatest challenges for waterfront projects today?

Significant capital costs: Sea wall, seismic zone. About \$1 billion total.

Great desire to create an active public realm and places for people to hang out and be close to the water and view the mountains, vs. preserving working waterfront. Still working uses however, ferry terminal, other water-dependent activities. There's a tension, think of them as interesting...

Habitat issue – salmon migration route needs to be protected. What do salmon like? What do people like? Often conflicting. Need to find ways to create and address both. Try to find a happy balance between the two.

9. What do you think the biggest challenges will be in the future?

No response.

10. What do you think are the most important aspects of recreation/tourism/development necessary for successful waterfront revitalization? Why?

No response.

11. What would you describe as an ideal balance of uses at the waterfront (ex. residential, recreation, office, and tourism)?

Need a lot of different types of uses to generate activity. Essential problem for the new project. Need residential, a lot of density close to waterfront to promote activity at all hours of the day. Depends on how much is close to the waterfront already, whether the waterfront is immediately adjacent to high-density activities. Public safety and transportation related uses – huge impetus for this right now as a result of failure of seawall and viaduct.

12. What do you think makes a waterfront revitalization project sustainable (successful over time)? Why?

Want it to be used by locals – have things that are genuine; Front porch of city, needs to be a place for interesting things to do as a local, places to interact with the water, look at bay and mountains. Experience it as a regional park. Big emphasis on figuring out what is authentic. Not pursuing it as a place for tourists.

Seattle is not necessarily typical. A lot of its money is coming in chunks from state taxes or voter approved measures. Expect they won't be able to do everything right away, developing an implementation strategy. Not necessarily all under this one umbrella, some might be done by parks. But most will be done by Seattle central waterfront umbrella.

Have a plan but also create an entity that will become the steward of the waterfront. Right now there is a committee, high-powered, ex mayor. Will continue for a couple of years and then will create an entity.

Additional Questions:

1. Can you offer any data relevant to my project, such as number of projects completed or revenue before and after revitalization?

No response.

2. What kinds of information do you think would be useful to me and where do you suggest I look for it?

No response.