SHAPING AN INCLUSIVE WATERFRONT:
COMMUNITY ENGAGEMENT IN THE REDEVELOPMENT OF SAN FRANCISCO'S PIER 70

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ABSTRACT

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Community engagement in large-scale development projects is a critical step in the real estate development process, needed both to obtain official project approval and to gain feedback to create projects that better provide for and respond to the needs of the community. In San Francisco and other cities with extensive political and community involvement surrounding issues of urban growth, community engagement can be particularly important. Yet the community process can be agonizing, rife with contentious public hearings in which only those who are avidly for or against a project participate. Because of this, developers may dismiss engagement as an unpleasant formality necessary for project approval. However, the community process undertaken at Pier 70, a large waterfront development project in San Francisco, demonstrates that engagement can be an effective tool to build trust, gain project support, and make projects that better serve the community.

The developers of Pier 70, Forest City, have gained remarkable community support for their project, including receiving citywide voter approval for proposed height changes on site. This thesis examines Pier 70 as a case study to explore how developers can help foster trust and effective collaboration through the community engagement process. To do so, it draws from a review of the process and problems of standard community engagement and presents alternative models. It also discusses recent large-scale waterfront projects in other cities, the history of San Francisco's highly politicized development process, and increasing controversy concerning waterfront development. Analysis suggests that Forest City has led an effective engagement strategy, gaining support and meaningful feedback throughout the process. Case study findings at the scale of the developer, project, neighborhood, and city demonstrate how Forest City has tailored their approach to the specific site to align the project and community process with the needs of the city and community. Forest City has been successful largely due to their ability to act locally, engage broadly and openly, and build trust with the community. Ultimately, this thesis draws lessons from Pier 70's development process to suggest methods for ensuring that development projects are not only profitable, but also valuable for the community and surrounding urban realm.

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1.   INTRODUCTION

1.1 BACKGROUND

Concerns about housing affordability are widespread in major metropolitan areas around the globe. In the United States, staggering housing prices have triggered ambitious new housing plans in San Francisco, New York, and Boston, the country's three most expensive cities, respectively.[1] In such dense and competitive cities, infill development is often the primary method by which to build more housing. While not an ineffectual method, this parcel-by-parcel and project-by-project process could take decades to even come close to producing the number of housing units needed. Large-scale development projects may be more efficient to provide the desired amount of housing, yet sites big enough for this within cities are very limited. Thus, the prospects of master-planned redevelopments of industrial, waterfront sites are especially appealing to cities and developers alike. Often underutilized or abandoned, these sites frequently come with prime waterfront views, access, and the potential for greatly increased real estate value.

San Francisco's housing affordability problems are particularly acute given its geographical constraints, development politics, and recent economic boom. Much of San Francisco's growth is attributable to the explosive success of the technology industry in the Bay Area. According to the Bureau of Labor Statistics, the percentage of jobs in the technology sector increased from less than 2% to over 6% from 1997 to 2012, and 30% of all new jobs added since 2010 have been in the technology sector (Sabatini, 2014). Furthermore, research from the Bay Area Council Economic Institute estimates that every technology job added produces over four additional jobs in the region (Covert, 2013). Between 2011 and 2012, the city had a 6.1% increase in jobs, more than three times the national average growth rate of 2%, and in 2013, the city had the highest job growth rate than any other city in the nation (Warburg, 2014). The city added approximately 32,000 residents between 2010 and 2013, and the population increased to 837,442, with a population change rate of 4% compared with the national rate of 2.4% (United States Census Bureau, 2014).

Yet, contrary to the growth of the economy and population, the city's housing supply has not followed suit. Instead, demand greatly outweighs supply and rents have skyrocketed, increasing 21% in 2013 (United States Census Bureau, 2014). On average, the city has produced about 1,500 housing units per year over the last twenty years (Metcalf, Karlinsky, & Warburg, 2014). Over the past three years, approximately 10,000 new households sought housing, while only 4,000 units were added (Dougherty & Elinson, 2014). The rate of construction has since increased, with 6,000 new units added in 2014; this sudden increase in building is due to both a backlog of projects on hold from the recession and fast-tracked development processes. That being said, this amount of new building is not projected to stay at such a level unless the city makes drastic changes to its development process that mollify the powerful community groups and political forces that impede new construction.[2] And, even with more units under construction and thousands more in the pipeline, there will still not be enough supply to suffice population increases. Plan Bay Area (a regional long-range land use, housing, and transportation plan) projects San Francisco's population to grow by 280,000 from 2010 to 2040, demanding an additional 92,000

housing units (Terplan & Warburg, 2014).

It is important to note that the city's technology boom is not the only reason for the housing shortage and affordability crisis. The success of the technology industry in the Bay Area has certainly compelled a faster economic recovery and reduced unemployment rates to some of the lowest in the nation (Covert, 2013). However, the housing problems are due to simple economics: demand vastly outweighs supply. New jobs and economic growth have increased demand for housing, but the city's housing supply, which was already insufficient, has not grown quickly enough. Development politics and the city's painstakingly slow permitting process are partially to blame, not the influx of new technology workers. As fear and anxiety grow about the changing city, particularly around issues of income inequality, displacement, gentrification, and homogenization of the city, the technology boom has become the city's scapegoat.

Tim Colen is Executive Director of San Francisco Housing Action Coalition (SFHAC), a non-profit organization that advocates for smart growth and the new production of housing; Colen describes SFHAC as an anti-NIMBY group. He candidly expounds on development politics in this "highly dysfunctional town," stating:

> Whatever you do, don't do what San Francisco does or you will get the result that you see right now. Google and Twitter did not cause this. We've worked for 30 or 40 years to carefully put into place the policies that have produced this result, and the chickens have come home to roost (Colen, 2015).

In the 2014 State of the City address, Mayor Lee reiterated this point, saying of the housing shortage: "We are all responsible – this is a crisis of our own making. For too long in San Francisco, we've tried to have it both ways. We want more money for affordable housing, but too often we oppose or scale back the very projects that generate those funds" (Lee, 2014, para. 10).

And in a city of 47 square miles surrounded by water on three sides, developable land is scarce.

Map of San Francisco and Pier 70

1.2 CASE STUDY, RESEARCH QUESTIONS & OBJECTIVES

PIER 70 CASE STUDY

In November 2014, 73% of voters approved a $242 million, 28-acre redevelopment project, Pier 70, on the San Francisco Bay. For a city with a history of activism surrounding urban development, particularly regarding the storied waterfront, the overwhelming support for the Pier 70 development is momentous. With the June 2014 passing of Proposition B in San Francisco, voter approval is now required for any proposed waterfront development project on Port property that exceeds existing height limits. In a fight against a "wall on the waterfront," this measure is changing how developers position their projects, work with the city, and respond to the needs of the community. Focusing on a case study of the Pier 70 development in San Francisco, this thesis will investigate how developers can better engage communities throughout the development process.

Pier 70 in San Francisco is an underutilized and highly desirable waterfront parcel. As in many major waterfront cities, San Francisco's port agency controls large swaths of waterfront land, including this prime industrial site. This port land includes piers and landfilled lots used directly for cargo shipping and other maritime operations, as well as property and roads adjacent to the waterside (Rubin, 2011a, p. 24). Historically, the Port of San Francisco either directly controlled shipping activities on and surrounding its property or leased lots to private operators. Though San Francisco was once a major center of shipping and maritime industry, the Port suffered

from a significant decline in cargo volume following World War II. This drop was due to issues specific to San Francisco, such as competition from Oakland's port and compromised budgeting and political problems, as well as larger macroeconomic conditions, such as the shift from an industrial to a service economy and the technological advances of containerization (Rubin, 2011a). Over the past several decades, the Port has sought to remake itself and its property in an attempt to keep the agency afloat. Physical transformation of port lands, whether through pubic or private development of new buildings and open space, has the potential to bring new people and activities to the waterfront, as well as new income streams.

While the redevelopment of most sizable site, anywhere, would garner attention from the city at large, plans for Pier 70 have been especially scrutinized. In San Francisco, with its housing affordability crisis, complex development politics, and collective consciousness surrounding the waterfront, there are many eyes watching what will happen here (Rubin, 2011a, p. 6). The area has been the focus of nearly a decade-long community planning process to determine its redevelopment.[3] The 67-acre site has been apportioned into sub-areas, including the 28-acre "Waterfront site" and the 5-acre "Historic core" for redevelopment, alongside the ongoing ship repair operations of BAE Systems and the site of the future Crane Cove Park. While the entire pier area has been the subject of long-term planning, the community process for the "Waterfront site" at Pier 70 has been particularly extensive. This process and project, under development by national developer Forest City, is the focus of this thesis's case study.

The Pier 70 project proposes to redevelop the largely underutilized and inaccessible waterfront site into a mixed-use, mixed-income neighborhood. The project, totaling approximately 3 million gross square feet of new construction, will integrate housing, office, commercial, and light industrial uses. Bringing a diversity of housing and employment opportunities to the area, it will include up to 2,000 units of housing, 2 million square feet of commercial space, and 400,000 square feet of cultural, industrial, and retail space. Forest City has promised to provide a significant amount of affordable housing, with 30% of all units reserved for low and moderate-income households. Additionally, it will open up the waterfront to the public, creating over nine acres of parks and plazas. The project program is the result of a multi-year planning process between developer Forest City, local community groups, the Port of San Francisco, and the San Francisco Planning Department.

In the recent elections, the public approved Pier 70 through Proposition F, authorizing a project-specific change in the height limit from 40 to 90 feet. This was the first project to be put up to public vote after Proposition B. While Forest City ran a successful political campaign to foster support for the project, their community process had already been ongoing for three years. Part of this process included standard planning practices of community meetings and a citizens advisory group. Forest City additionally nurtured awareness and support for the project with innovative engagement strategies such as interim activation events to create excitement surrounding the project and bring a broad range of San Franciscans to the site. These events included open houses, tours, art exhibitions, and a pop-up open-air market on the site.

Kelly Pretzer, Forest City's Development Manager for the project, distinguishes the extensive community involvement not as the "we hate all development" type of NIMBYism that so often characterizes real estate in San Francisco. Instead she explains that there is a large amount of scrutiny, but rightly so, "This is a huge public asset, it is one of the few pieces left of the waterfront. People just want to make sure it is done right…. Of course people are concerned and paying attention" (Pretzer, 2015).

Throughout this process, Forest City has forged a strong relationship with the surrounding Dogpatch neighborhood. Neighbors recognize that if all goes as planned, the Pier 70 project will bring the amenities and infrastructure that the neighborhood needs and that the City of San Francisco has not been able to provide. Dogpatch has become rife with development over the past decade, rapidly transforming from an industrial area to a mixed-use neighborhood, with the greatest conversion of industrial to residential space in the city (San Francisco Planning Department, 2014). Dogpatch residents accept that their neighborhood is changing, as long as it is done well, and this is exactly what they are hoping from the Pier 70 project.

RESEARCH QUESTIONS

With neighborhood and city approval, Pier 70 presents a unique opportunity to examine the successful community engagement process thus far. In this case, success is determined by an analysis of the unique attributes of the project (at the developer, project, community, and city level), the community process, and how the project incorporates city and community interests. This case study is important to analyze for its process and program, as seen in Forest City's efforts to build trust among community members and provide needed amenities for the neighborhood. This research aims to uncover how engagement may have shaped the Pier 70 project to align with the needs of the community, focusing on the role of the city and the community in developing the project program and design. Given that the project is still undergoing the entitlement process and will take at least a decade to reach full build-out, research will focus on the strengths and limitations of Forest City's community outreach approach and not on a final assessment of the project.

Additionally, contextualizing the Pier 70 case study within the landscape of surrounding waterfront redevelopment projects in San Francisco will help explain how these projects relate to each other. Proposition B also impacts Mission Rock, another large-scale development project on Port property. Mission Rock's location in the nearly complete master development area of Mission Bay presents different complications for the development team. Nevertheless, community engagement has been a crucial component of the project's entitlement process.

Top: View of Pier 70 site, looking north with Building 12 to the west
Bottom: Aerial view of Pier 70, looking north towards downtown (source: Port)

This research seeks to identify the ways that real estate developers interact with the places and communities where they work, asking: **how can developers foster trust and collaborate effectively through the community process?**

To answer this, research will focus on the following questions:

Project Specific
- What can we learn from the Pier 70 project about how to engage the city and community in the development process?
    - How did the city and the community engage in the development process of Pier 70?
    - What was different about it? And what lessons can be learned?

General
- Is the development industry changing in terms of developers' relationships with the communities and cities where they work? If so, what is influencing this change?
- How does the community process impact large-scale redevelopment projects?
- Do new engagement approaches provide a better way to gather community support and feedback for projects?

RESEARCH OBJECTIVES

Through this analysis of the Pier 70 case study, this thesis will assess the limits and opportunities of community engagement processes in large-scale development projects. Waterfront redevelopment projects generally follow the same trajectory as other projects, yet the vast scope and intensity of scrutiny given to these developments highlight the importance of the community process. This thesis aims to uncover how private development can foster and benefit from increased community engagement in the development process, creating projects that are not only profitable, but also valuable for the community and surrounding urban realm. Ultimately, this research considers how development projects can equitably provide for and respond to the needs of the existing community. The objectives of this research are:

1. To investigate community planning processes that draw a broader range of participants and provide new venues for feedback and engagement.

2. To understand how alternative community engagement strategies may lead to an improved development approval process and projects that better meet the needs of diverse interests.

3. To suggest different approaches of community engagement for large-scale development projects that draw the attention of the entire city not just the immediate neighborhood.

1.3 WATERFRONT DEVELOPMENT IN CONTEXT

COMMUNITY ENGAGEMENT IN THE DEVELOPMENT PROCESS

Community engagement is a critical part of the planning and development process in the United States. For real estate projects, engagement is important for two primary reasons: to show public officials that developers have consulted the community about the project, ideally gaining buy-in, before seeking city approval, and more aspirationally, to receive input that will help shape projects to better respond to community needs. Sherry Arnstein, whose "Ladder of Citizen Participation" model critiqued the efficacy and meaningfulness of community engagement processes, writes:

> The idea of citizen participation is a little like eating spinach: no one is against it in principle because it is good for you. Participation of the governed in their government is, in theory, the cornerstone of democracy - a revered idea that is vigorously applauded by virtually everyone (Arnstein, 1969, p. 216).

Yet, in actuality, the community process can be handwringing and agonizing, in which only the people who are avidly for or against a project participate. Because of this, developers may dismiss engagement as an unpleasant formality necessary to get through the entitlement process. The experiences at Pier 70, however, demonstrate that engagement can prove very beneficial to build trust, gain support, and form projects that better benefit the community.

COMPARATIVE WATERFRONT DEVELOPMENT PROJECTS

Controversy over waterfront development is not unique to San Francisco. Waterfront development projects in major cities around the world have sparked debates about how to redevelop industrial maritime areas given economic shifts and increased urbanization. For many cities, this has meant a transition, both physically and functionally, of the waterfront as a place of work to a place of leisure. (Rubin, 2011a). Other mixed-use development projects along the water in Washington D.C., Boston, and New York have had varying degrees of community engagement and resultant support or opposition. A brief discussion of these other large-scale waterfront projects illustrates how problematic they can be, particularly as they relate to community interests.

GLOBALIZATION IN DEVELOPMENT

Pier 70 represents the changing nature of community engagement in the development process and the shifting relationships between developers and their stakeholders. Looking beyond this, it is important to understand the broader changes that are impacting urban development today. Globalization has had enormous impacts on the built environment in both its financing and its form. Financially, real estate is no longer local. Instead, international investors can engage in development projects around the world, thereby shaping a built environment that they may have little relationship with or understanding of, besides as one that can help them maximize their financial return. International development firms sometimes seek a "universal aesthetic" that symbolizes modernity instead of referenc-

ing local conditions (Lang, 2009). Many of the same international firms design these large-scale development projects. These firms, such as Skidmore, Owings, and Merrill (SOM), AECOM, and HOK, usually have thousands of employees in offices around the globe. The internationalization of design has meant that these firms often produce increasingly homogenous building and urban designs, with little reference to the culture or place of the project site (Lang, 2009). Jasper Rubin calls such actors "members of the 'transnational capitalist class' who influence the creation and design of the built environment" (Rubin, 2011a, p. 3).

Forest City, as a publically traded national developer, is yet another actor tapped into this pool of global capital. That being said, it appears the firm is trying very hard to incorporate the local context into its Pier 70 project. Whether or not Pier 70 truly reflects the "sense of place" of its site, neighborhood, and city is yet to be seen.

1.4 HYPOTHESIS & METHODS

HYPOTHESIS

The hypothesis for this research is that community engagement was an important tool in the Pier 70 development process. Because Forest City created a project-specific community engagement strategy that reached above and beyond the standard community process, the project was able to garner high levels of community support and shape its program to align with the needs of the city. Part of this strategy included learning from previous waterfront development processes and responding to these precedents. This case study suggests the importance of understanding the culture and context of the neighborhood and city in creating a successful development project.

METHODS

The primary data relied on for this thesis is mostly qualitative, collected in person through interviews and field research. Semi-structured interviews with experts related to Pier 70 and waterfront development in San Francisco provide a crucial understanding of the complexity of the development process in the city. Interview subjects include the developers and designers working on Pier 70, representatives of local neighborhood organizations, officials from the San Francisco Planning Department and Port, and consultants and advocates working in planning and development. Given that the project is still in the entitlement process and construction will not begin for several years, it is not possible to interview stakeholders regarding the success of the project, nor perform a post-completion assessment. Instead, analysis examines the development process, specifically focusing on the community outreach approach.

Field research was conducted to understand the character of the project site and neighborhood as a historic, industrial waterfront. Direct site observation has informed the evaluation of the current design proposal and how it does and does not meet community needs. This assessment of the existing urban fabric surrounding Pier 70 and other waterfront redevelopment areas includes an examination of land uses, streetscapes, building forms, site characteristics, and the relationship of the site to the water and the neighborhood.

Examination of project documents, including the Pier 70 Preferred Master Plan and RFQ, development proposals, and term sheet, has also informed research.

Secondary data includes recent journalism about San Francisco's waterfront development and publications on real estate development, planning, and urban design issues. Review of literature on community engagement, the real estate development process, and waterfront redevelopment grounds this inquiry.

1.5 THESIS ORGANIZATION

This thesis is divided into six chapters:

Chapter 2: Community Process in Real Estate Development establishes a framework for understanding real estate development as an iterative process of phases, each with different levels of risk and community involvement. Next, the chapter examines community engagement in the context of development, establishing the foundations of community planning and defining the standard community process and exposing its inherent problems. This is followed by a brief review of the different ways that communities can gain public benefits from development projects. Lastly, the chapter explores new strategies for community engagement, including the use of technology and on-the-ground events to increase citizen participation and garner more feedback and support throughout the development process.

Chapter 3: Current Context of Waterfront Development grounds the research with a review of waterfront development literature, projects, and history. This chapter provides context to the Pier 70 case study with a brief discussion of mixed-use waterfront redevelopment projects in Washington D.C., Boston, and New York. Next, the chapter presents a review of the politics and processes that have led to San Francisco's current conditions surrounding development. These conditions include a highly politicized development process and increasing controversy concerning development on the waterfront.

Chapter 4: Pier 70 Case Study presents the history, context, and process behind Forest City's Pier 70 development project. This chapter details the extensive development process and community engagement efforts, identifying key project goals and priorities for city and community stakeholders. This includes an analysis of how the project's programmatic elements meet stakeholder priorities. Lastly, this chapter ends with an overview of the design, financing, and implementation for the project, and a brief discussion of the future of the project.

Chapter 5: Context & Analysis features an assessment of two ongoing waterfront projects that neighbor Pier 70 in San Francisco. This provides important background to understand how the Pier 70 project fits within the landscape of waterfront development in the city. Following, the chapter analyzes the Pier 70 case study in context to understand how the project and process is successful. Analysis considers the case study findings at multiple scales (the developer, project, neighborhood, and city), the standard development process,

and how Forest City has met community goals and priorities.

Chapter 6: Conclusion analyzes the replicability of Forest City's community engagement approach at Pier 70. In doing so, it presents lessons learned for the developer, community, and city, highlighting effective methods for engagement in the development process. This chapter outlines future topics for research, concluding with final thoughts on the changing nature of real estate development and the different roles that developers, cities, and communities play in shaping the built environment.

early 2000s. Though there were previous failed efforts to redevelop Pier 70, direct planning for the current incarnation of the Pier 70 project began in 2007, culminating in the Port's "Pier 70 Preferred Master Plan" in 2010. Since 2011, developer Forest City has lead community outreach and engagement efforts for the development of the 28-acre "Waterfront" site.

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1   In San Francisco, Mayor Lee has set a goal of building 30,000 new units by 2020. Mayor DeBlasio's plan for New York City calls for the construction or preservation of 200,000 units over the next 10 years (80,000 new units and 120,000 preserved units). Boston's Mayor Walsh has called for the construction of 53,000 new housing units by 2030. However, in all three cities, critics question the financial and regulatory feasibility of such plans, as well as the impacts of such development on existing communities. As former San Francisco Mayor Art Agnos says about Mayor Lee, "This mayor is very prolific with his goals, but short on detail" (Coté, 2015, para. 15), (Ross, 2014), (Yee & Navarro, 2015).

2   According to the San Francisco Planning Department, many of the large residential projects currently under development were entitled prior to the recession, which subsequently delayed construction. As economic conditions recovered, construction for these projects began at once. However, this surge of new development will slow down once the pre-recession backlog is complete (San Francisco Planning Department, 2014).

3   Planning related to Pier 70 began with the San Francisco Planning Department's Eastern Neighborhoods and Central Waterfront Plans in the

2.   COMMUNITY PROCESS IN DEVELOPMENT

Projects like Pier 70 draw scrutiny precisely for their unique positions in the landscape of real estate development in dense cities such as San Francisco. "It's the best site left in San Francisco," remarked one of the responding developers to the Pier 70 RFP (Stillman, 2009, para. 10). Because of the significance of such a project (politically, financially, and in terms of its impact on the built environment), it is especially important to understand the real estate development process that will unfold to make the project happen. Recognizing how community engagement fits into this process is particularly important for such a large, public-private development project. Following a review of the real estate development and entitlement processes, this chapter presents a brief overview of the different ways that communities negotiate and gain public benefits from development projects. Lastly, this chapter explores new strategies for community engagement both to streamline the development process and to establish new methods by which the public can more actively and effectively participate in the development of their cities.

2.1 REAL ESTATE DEVELOPMENT PROCESS

Real estate exists at the nexus of physical form and financial markets. The industry shares characteristics of other productive industries, such as the product making of manufacturing and the market-cycle dependence agriculture (Fainstein, 2001, p. 198). Yet, the industry's place within both the property market (the market for the use of real property, whether land or building) and the asset market (the market for the ownership of property as an investment in a future cash flow) makes it a uniquely time and location-sensitive field (DiPasquale & Wheaton, 1995). Geltner writes, "From an eco-

nomic perspective, development projects are crucial points in space and time where financial capital becomes fixed as physical capital. More broadly, they are where ideas become reality" (Geltner, Miller, Clayton, & Eichholtz, 2013, p. 733). To create a successful development project, the development process requires the coordination of a diverse set of disciplines and activities. Graaskamp suggests that this process is highly iterative, cycling between market, design, political, and financial analysis to synthesize a feasible and profitable development project, as illustrated in the Graaskamp Model diagram (Geltner et al., 2013). Geltner separates this process into four phases (predevelopment, construction, closeout, and stabilization) depicting the relationship between investment risk and return throughout the development process.
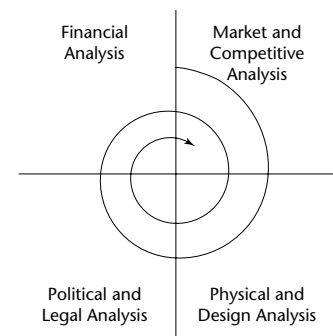
PHASES OF DEVELOPMENT

The most creative part of the development process is during the preliminary phase, also called predevelopment, when the project is first imagined and shaped. This iterative, entrepreneurial period can last anywhere from several months to over a decade depending on the complexity of the project. During this phase, the developer begins to option and assemble land parcels, obtain permits, and develop the design and program of the project. This process may ultimately lead to the project's failure, for example if permitting is denied or analysis deems the project is financially infeasible. Because of this uncertainty, the preliminary phase carries the highest risk and a commensurately high opportunity cost of capital (OCC), as high as 40%. The second phase of the process is the construction period. Risk is still high, but reduced from predevelopment, as the devel-

oper must have the entitlements necessary to break ground. This period requires a relatively high expected return, with an OCC of 20%. In order to build the project, the developer must purchase the land and thus make a significant financial investment in the project; further financial investments follow, in the form of construction costs. The third phase, lease-up or closeout, occurs after the construction of the "shell" of the project is complete and tenants begin leasing space. Because the project is largely constructed, the project requires less capital and less risk, thereby reducing the return, with an OCC of 10%. The last phase of the project, stabilized operations, occurs when the project is completely built and leased up, operating at its steady-state level of profitability and low risk levels, with an OCC of 8% (Geltner et al., 2013).

DEVELOPMENT RISK

Real estate development is an inherently unstable field, in which risk and reward go hand-in-hand. Savvy investors can reap high returns for the success of risky projects. In general, all projects are subject to the standard risks associated with development: entitlement, financing, cost, market, counterparty, and operating risk. Entitlement risk is the risk that the process of seeking project entitlements will be more expensive and take more time than expected. Financing risk involves the availability and cost of funding and financing mechanisms for a project, including construction loans and bonds. Cost risk involves the risk associated with estimating entitlement and construction costs. Market risk involves the timing of the project and how it will relate to changing market conditions over the lifetime of the development process. Counterparty risk involves the

Graaskamp Model (source: Geltner et al.)
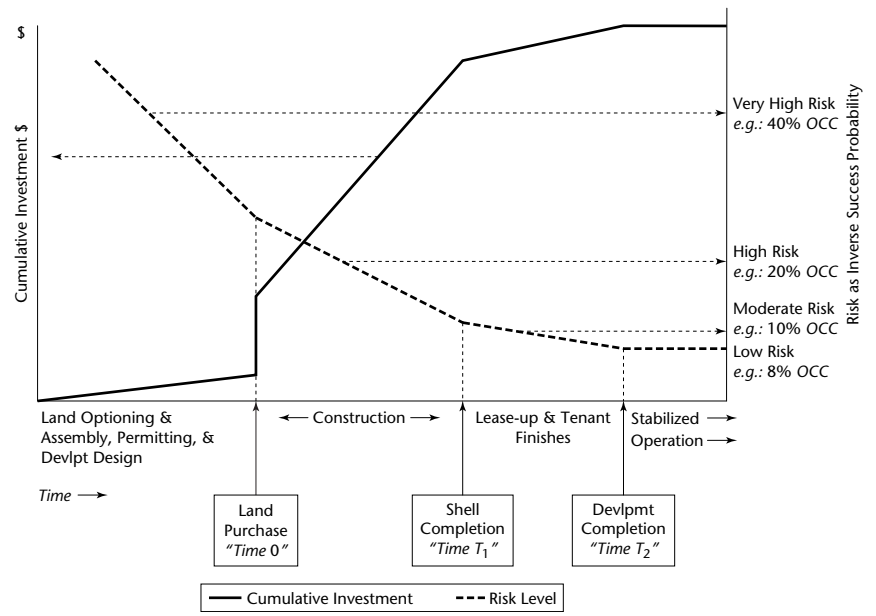
Development Project Phases: Cumulative Capital Investment Profile and Risk (source: Geltner et al.)

reliability and expertise of any partners in the development process. Operating risk involves revenue that is dependent on the project's ability to maintain high occupancy levels, capture high rents, and manage operations and maintenance (San Francisco Board of Supervisors, 2013).

ENTITLEMENT PROCESS

Within the development process, entitlement risk during the preliminary phase exposes the developer to the greatest uncertainty. The entitlement process, meaning obtaining approval to develop the project from regulatory bodies at the local, state, and federal level (depending on the project), requires navigating legal regulations and stakeholder input. Through the entitlement process, the developer is able to significantly increase the value of the project, gaining the ability to develop the property at a use more profitable than its current state. However, many aspects of this process are out of control of the developer and instead dictated by municipalities, communities, or market conditions. As government agencies and residents become more involved in shaping development projects, the entitlement process has become increasingly complex and at times, idiosyncratic (Kelley, 2007). According to Ben-Joseph's nationwide study of the impact of regulations on the development of residential subdivisions, the approval process has been protracted in many ways, including an increase in the number of agencies involved, requirements included, and delays and processing time (Ben-Joseph, 2003). Because the time and money spent throughout the entitlement process can have a significant impact on the development budget, it is imperative to reduce entitlement risk.

Increased community involvement, both in the planning and development processes, has proven effective at lowering entitlement risk while promoting community-minded projects. One such strategy for this is through intensive community engagement and involvement in the creation of city and neighborhood area plans, thereby building consensus for overarching development goals and streamlining the review process for all projects consistent with these plans. A successful example of this pre-entitlement approach is seen in Walnut Creek, California, where the city engaged residents to create a downtown development plan that provided amenities while relieving community concerns about building at high densities and heights. Through this process, the city performed an environmental impact review on the entire area, meaning that individual projects conforming to the downtown plan were only required to undergo design review and obtain building permits as part of the entitlement process (Long, 2011). The San Francisco Planning Department has also taken this pre-entitlement approach for its most recent neighborhood area plans, helping to streamline the city's arduous entitlement process. This pre-entitlement approach to reducing risk can certainly streamline the development process, but cannot always be applied to large, complex projects. In particular, it may not apply to projects that do not conform to area plans or to public-private partnerships with a large number of stakeholders. In these cases, project-specific community outreach may be used to reduce development risk.

2.2 COMMUNITY ENGAGEMENT IN PLANNING & DEVELOPMENT TODAY

"Town meetings are to liberty what primary schools are to science; they bring it within the people's reach, they teach men how to use and how to enjoy it…. In America the people form a master who must be obeyed to the utmost limits of possibility."
  - Alexis de Tocqueville, Democracy in America (Kaliski, 2005, p. 24)

FOUNDATIONS OF COMMUNITY PLANNING

Community engagement is not unique to the real estate development process. On the contrary, civic engagement forms the very foundations of democracy in the United States and it was de Tocqueville himself who was surprised by the intensity of citizen participation in local decision making (Kaliski, 2005). Despite this, engagement has not always had such a prominent role in shaping the built environment. With the professionalization of the field in the early 20th century, top-down master planning characterized urban planning practices. Historically, public feedback was not integral to the planning process. Instead, feedback was largely given only at public hearings, which local and state agencies required prior to enacting significant land use, environmental, and development decisions. However, these hearings, often formal and perfunctory, were typically held only at the end of the planning process (Hoch, Dalton, & So, 2000). By the 1960s, concerns over the impact of urban renewal on existing communities catalyzed criticism surrounding how planning decisions were made. This brought new attention to whose voices are heard and interests are represented, exposing who could and could not participate to influence change in the planning process.

The literature on citizen participation in planning largely concerns the problems of current methods and the need to consider alternative strategies for more effective participation. Paul Davidoff champions the concept of advocacy planning, calling for meaningful citizen participation to represent diverse interests and an inclusive process that allows the citizen not only to be heard, but also to understand the issues at hand. Sherry Arnstein's 1969 article, "A Ladder of Citizen Participation," is a seminal critique of participation in the planning process. She writes, "There is a critical difference between going through the empty ritual of participation and having the real power needed to affect the outcome of the process" (Arnstein, 1969, p. 216). Her illustration of the "Ladder of Citizen Participation" categorizes eight rungs of participation to demonstrate the different "gradations" of participation: manipulation, therapy, informing, consultation, placation, partnership, delegated power, and citizen control (Arnstein, 1969, p. 217).

Innes and Booher seek to reframe participation strategies, exploring new models to replace the highly ritualized, legally required methods practiced in the United States. These standard methods, pervasive across public-decision making processes, include public hearings, review and comment procedures, and citizen-based commissions and committees. However, these methods do not allow for meaningful participation and collaboration. Instead, they lead to the formal, reactionary, one-way communication of public hearings and comment processes, and the selected elite groups of representatives

who sit on citizen commissions. Innes and Booher emphatically summarize the problems:

> They do not achieve genuine participation in planning or other decisions; they do not satisfy members of the public that they are being heard; they seldom can be said to improve the decisions that agencies and public officials make; and they do not incorporate a broad spectrum of the public. Worse yet, these methods often antagonize the members of the public who do try to work with them. The methods often pit citizens against each other, as they feel compelled to speak of the issues in polarizing terms to get their points across. This pattern makes it even more difficult for decision makers to sort through what they hear, much less to make a choice using public input. Most often these methods discourage busy and thoughtful individuals from wasting their time going through what appear to be nothing more than rituals designed to satisfy legal requirements (Innes & Booher, 2004, p. 419).

In the face of these standard models, Innes and Booher, among others, propose more collaborative, interactive participation methods. They seek to change the dynamics of community engagement to promote transparency, the integration of individual and collective interests, authentic dialogue, and civic capacity. Hoch, Dalton, and So offer principles for consensus building, which calls for mediation and the incorporation of multiple viewpoints in the planning process:

> involve interests as early as possible; tailor the process; be inclusive; identify and nurture shared interests; share credible information; provide impartial and collaborative leadership; consider using professional help; maintain momentum; validate results; and involve the media (Hoch et al., 2000, p. 425).

These principles lend themselves well to create a meaningful public participation process for real estate development as well as for general planning processes.

STANDARD COMMUNITY PROCESS

While every city has different standards and regulations for approving real estate development projects, the entitlement process usually follows a similar format. The length and intensity of this process, and the need to deviate from the "standard model," largely depends on the political climate of the government and the community.

Peca describes the standard entitlement process with four phases: concept, pre-application, application, and public approval phase. In the concept phase, the developer envisions the program and design and tests the feasibility of the project. While ideally the developer presents these ideas to community groups and the government, many developers overlook this step to later realize their plans will be stalled due to this oversight (Peca, 2012). During the pre-application phase, the developer furthers the project feasibility in dialogue with the community and government agencies. The purpose of this is both to incorporate feedback and ensure that the project meets local regulations and ordinances. Next, the developer files a formal application for approval and initiates an official notice of a public

hearing to adjacent property owners and community members. Finally, during the public approval phase, the developer presents the project and the public is invited to comment on the project. The government takes this feedback into account when making its decision to approve the project as is, approve the project given specified changes, or deny project approval (Peca, 2012).

The standard community process specifies the need for public input in the form of a public hearing and whatever additional outreach efforts the developer undertakes, but it cannot guarantee participation. If the developer chooses to meet with the community in the initial concept and pre-application phases, who participates is largely the choice of whom the developer contacts. The local planning department or other government agencies may recommend specific stakeholder groups, but the developer largely is in control of which groups participate (generally neighborhood associations and special interest groups, such as environmental or historic preservation organizations). Those who meet regarding new development projects are largely the "usual suspects" who have the wherewithal to be involved in local land use decisions.

While anyone could conceivably attend a public hearing about a development project, many people do not have the time, interest, or courage to take a stand and voice their opinions at these often-contentious meetings. The numerous meetings require patience and persistence; the time commitment can exclude many working adults, especially those with families, from the participation process (Heywood & Nelson, 2015). Planners and citizens alike must deal with meeting fatigue and the "tyranny of the extremes," in which

only people who are passionately for or against an issue will attend meetings (Seifel, 2015). Given the formalistic procedures of public meetings and hearings, often in which citizens may only speak in turn, on an agenda-defined topic, and for a few minutes at a time, it makes sense that citizens would only participate if avidly for or against an issue (Innes & Booher, 2004). Or as Molotch puts it, "The people who participate with their energies, and particularly with their fortunes…have the most to gain or lose in land-use decisions" (Molotch, 1976, p. 314). In many cases, these meetings are not representative of the community at large.
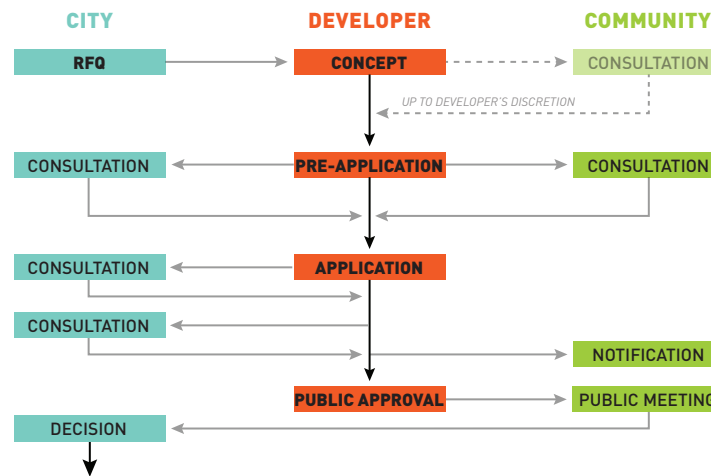

Diagram of Standard Community Process

The formation of neighborhood organizations and other citizen advisory groups also does not guarantee the equal representation of citizens residing in affected areas. However, these organizations can have a significant influence in the planning and development process. Kaliski describes the "increasingly institutionalized" process in Los Angeles, where voters have legally required review and oversight by neighborhood councils and advisory boards. Technically these groups are only advisory, without actual approval power, yet their existence and right to comment on all development and planning issues does influence decision makers to take their considerations into account (Kaliski, 2005, p. 29). Jasper Rubin, a former planner with the San Francisco Planning Department and a current member of the Port's Central Waterfront Advisory Group, believes the opinions of these groups does matter, especially the advisory groups, which act as bully pulpits (Rubin, 2015).

In San Francisco, the entitlement process is particularly extensive in terms of legal requirements and public participation. Tim Colen, Executive Director of SFHAC, a housing development advocacy organization in San Francisco, explains that the very existence of his organization is due to the increasingly difficult nature of the real estate development and the "too established, too generous public processes" in the city. He says:

> I think in many ways we have put enormous energy and resources into community outreach and public participation. But it's broken. Because in the end, what we value more is the process rather than the results. So as long as the process goes on and people come in [and stop the development process].

And this happens again and again. You can keep stalling and appealing projects and this is a legitimate tactic to kill a project. You don't have to get it denied, but you can run out the developer's pockets (Colen, 2015).

This focus on the process rather than the results, as Colen describes, has prompted public agencies and developers alike to rethink how to engage citizens in a more effective, collaborative manner. Project approval is a relatively standard and expected part of any development process, but as entitlement processes and attitudes surrounding development become increasingly complex, the most appropriate strategies for community outreach remain unclear (Quill, 2007).

2.3 ENGAGEMENT: FOR WHAT & FOR WHOM?

The purposes and reasons behind community participation in planning and development decisions vary for different parties. For decision makers such as public officials or developers, the purposes of public participation are as follows: (1) to understand public preferences before making decisions, (2) to draw on the knowledge and expertise of the community, (3) to more fairly hear and recognize the needs of a diverse range of groups, (4) to gain legitimacy to support decision making, and (5) to comply with legal requirements (Innes & Booher, 2004).

For citizens, the reasons why people want to or should engage in the community process also differ, but they largely relate to ways to ensure that new planning or development projects do not harm existing residents. In other words, they consider how the public can

get what it wants and needs from development projects. The outcomes fluctuate greatly, in both scale and formality – ranging from informal discussions about neighborhood concerns to full-blown contracts detailing the scope and timing of public benefits to be delivered by the developer.

An important way that communities and cities gain from development projects is through provisions calling for public benefits. Often in the form of open space, streetscape amenities, transit improvements, or more housing, among others, public benefits rose to prominence in the 1980s as American cities called on the private market to provide what they wanted (Sagalyn, 1997). Traditionally, these public benefits have been part of a tradeoff that developers provide in order to gain permission to develop their site as they see fit. Cities gain public benefits from private developers under several common frameworks, including exactions, incentive zoning, and public-private development. Exaction requirements call for developers to provide public amenities, either directly or through a fee, in exchange for permission to develop a property in a form or use otherwise prohibited (Been, 1991). Exactions take several forms, such as the on or off-site dedication or construction of a public amenity. They also include impact fees that developers must pay to offset the costs of increased public services, such as infrastructure, schools, and utilities, needed to support new developments and mitigate any negative impacts they may cause to the neighborhood or city. Linkage fees are another form of exaction, in which developers must pay to indirectly offset the effects of their projects, such as increased demand for housing, employment, or public transportation (Been, 1991). Inclusionary zoning programs generally address housing

needs, requiring developers to dedicate a portion of a project's residential units as below-market rate, pay an equivalent fee, or build below-market rate units off-site. Both exactions and incentive zoning are tied to regulatory approvals, in which the scope of the public benefit trade-off is generally specified by the size of the project or the number of zoning exemptions required (Sagalyn, 1997).

The scope of public benefits provided in other frameworks, including in public-private development projects, are much less defined and can largely depend on the negotiation powers of the community, the city, and the developer. Development agreements are formal contracts negotiated between a developer and the local government to detail the terms of the development project, linking the right to develop a site under specific land use regulations in return for exactions and other conditions (Callies & Tappendorf, 2000). Under the landmark land use cases, *Nollan v. California Coastal Commission* and *Dolan v. City of Tigard*, the exactions required must have an "essential nexus" and "rough proportionality" to the impact of the proposed development (Callies & Tappendorf, 2000). Development agreements set these terms and others related to the implementation of the project. While some states require a public hearing before entering into a development agreement, extensive community negotiations and engagement is not standard. Nevertheless, citizen participation in earlier development processes is crucial for the city and developer to understand community concerns and priorities to incorporate into the development agreement, including how to spend any applicable impact fees.

In addition to development agreements, community benefit agree-

ments have emerged as a new tool for enhanced community engagement. For developers, they help gain approval and for community members, they act to ensure public benefits from the project (Musil, 2014). Negotiated directly between developers and community groups, community benefit agreements are private contracts offering specific project-related public benefits and development terms in exchange for community support. Once obtained, the developer takes the community benefit agreement to the municipality, where the agreement may be incorporated into the development agreement, and used to accelerate the entitlement process (Musil, 2014).

2.4 NEW STRATEGIES FOR ENGAGEMENT IN REAL ESTATE DEVELOPMENT

In order to influence the development of one's neighborhood, whether through community benefit agreements or other exactions, participation is crucial. Not only must community members actively contribute to this process, but also they must feel like their opinions matter to the decision-maker charged with collecting feedback for a new project. Effective communication is critical to building relationships between developers and community members, creating an environment of mutual understanding that can eventually lead to project support (Quill, 2007). A common scenario is for developers to spend a significant amount of time and money to develop a project to a high level of resolution before taking it to the community for feedback. However, upon seeing a nearly complete project with hard-lined plans and slick renderings, the community is taken aback because they did not know about the project until this point in time. To the community, the project seems too concrete and the process

seems too far along to incorporate their input in a meaningful way, and thus they oppose the project. To avoid this, Quill recommends a community engagement approach based on communication: early, interactive (listening and hearing), and visual (2007). Developers can build trust through documentation, including with written transcripts and project websites, to ensure accountability by providing a record and act as a resource archiving the development process.

Nevertheless, building more trusting and communicative relationships between developers and the community is hardly beneficial if the community does not participate. This is not just a problem for developers, but for other people involved in the built environment, such as urban planners, designers, and those concerned with civic engagement in general. Planners at the San Francisco Planning Department and the Port said that their agencies continually struggle to draw broader groups of citizens to take part in the planning process. The Planning Department has sent their staff to week-long public participation trainings, run by the International Association of Public Participation, where the main lesson has been to stop holding the kinds of public meetings and hearings of the standard planning process. Yet, Joshua Switzky of the Planning Department believes that planners are fundamentally not trained in a way to innovate and make up a new system of public participation. His department has experimented with different approaches, trying to be savvier with their outreach approaches in recent planning efforts. Switzky says they held walking tours and had a pop-up storefront for drop-in visioning exercises and events for their Central SOMA neighborhood plan. However, the larger problem is that they need to engage people no matter if they have the tools available; if they

cannot get new people interested, they just have the same people with new methods of engagement (Switzky, 2015). On this matter, Kaliski writes:

> Regardless of the increased means for local input, too many people still do not participate. Lack of participation is in part the result of cynicism about the potential of politics in general and local planning politics in particular, particularly when implementation takes so long. Lack of input may also be due to the fact that people's lives are busier than ever. The number of issues that get vetted at simultaneous meeting opportunities is vast. There are simply too many meetings (Kaliski, 2005, p. 31).

This very sentiment summarizes the need for new engagement strategies. Around the country, people, including planners, community organizers, software developers, and artists, are experimenting with new community engagement strategies to reach out to a wider range of constituents. The following section discusses a few examples of these new engagement strategies.

ENGAGEMENT THROUGH TECHNOLOGY

The use of technology provides an important way to acquire feedback in a faster and more efficient manner. An example of this is coUrbanize, an online project-based platform for planners, developers, and cities to share their work and gather community feedback. Karin Brandt, CEO and co-founder, of coUrbanize says she hopes the tool can become a home base for development projects and a

coUrbanize Platform Screenshot (source: coUrbanize)

platform for civic engagement that supplements in-person community processes. By providing more details about development projects, Brandt says that coUrbanize can better equip people to participate. It can be difficult for people to make public comments, especially if they want more time to digest information or if they do not want to speak up at a controversial meeting. By providing another outlet to give feedback, coUrbanize can help solve this problem. Brandt says the platform creates transparency and control for the developer, all with the aim of reducing risk. An example of this is electronically compiling public meeting comments, making them searchable, thereby providing clear information for the developer but also holding the developer accountable to this publically accessible information (Brandt, 2015).

Textizen is another new technology tool that seeks to improve community engagement. It also creates a channel for direct feedback and can be used to bypass tiring community meetings. Textizen is a text message survey platform that allows planners and developers to survey residents for community input on local projects, such as the location of a new transit line or the community benefits people would like to see as a result of a new development project. coUrbanize's platform also includes an integrated text message survey system. The founders at both Textizen and coUrbanize believe that their tools, as low "barrier to entry" strategies, will allow more people to engage, ultimately helping shape a more accessible and inclusive planning process.

Brandt notes that real estate development is still about human relationships, hinging on the ability of developers to connect with the

Top: Textizen campaign for Philadelphia's University Southwest District Plan (source: Philadelphia 2035); Bottom: Proxy in San Francisco (source: envelope A+D)

community. If developers are perceived as transparent and honest, it not only helps streamline the approval process for their current project, but also helps their reputation and strengthens relationships for future projects. Even with tools like coUrbanize, Brandt says the challenges of getting new people involved remain. She believes that people need to see that they matter, perhaps with a feedback loop to see how their input has been incorporated into the project, and much of this depends on the will of the developer (Brandt, 2015).

ENGAGEMENT ON-THE GROUND

On-the-ground community engagement events, contextual to the neighborhood and development project, provide another strategy to draw a wider audience than the typical planning meeting. Rooted in community organizing and performance art, developers and planners alike have also begun to adopt elements of this type of engagement. Known as interim activation or "pop-up," this strategy involves providing a temporary use for a site while waiting through an approval process or market cycle. Examples include open-air markets, such as the one Forest City held at Pier 70, and venues for food and entertainment, such as concerts, beer gardens, and food trucks.

Real estate development-oriented interim activation events have had varying degrees of explicit connection to the real estate project, including with project publicity and tabling or no sign of a development project whatsoever. When the development project is publicized, the intent of this strategy is to spur excitement and support for the future development in a more casual and fun environment

while also generating positive media attention. These temporary uses also help build up habits, as residents become used to visiting a once-vacant site. Anna Muessig, an urban planner at Gehl Studio, has been involved in several interim activation strategies for waterfront development in San Francisco. She says that interim activation strategies can be an important tool for developers, in which they can prototype different uses, including retail or restaurants, and form relationships with community members and local vendors, who may potentially become ground floor tenants (Muessig, 2015).

This strategy is particularly popular in San Francisco, beginning with Proxy in the Hayes Valley neighborhood. This temporary two-block public space and retail venue, designed by the firm Envelope Architecture+Design, is the product of the Mayor's Office of Economic and Workforce Development, which distributed an RFP for the temporary use of a development site during the economic downturn. The project, occupying a future development site under the former Central Freeway, opened in 2010 with four shipping containers. Intended to only last three years, the site has since grown to 21 containers, with coffee and ice cream shops, a beer garden, and a bike tour center, and the lease extended until 2020. Interim activation sites like Proxy can be a win-win for developers, the city, and the community, generating project support while also providing the public realm and amenities that are missing and needed in the area (envelopeA+D, n.d.).

Both technology-based and on-the-ground strategies for community engagement work by creating new environments for participation and new "channels for feedback," in the words of Sherry Arnstein

(1969, p. 219). By exploring new methods and stepping outside of the confines of standard community planning processes, these strategies could help garner greater and more diverse feedback, support, and attention for planning and development projects.

3. CURRENT CONTEXT

3.1 WATERFRONT DEVELOPMENT TODAY

BACKGROUND

The redevelopment of urban waterfronts around the world has been a significant phenomenon in the transformation of cities over the past several decades. Driven in part by macroeconomic changes surrounding industry, globalization, and increasing urbanization, port cities from London to Sydney have restructured their waterfronts from places of work to places of leisure and living (Rubin, 2011a). In many of these cities, waterfront redevelopment has been a lengthy, complicated process. Often, the process is rife with differing interests and concerns from a wide range of stakeholders, including neighborhood associations, environmental organizations, industrial groups, and political forces. Thus, the complexity of redevelopment extends greatly beyond the difficulty of the environmental remediation, infrastructure shoring, and new construction needed to physically redevelop the waterfront.

With the proliferation of waterfront redevelopment projects has come a growing body of literature on the topic. These works largely encompass two groups: the first, examining the political, social and economic conditions of waterfront redevelopment (Malone, Gordon, Hoyle et al), and the second, profiling the physical urban design qualities of waterfront projects (Breen and Rigby, Bruttomesso, Marshall). These studies of the sociopolitical impact of waterfront redevelopment include analysis of the changing role of port authorities (Brown, Garcia, Cook et al) and development in the context of neoliberal urbanization (Desfor and Laidley, Oakley). Related are empirical studies examining the economic implications of industrial activity, residential location, and mixed-use redevelopment (Burnell, Hopenbrouwer and Louw). Additional scholarship examines the changing waterfront in specific cities like San Francisco, chronicling the relationship between the city and its shoreline (Rubin, Corbett). The wide range of scholarship on waterfront redevelopment is representative both of the increasing prevalence of waterfront projects around the world and the multi-faceted extents of such projects (E. Woods, 2012).

Waterfront projects provide an interesting ground for examination precisely because of the heightened level of attention they receive. According to Marshall, the waterfront provides a highly visible venue "to recreate the image of the city," while attracting people (residents, tourists, and workers) and creating economic development in the city (Marshall, 2004). Malone argues that waterfront development projects reflect familiar patterns of urbanization:

> The waterfront is remarkable in that it can be endowed with economic, political, social and even cultural significance. Nevertheless, neither the factors that have created the opportunities for redevelopment, nor the processes of renewal, fall outside the common frameworks for urban development. In this respect the waterfront is not unique (Malone, 1997, p. 2).

Yet, though the larger capital flows and general development tools needed to implement waterfront projects are not unique in themselves, there is much about these projects that create a rich field for examination. In fact, the very differences in regulations to uphold

and agencies to comply with, alongside the high political and community attention paid to such projects, distinguish these projects from typical urban infill development. Particularly, the scale and financial value of these waterfront sites and the complexity of issues at-hand create a multitude of community and stakeholder interests.

COMPARATIVE WATERFRONT DEVELOPMENT PROJECTS

On San Francisco's waterfront, the Pier 70 project has benefitted from extensive community outreach and resultant support for the project. Yet, even with such support, the project has required significant resources expended and has suffered multi-year delays. This is not unique to waterfront projects in San Francisco. An examination of several other recent waterfront redevelopment projects provides context and comparison for Forest City's efforts at Pier 70. These projects, in Washington D.C., Boston, and New York, are notable and similar for their formerly industrial uses, proposals for mixed-use development, and varying degrees of public engagement and support. A brief review of these waterfront projects provides context to the in-depth study of Pier 70. Though not completely equivalent to redevelopment in San Francisco, efforts in other cities display the range of different approaches to waterfront development projects and processes.

The Yards, Washington D.C.
The Yards in Washington D.C. is an especially apt comparison to Pier 70. Forest City is also developing this industrial waterfront site, through its regional Forest City Washington office, and in a public-private partnership with the U.S. General Services Adminis-

tration (GSA) and the municipal government of D.C. The 42-acre mixed-use project will include 5.5 million GSF total, with 2,700 residential units, 1.8 million GSF office space, and 300,000 GSF of retail, restaurants, and ancillary services. Located along the Anacostia River, the site was once an annex of the Washington Navy Yard where it was home to shipbuilding, repair, and other industrial functions of the Navy. The GSA gained control of the site in 1963 and began negotiations with Forest City to redevelop the property in 2004. The project is adjacent to the new Washington Nationals baseball stadium and at the center of the Capital Riverfront Business Improvement District, with aims to catalyze the formerly remote industrial area. Like the Pier 70 project, Forest City has integrated historic preservation and open space, including a new 5.5-acre waterfront park, into the development plans. The firm's description of the project, "A careful blending of adaptive reuse of historic buildings with new construction offers residents and visitors an eclectic, urban, riverfront neighborhood experience with an emphasis on sustainable design," emphasizes the "eclecticism" that they also hope to draw from and produce at Pier 70 (Forest City, n.d.). Adaptive reuse plans include the redevelopment of a warehouse into loft apartments, a boilermaker shop into a market place, and a lumber shed into retail stores, which will help create "a more holistic community feel than the relatively isolated new buildings popping up around the ballpark" (Dietsch, 2011, para. 6).

Construction began in 2007 and the first phase of the project recently completed, with several hundred housing units, retail stores, and restaurants. Though full build-out is expected to last 20 years, Forest City has tenanted the site with more temporary uses, includ-

Top: The Yards, Washington, DC (source: Forest City)
Bottom: Fan Pier, Boston (source: Fallon Companies)

ing a home for the DC Trapeze School, as well as parking lots and public open space. Additionally, the 5.5-acre riverfront Yards Park opened in 2010, as part of the project's phasing plan to provide public benefits upfront and incrementally throughout the project.

The development of The Yards has had no notable controversy with the community. Much of this is due to its location, in the relatively unpopulated, transitioning neighborhood of the Capital Riverfront. For years, Navy Yard activity dominated much of the riverfront (with 26,000 employees on 127 acres of land during WWII). Only recently has the city moved to redevelop the waterfront industrial area as a public amenity and mixed-use neighborhood, as seen by the 2003 Anacostia Waterfront Initiative and followed by the 2007 creation of Capital Riverfront Business Improvement District (Capitol Riverfront, n.d.). Located between the Nationals baseball stadium and the active Washington Navy Yard, there was little existing community to engage throughout the development process. As the project progresses, it will be interesting to see how developers at The Yard integrate the waterfront and the existing historic buildings into the site, and if the development truly creates the "neighborhood experience" that Forest City champions.

Fan Pier, South Boston Seaport District, Boston
The redevelopment of Boston's industrial waterfront mirrors similar processes in Washington D.C. and San Francisco, albeit on a much larger scale. The planning and development of the South Boston Seaport District has been a decades-long process to determine the fate of nearly 1000 acres of industrial waterfront adjacent to Boston's downtown. With estimates of creating 20 million square feet

of new buildings resulting in 44,000 permanent jobs, the district's development has drawn intense scrutiny from city officials and residents of surrounding neighborhoods since the 1980s. The politically powerful South Boston community has been especially demanding, seeking linkage payments from the development and threatening to stop progress unless they receive sufficient concessions (Fischer, 1999). Historically, the Seaport District has employed many South Boston residents, who still see the area as their "backyard" despite the transition of the area away from an industrial economy. Furthermore, South Boston has claimed "ownership" of the area even though it is really no closer to the Seaport than many other Boston neighborhoods, including Chinatown and the South End (Fischer, 1999). Since the 1980s, negotiations between developers, the city, and South Boston political leaders have impacted many of the proposed projects and plans for the area, including Fan Pier, the Federal Courthouse, the Megaplex, the Patriots Stadium, the Boston Convention and Exhibition Center, and the South Boston Seaport Master Plan (Silberberg, 1998).

The controversial and lengthy development process of the 20.5-acre Fan Pier area is particularly relevant to this review of recent mixed-use waterfront projects. In close proximity to downtown, just across Fort Point channel and less than half a mile from the nearest subway and commuter rail station, and with spectacular views of the Boston Harbor, Fan Pier has been a desirable redevelopment site for decades. In 1981, landowner Anthony Athanas entered into agreement with developers to develop Fan Pier and the adjacent Pier 4 area, totaling 35 acres. The mixed-use program included 2.1 million GSF of office space, 250,000 GSF retail, 900,000 GSF hotel, 1.4

million GSF housing (over 1000 units), in addition to parking and cultural uses (Silberberg, 1998).

Though the city greatly supported the project, it attracted significant opposition from the community. Residents and politicians from South Boston's traditional residential neighborhoods largely made up the mayor-appointed Citizen Advisory Committee (CAC) and supported the project with the promise of receiving a large percentage of the project's linkage funds. However, the CAC did not represent interests of the entire community. The density of office buildings that threatened to increase real estate prices and drive people out of the area concerned existing residents of the less traditional residential areas, including the Fort Point Channel artist community. Maritime industrial groups worried that the project would hamper operations and would be the first of many other projects to endanger the vitality of the Port. Nevertheless, the CAC acted as the "official" voice of the community and with their support, the city approved the project in 1987 (Silberberg, 1998). Ultimately, Athanas halted development plans not due to community opposition, but for financial reasons. The divided support is a manifestation of the strength of political interests over community well being on the Boston waterfront.

A lawsuit, extended entitlement process, and economic downturn delayed the development in the years following. Finally in 2006, local developer Joseph Fallon bought much of the site for $115 million, refining the master plan and breaking ground right as the recession landed in 2007. Full build-out for the planned 3 million GSF of new office, residential, retail, and public space will take at least a decade

and cost nearly $4 billion (Newsham, 2014). Though the Fallon Company prides itself on its transformation of nine blocks of parking lots into a "pedestrian friendly neighborhood," the design and program of what has been built thus far has not nurtured an active community neighborhood. Instead, the scale of development is tall and dense and the architecture glassy and bland. The program built to date is not particularly mixed, with large corporate offices for biotech and law firms, and few retail or restaurant opportunities. While the current construction of more residential and retail spaces will likely help create a more active, 24/7 neighborhood out of Fan Pier, so far it has become yet another anonymous development on an increasingly homogenous waterfront.

Williamsburg Waterfront, Brooklyn, New York
New York City has a different story of waterfront development. Instead of the long-range, master-planned developments of San Francisco, Washington D.C, and Boston featured for their role in the redevelopment of the waterfront, much of the transformational development along New York City's East River waterfront has been more piecemeal. Most relevant to this review of recent waterfront projects is the proliferation of development in Williamsburg, Brooklyn. In 2005, the city rezoned 200 blocks of the Williamsburg waterfront, at the time a largely industrial area. This rezoning was intended to spur new residential development including affordable housing and a 28-acre waterfront park. Since then, thousands of new units have been built along the waterfront, in towers up to 41 stories high. Yet, though residential construction is booming, development of the 28-acre Bushwick Inlet Park has inched along. The city has only developed nine acres of the park and acquired

two of the six parcels needed to finish the park. This promise to the community for more parkland was in exchange for the rezoning, which allowed for tens of thousands of new residents in an area with limited open space (Gregor, 2014).

Given the rapid transformation of the neighborhood and the unful-filled promises for more open space, the existing community has become reluctant in its support for additional waterfront projects. One project in particular has faced significant delays, due partly to neighborhood opposition, as well as financial and political issues. This project, the redevelopment of the Domino Sugar Factory, is more significant than the single residential towers that have already shot up along the river; it is larger, with an 11-acre site, and more controversial, with plans to redevelop what has been an iconic land-mark on the waterfront into a mixed-use "megaproject."

The project has been over ten years in the making. First, developer Community Preservation Corporation spent six years creating a plan for the site after the 2004 closing of the factory. The plan, calling for the creation of 2,200 housing units (30% below market rate), a park, school, and esplanade, came under significant community opposition. Bagli of the New York Times writes, "For years, the plan to redevelop the Domino Sugar refinery in Williamsburg was viewed in the neighborhood with dread, roundly derided as a line of bulky new buildings that would clog the Brooklyn waterfront" (2014, para. 1). Opposition concerned the glassy, generic towers that walled off the waterfront, as well as larger fears about rising rents, changes to the neighborhood, and the loss of an industrial anchor that once provided 400 well-paying union jobs (Bagli, 2014). Com-

munity Preservation Corporation ran into financial troubles during the recession, and even though they had received city approval for the project, they subsequently sold the site to Two Trees Development for $185 million in 2012.

Two Trees' $1.5 billion, 2.9 million GSF project includes residential and commercial uses, alongside incubator space, a school and a waterfront park. Though Two Trees could have developed the already-approved plan they inherited from Community Preservation Corporation and designed by Raphael Viñoly, they instead brought on SHoP Architects to create a new proposal for the site. The plan has expanded the amount of park space and waterfront access, extended the existing street grid into the site, helping to reconnect the previously walled-off plan with the neighborhood, and rotated the towers from their previously parallel position to perpendicular with the site. The towers are taller (the highest at 55 stories, up from the 30- and 40-story towers of the previous plan) but also thinner and with large cutouts, "to bring light and air into the neighborhood," says SHoP principal Vishaan Chakrabatri (Gregor, 2014, para. 27). Two Trees has added more commercial space, but also retained the amount of affordable housing promised in the Community Preservation Corporation plan. Community leaders say the commitment to keep a high percentage of affordable housing in the project, in addition to the design changes, has helped quell opposition, as much of the concerns regarding new development on the waterfront concern housing affordability. Mayor DeBlasio's administration pushed the plan to include even more affordable housing, and the project will now include 700 units up from 660 in exchange for building taller towers (Velsey, 2014).

Top: Former proposal for Domino Sugar Refinery, 2010 (source: Rafael Viñoly Architects)
Bottom: Two Trees' Proposal, 2013 (source: SHoP Architects)

Opposition still exists, as seen by the formation of the protest group Save Domino. However, for the most part, community members believe that the site will be developed no matter what and that the Two Trees plan may be the best of what would be built (Yee, 2013). Community and advocacy organizations know that the project will provide what they need and otherwise may not get. Robert Solano, community board member and executive director of Churches United for Fair Housing, an affordable housing group, summarizes this belief: "It's a delicate balance between pushing as hard as you can and a break. If we get to the point where nothing is built, or there are more delays, that's another day without affordable housing" (Bagli, 2014, para. 12).

During these negotiations and project approvals, as an attempt to make peace with the neighborhood, Two Trees opened up over an acre of the previously fenced-off site for public use. They released an RFP for proposals for use of the land and opened the site as the temporary Havemeyer Park, complete with an urban farm, bike course, and grassy open space. Two Trees project manager Marina Trejo says, "This was not meant as a Band-Aid or a diversion. If people don't like our project, a temporary park won't change that" (Beck, 2014, para. 4). While the park has provided the community with more open space that they say they need, it has also helped to woo them. In addition to this, Two Trees has arranged local art-ists to create a series of murals around the construction site – yet another interim strategy to soften Two Trees' image. Yet, in the end, perhaps it did not matter whether or not these interim strategies helped to mollify the community. The site already had city approval and entitled development rights for the original plans when Two

Trees purchased it in 2012. Therefore, though Two Trees sought city approval for its new SHoP proposal, their efforts to engage the community were perhaps more conciliatory than constructive (Smith, 2013). Two Trees received this approval in mid-2014 and began construction on the first tower of the project in early 2015. With this project, like the others currently under development, only time will reveal how the projects really benefit and connect with the surrounding community.

Of course there are limitations to the comparisons of waterfront development projects in Washington D.C., Boston, New York and San Francisco. The projects have their own complexities and objectives. The cities, with different political climates, community concerns, and planning regulations, have become unique settings for athe development process. Nevertheless, the range of factors that have and have not impacted the projects reflects the political and community values embedded within waterfront development. In New York, efforts by the developer to enhance its relationship with the neighborhood and community concerns about historic preservation and access to the waterfront mirror the issues at Pier 70 in San Francisco. The master-planned projects in Washington D.C. and Boston are larger and have fewer immediate surroundings, thereby providing more of a blank slate for development. Concerns and criticism about the homogenous design quality of these projects echo those in San Francisco about the Mission Bay redevelopment, guiding exactly what the community does not want to see at Pier 70.

3.2 WATERFRONT DEVELOPMENT IN SAN FRANCISCO

BRIEF HISTORY OF SAN FRANCISCO DEVELOPMENT

"The waterfront has been San Francisco's principal link to the Bay Area, the nation, and the world - it was the City's 'front door.'"
  – John Bolles, planner and consultant to the city and port, 1966
    (Rubin, 2011a, p. 278)

In San Francisco, waterfront development is at least equally, if not more, controversial than in the other waterfront cities. Grounded in a history of anti-growth activism, real estate development in San Francisco has often had to contend with strong political and community will. In *Left Coast City*, Richard DeLeon chronicles the progressive politics of the city and the "convoluted path" that developers must follow "to gain access to the city's urban space," claiming, "San Francisco's new progressive agenda emphasize human development rather than physical development, the use value of the city's built environment rather than its exchange value" (DeLeon, 1992, p. 3). This emphasis on "use" over "exchange value" has not always been the case. In fact, it is largely a reaction against the "pro-growth urban regime" of the early 1960s to mid-1980s that drove what some would call the "Manhattanization" of the city (DeLeon, 1992). The development of the downtown business district was part of a larger trend in major cities across the country, where political and business leaders sought to create competitive, desirable centers to foster postindustrial economic growth (McGovern, 1998). In San Francisco, the rate of growth during this period was remarkable,

with the supply of downtown office space increasing from 26 million square feet to over 60 million square feet between 1965 to 1985, at an annual rate of over 1.4 million square feet a year (DeLeon, 1992). This building boom also transformed the skyline as major projects including the Transamerica Pyramid and the Embarcadero Center rose in the relatively low city.

Slow-growth activism
By the 1970s, some residents and interest groups began to worry about the impact of such rapid development on the city. These concerns regarded harm to the environment, architectural character, and general quality of life that gives San Francisco its unique charm. Residents living closest to downtown also worried about the impact of such development on their property values and sense of community (DeLeon, 1992). Under the leadership of local businessman Alvin Duskin, growth control activists put forth a series of initiatives to citywide vote to limit the building heights. Proposition T (1971) called for a six-story limit on all future construction, losing 62 to 38 percent, and Proposition P (1972) called to limit downtown construction to 160 feet and all other construction to 40 feet, losing 57 to 43 percent (DeLeon, 1992). Though these initiatives lost at the ballot, they sent several important political messages. First, that there was not a single, shared interest in the growth of downtown. Second, that what started as a small, grassroots minority of activists could demonstrate substantial support, if not a majority. Lastly, and perhaps most importantly, that citizen initiative campaigns could be a powerful mechanism to oppose development, thereby expanding the public's perception about who should have a voice in making decisions about the built environment (McGovern, 1998).

Top: Downtown San Francisco, 1959 (source: SF Chronicle)
Bottom: Downtown San Francisco, 1979 (source: SF Chronicle)

Top: View of Russian Hill after city lowered height limit to 40 feet (source: SF Chronicle)
Bottom: Fontana Apartments blocking views of the bay (source: Found SF)

These initial initiatives prompted more widespread attention to the idea that the development of downtown should be a matter of citywide concern. The growth control movement continued to gain in strength and numbers in the following decade with the creation of new interest groups and additional citizen initiatives. This culminated with the 1986 passage of Proposition M, the Accountable Planning Initiative, which capped new office development to 875,000 square feet a year indefinitely. Additionally, Proposition M limited only half of this amount of square footage to be built until all pipeline projects were completed; meaning that for the immediate ten to fifteen years, office space totaling the size of one Transamerica tower could be build per year. Not only did the passage of Proposition M become the most restrictive development measure in any major U.S. city, it also cemented the foundations for expanded citizen participation in and control over the built environment (DeLeon, 1992).

Saving the Waterfront
At the same time, concern over development downtown spread to the waterfront. The grassroots activism that rose against the skyscrapers of the Financial District also lent itself to the shoreline. According to Jasper Rubin's account of the development of San Francisco's shoreline, the waterfront holds a special meaning in the city:

> San Francisco grew out of its waterfront, something that has figured prominently in its citizens' collective awareness of its history. This commonly held view of urban historical origins created a strong public connection between San Franciscans

and their waterfront, one that persists today. If the maritime activities that helped establish San Francisco were to disappear and their physical and symbolic markers were to be replaced by commercial and office developments, not only would a large and essential part of the city's built environment by destroyed but some history would be as well (Rubin, 2011a, p. 113).

Watching the transformation of downtown, people feared that development was too tall and too dense, threatening to change the very nature of the city's relationship to the water. In 1960, planning department director James McCarthy warned, "San Francisco's zoning laws will have to be changed to prevent construction of a 'China Wall' of skyscrapers along its waterfront…We want to avoid what has happened in lower Manhattan in New York, where views of the bay are blocked by high rising buildings" (Rubin, 2011a, p. 114).

The construction of the Fontana Apartments, two 170-foot tall residential buildings, positioned parallel to the waterfront and largely blocking views from the Russian Hill neighborhood behind it, triggered residents to push for a height limit along the water. Neighborhood group Russian Hill Improvement Association assembled the support of over 22 interest groups and presented the planning department with 8,000 signatures to support a 40-foot height limit on 100 blocks of waterfront property. Regarding the difference in views among real estate developers and residents, Supervisor Roger Boas stated, "Their concern is, and must be, with personal economics. Ours is the broader view. They're eyeing the waterfront property as children do a piece of candy…I don't blame them. It's one

of the choicest pieces of real estate in the United States…. We're putting a sign on our hills and waterfront that says 'not for sale.'" (Rubin, 2011a, pp. 119–120). The planning department sympathized with these concerns, and in 1964 adopted the 40-foot height limit, thereby greatly limiting the ability of the port or private developers to redevelop the waterfront to maximize its financial and design potential.

Though there was now a height limit capping redevelopment on much of the waterfront, this did not mean that there was a cohesive vision for its redevelopment. For the next several decades, the Planning Department and the Port worked to create land-use and policy plans for the area, beginning with the 1969 Northern Waterfront Plan. Additionally, the 1968 transfer of the Port from state to city control meant that the Port, as a new city agency, could now better manage its own development in context with local political and planning decisions (Rubin, 2011a). This transfer was the result of the 1968 Burton Act, giving control and management of San Francisco's tidelands back to the city. Throughout the 1970s and 1980s, the Planning Department and other related agencies, including Bay Conservation and Development Commission (BCDC), which oversaw protection of the San Francisco Bay, developed area plans for the waterfront. Alongside these plans, the Port set out to redevelop its property from crumbling infrastructure, much of which was no longer used for its original maritime purposes, into something much more valuable (Rubin, 2011a).

By 1990, politicians and interest groups were frustrated by the seemingly haphazard nature of the Port's planning process. They were also threatened by a proposal for a massive conference and sailing center right along the Bay Bridge. In reaction to this, they banded together and went to the ballot once again to take control of what should happen on the waterfront. In November 1990, Proposition H passed with 51% of the vote, calling for the Port to develop a comprehensive waterfront land use plan and putting a stop to all hotels and other non-maritime development within 100 feet of the water until the Port completed its plan. One supporter of the Proposition from environmental group Save the Bay explained, "We'd like to see an overall plan for the waterfront rather than just a catch-as-catch-can philosophy of entertaining developer's proposals that happen to come in" (Rubin, 2011a, p. 245). For the public, Proposition H also guaranteed that they would be a part of the planning process. "Business deals involving public land and property were too important to be decided by business leaders and planners. The process had to make room for citizens as active participants; traditional methods of deal making had to be discarded," writes DeLeon (1992, p. 132). For the Port, this meant that it would finally articulate a clear vision for its property with the *Waterfront Land Use Plan*, approved in 1997 after a six-year community-based planning process.

This history of community involvement in development decisions, particularly on the waterfront, grounds the ever-increasing complexity of building on San Francisco's shoreline.

SAN FRANCISCO'S WATERFRONT TODAY

"A city is not gauged by its length and width, but by the broadness of its vision and the height of its dreams."
  – *Herb Caen, San Francisco Chronicle columnist, 2010*
    (Caen, 2010, para. 4)

Nearly fifty years after the passage of height limits along the water, another battle regarding waterfront development erupted in the city. With a politicized planning process and decades of community activism and involvement surrounding land-use and development decision-making, a subset of San Francisco's citizens have become very well adept at disrupting the development process.

Ballot Box Planning
California's model of democracy is notably more involved than in the rest of the country. Since 1911, when an amendment to the California Constitution set up the state's initiative process, voters have had the right to directly enact legislation at both the local and state level (Silva, 2000). In order to reach the ballot, citizens must collect a certain number of signatures and draft a statute or proposed amendment to submit to the Attorney General. According to the Public Policy Institute of California, initiatives over the past century have not focused on single issues, but instead encompassed a broad range of issues such as education, taxation, and social services. In San Francisco, this has also included initiatives for project specific issues and broader planning measures meant to control land use and downtown development, as seen in Table 1: Development-related voter initiatives.

Though professional planners denounce this form of "ballot box planning," it is a reality that they must contend with in California. Planners and policy makers argue that the complexities of planning issues should not be left up to public decision, nor can they be easily summarized into a digestible statement in a voter pamphlet. San Francisco City Planner Joshua Switzky says that for his department, ballot box planning "is just another log on the fire" and is a "very blunt instrument with a high hurdle for change:"

> When you have to take everything to the ballot, it doesn't necessarily represent best planning outcomes or even what is best for the public. It just makes you produce things that poll best, based on slogans…. It's not that a lot of these things that have gone to the ballot aren't legitimate concerns that don't have real issues behind them and weren't real solutions. But the problem with the ballot is that it locks things in stone that cannot be evaluated and modified as needed over time (Switzky, 2015).

Former San Francisco City Planner Jasper Rubin adds to this, saying that citizens may argue that ballot box planning is an act of democracy in the face of political negotiations, but often it is equally undemocratic. Instead of hedging on back-room deals between developers and politicians, ballot box planning still involves deals, now between campaigners and developers, and relies on who can pay for the best campaign (Rubin, 2015). In the case of development on the waterfront, it was exactly this "No Wall on the Waterfront" slogan and campaign that swayed the public.

Top: Streetview rendering of 8 Washington (source: 8washington.com)
Bottom: Aerial view shows size of project relative to surroundings (source: 8washington.com)

No Wall on the Waterfront

In 2013, as the housing affordability crisis reached its peak, anxiety about displacement, gentrification, and a changing San Francisco began to stir controversy over new real estate development in the city. One new waterfront residential project in particular, 8 Washington, became the flashpoint for citizens' concerns about urban growth. Located close to the Financial District, the project called to redevelop 3.2 acres of a Port-owned parking lot and a tennis court privately owned by an athletic club into a 136-foot tall building with 134 luxury condominiums. This project was seven years in the making and had already undergone a lengthy community process and received city approval. Yet, due to largely political and personal reasons, influential leaders mobilized opposition against the project. Opponents complained about the loss of the athletic club (even though the project plans included a larger, more public open space), the high prices of the condominium (fetching up to $5 million per unit), the large number of structured parking spaces being provided, and building a wall on the waterfront (even though the building design was tiered and most parts of it only reached 5 or 6 stories tall). Using "No Wall on the Waterfront" as a rallying cry, they collected over 31,000 signatures to place a referendum on the ballot to revoke the approved height limit increase from 84 feet to 136 feet for the project. Opponents put forth Proposition C, which would overturn the Board of Supervisors' approval for the project (Wildermuth, 2013).

Gaining the support of neighborhood groups and environmental organizations, opponents calculatingly painted a picture of 8 Washington as one that would catalyze the privatization of the waterfront

as a haven of high-rises for the wealthy elite (Wildermuth, 2013). They shrewdly called the project a "wall on the waterfront" that threatened to turn San Francisco's waterfront into Miami Beach's. Meanwhile, the developers of 8 Washington, Pacific Waterfront Partners, put Proposition B on the ballot as a countermeasure to allow the project to move forward. In November 2013, both measures were defeated at the polls, with 62% of votes rejecting Proposition B and 66.5% rejecting Proposition C. This was a major blow to the project, but also to the city, which lost out on the many public benefits of the project, including public open space, $11 million in contributions to the city's affordable housing fund, and nearly $12 million in near-term revenue that would have provided important capital funding for the Port and the city (Wildermuth, 2013).

While opponents were successful at disrupting one development project on the waterfront, they knew that proposing individual ballot initiatives against each upcoming project was not a sustainable way to influence decision-making. The shutdown of 8 Washington triggered broader discussions about what to do with the waterfront. In the following election in June 2014, many of the same opponents put forth Proposition B, the Voter Approval of Waterfront Construction Exceeding Height Limits Initiative. Armed again with the successful slogan of "No Wall on the Waterfront," the initiative's supporters appealed to fears of untamed growth, claiming to offer a more democratic solution. The initiative passed with 59% of the votes, thereby requiring citywide voter approval for any new project on Port property that will exceed the existing height limits, which largely range from zero to 84 feet.

Despite the fact that Proposition B passed through measures of direct democracy, many of the development and planning experts interviewed said that its passing is not truly representative of the will of the people or the city at large. Instead it was akin to political revenge, carried out successfully by a small, influential group. Opponents were very strategic with the rhetoric and timing of their campaign, gaining the support of key organizations such as the Sierra Club and putting the initiative up for vote in the midterm June elections that tend to draw lower turnouts than in November.

As a result, Proposition B has forced the developers of Pier 70 and all future waterfront projects on Port property to go to the ballot for citywide voter approval to build higher than existing height limits. In reality, it will not directly impact many projects because the Port owns a limited number of developable sites. However, Kristy Wang, Community Planning Policy Director at SPUR, an important independent planning and advocacy organization in San Francisco, believes it has changed the tenor of development for all projects, not just on Port property, as developers are threatened by the ballot process (Wang, 2015). Most regrettably, it disrupts the long-range planning vision for the city and has the potential to stifle the development of thousands of future housing units and the generation of taxes and development fees that support the city (Wildermuth & Coté, 2014).

Right to the Waterfront
Though the high level of citizen involvement in the development process can impede the planning process in San Francisco, as seen in recent ballot box decisions, in a way, the very regulations, levels

of public control, and symbolism surrounding the waterfront have helped preserve a "right to the waterfront." Urban theorist and geographer David Harvey explains:

> The right to the city is far more than the individual liberty to access urban resources: it is a right to change ourselves by changing the city. It is, moreover, a common right rather than an individual right since this transformation inevitably depends upon the exercise of a collective power to reshape the process of urbanization. The freedom to make and remake our cities and ourselves is, I want to argue, one of the most precious yet most neglected of our human rights. (Harvey, 2008, p. 23).

In San Francisco, through citizen initiative campaigns and other collaborative community efforts, citizens have been able to exert a real influence over the shape of the waterfront. Forces of neoliberal urbanization can be used to explain the rapid development of the city at large, including the increase of public-private partnerships and business improvement districts, to name a few, but the waterfront has had a slightly different story of development (Rubin, 2011b). Instead of the retreat of the government to allow market forces to command control of the built environment, in San Francisco, local agencies, including the Planning Department and the Port, have tried to protect public interests in their increased regulation of development on the waterfront (Rubin, 2011b).

In the words of Henri Lefebvre, the right to the city concerns the "opposition between *use value* (the city and urban life) and *exchange*

value (spaces bought and sold, the consumption of products, goods, places and signs)" (Rubin, 2011b, p. 145). Urban real estate development typically capitalizes on the "exchange value" of a site, such as the financial worth it could have if fully developed as opposed to the "use value" the site may have for the public as open space. While the redevelopment of waterfronts around the world often involves privatization, as seen in the luxury apartments in Williamsburg and corporate offices in Boston, San Francisco has largely tried to preserve the waterfront for the public. Therefore in a way, in San Francisco, for better or worse, regulations have preserved much of the "use value" of the waterfront for its civic and symbolic value.

The redevelopment of the waterfront from a center of maritime industry to one of recreation and leisure in San Francisco has brought up questions both of "what" and "whom:" asking "what should the waterfront be?" and "whom should the waterfront be for?" Rubin asks, "Who will have the right to the waterfront? Will only members of the middle and uppers classes be welcomed, or will skateboarders, pamphleteers, the homeless, and the variegated 'other' be tolerated, if not embraced? Will exchange value trump use value? Will private enterprise ultimately dictate the fate of a public resource?" (Rubin, 2011a, p. 17). As large-scale master plan projects like Pier 70 seek to transform the city's shoreline, only time will tell who will ultimately have a right to the waterfront.

In San Francisco, as in Washington D.C., Boston, and New York, the projects share similar positions in their role reshaping the waterfront from a place of industry to a place of living. As these projects transform the skyline, they also help determine whom the water-

front will be for. The majority of new housing is market-rate and commercial office space is Class A, likely commanding high rents for the prime waterfront location. Yet, will there be spaces, whether outdoor or indoor, that draw a broad range of people? The privatization of the waterfront for the wealthy, with luxury condominium, hotel and office towers built along the shoreline, has transformed the physical form and cultural uses of waterfronts around the world, including London's Docklands and New York City's Battery Park City. However, with these newer projects, there is an opportunity to redevelop in a way that maintains the waterfront for a diversity of uses and people. This is exactly what Forest City says it hopes to achieve at Pier 70 in San Francisco.

DATE	PROPOSITION	NAME	RESULTS	% FOR	% AGAINST	PLACED ON BALLOT	TYPE
11/2/20	32	Control of the Wharves, Waterfront and Harbor	Passed	59.2%	40.8%	Supervisors	Charter Amendment
11/5/68	C	Control of Harbor and Port From California to San Francisco	Passed	74.0%	26.0%	Supervisors	Charter Amendment
11/2/71	T	High-Rise Limit on Buildings, 6 stories	Failed	37.8%	62.2%	Initiative	Ordinance
6/6/72	P	Maximum Building Height, Downtown and Residential Areas	Failed	43.1%	56.9%	Supervisors	Ordinance
11/6/79	O	High-Rise Regulation	Failed	43.4%	56.6%	Initiative	Ordinance
6/5/84	K	Park Shadow Ban	Passed	61.2%	38.8%	Supervisors	Ordinance
11/5/85	F	Highrise Ban for Three Years, Buildings Over 50,000 feet	Failed	41.0%	59.0%	Initiative	Ordinance
11/6/90	H	Waterfront Land Use Plan	Passed	50.4%	49.5%	Initiative	Ordinance
11/8/94	P	Ferry Building and Pier 52	Passed	64.4%	35.5%	Mayor	Ordinance
3/2/04	J	Incentive to Build Below-Market-Rate Housing	Failed	30.0%	70.0%	Initiative	Ordinance
11/4/08	D	Financing Pier 70 Waterfront District Development Plan upon Board of Supervisors' Approval	Passed	68.1%	31.9%		Charter Amendment
11/6/12	B	Clean and Safe Neighborhood Parks Bond	Passed	72.1%	27.9%		Bond Measure
11/5/13	B	8 Washington Street Initiative	Failed	37.2%	62.8%	Initiative	Ordinance
11/5/13	C	8 Washington Street Referendum	Failed	33.0%	67.0%	Initiative	Ordinance
6/3/14	B	Voter Approval of Waterfront Construction Exceeding Height Limits Initiative	Passed	58.9%	41.1%	Initiative	Ordinance
11/4/14	F	Pier 70 Redevelopment Initiative	Passed	72.9%	27.2%	Initiative	Ordinance

Table 1: Development-related voter initiatives (compiled by author with information from San Francisco Public Library)
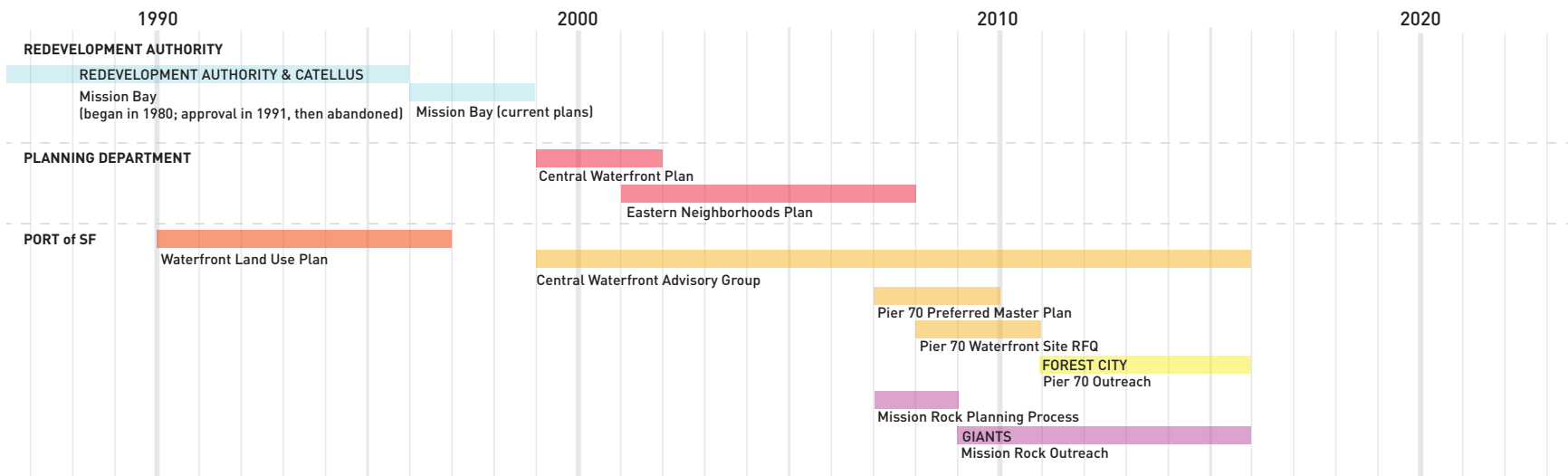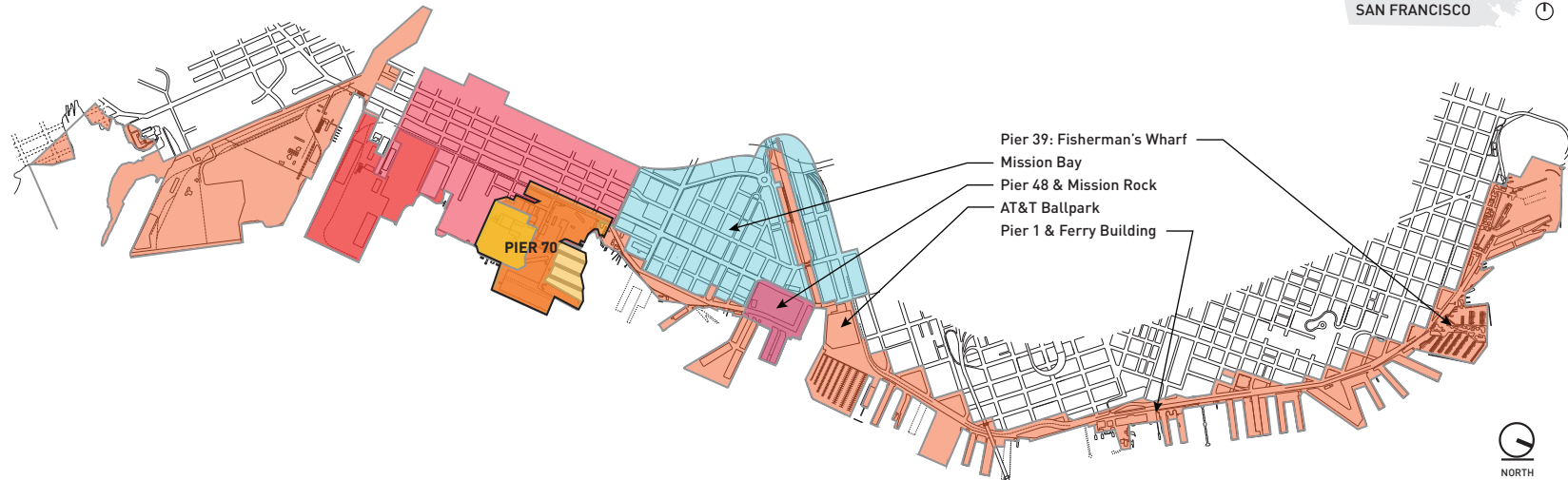
4.   PIER 70 CASE STUDY

4.1 BACKGROUND

The Pier 70 project has brought a lot of attention to the currently derelict site – a place that many San Franciscans have never heard of, let alone visited. In many ways, it is a groundbreaking project for the city. It is the first project to go up to ballot and pass under the city's new requirement for voter approval to increase height limits on Port property. Additionally, it will provide direct waterfront access for the Dogpatch neighborhood, allowing the community to enjoy the waterfront as a public asset for the first time. With mixed-use programming that promises to bring greatly needed amenities to the area, many residents see this project as a welcome change for the neighborhood. Janet Carpinelli, President of the Dogpatch Neighborhood Association, describes Pier 70 as "a long time coming," and indeed it has been, with over a decade-long planning process and an additional 10 to 15 years until completion (Wildermuth, 2014, para. 16).

Pier 70 came to the media's attention over the course of the past year, with articles promoting the project, including "Plan to bring Pier 70 back to life," "Pop-up party to promote ambitious vision for Pier 70"and "Prop. F backers look to buck S.F.'s 'new reality'" in the *San Francisco Chronicle*. However, behind these positive tales of the success of the project in the face of a hostile development environment lie years of planning that have shaped the project's trajectory.

Prior to Forest City's three-year community outreach efforts (2012-2014) was the Port of San Francisco's lengthy public process to develop the Pier 70 Preferred Master Plan (2007-2010) and the Pier 70 Waterfront Site RFQ (2008-2011). This Port-initiated plan for Pier 70 came after several previously failed attempts to redevelop the site. In 2001, the Port released two RFP's to redevelop 14 acres of the site, approving proposals from the San Francisco Arts Future Consortium for an arts center and from AMB Development Corporation for a warehouse distribution complex. However, both proposals failed due to financing and project feasibility issues. Concurrently, the San Francisco Planning Department embarked on a lengthy community planning process to create the new Eastern Neighborhoods Area Plan (2001-2008). Before this, in 1999 the Planning Department began its community-based planning effort for the Central Waterfront Plan, as part of the Better Neighborhoods program, before merging the project with the Eastern Neighborhoods plan in 2002. Alongside the Planning Department's work on the Central Waterfront Plan, the Port of San Francisco created the Central Waterfront Advisory Group (CWAG) in 1999 to help guide the transformation of the area.[1]

Susan Eslick, one of the original founders and former President and Vice President of the Dogpatch Neighborhood Association, doubts she will see the Pier 70 project completed in her lifetime. She says, "This will take a ton of time. Yerba Buena took 40 years and Mission Bay took over 30…. I was asked to join the Citizens Advisory Group in 1999. At that point, I was told it would be active for a few years. It's been over 15 now" (Eslick, 2015). All of this work follows the Port's Waterfront Land Use Plan, approved in 1997 and the product of a six-year public planning process and a voter initiative requiring the Port to create a comprehensive land use plan.

Pier 39: Fisherman's Wharf
Mission Bay
Pier 48 & Mission Rock
AT&T Ballpark
Pier 1 & Ferry Building

PIER 70

SAN FRANCISCO

NORTH

	1990		2000		2010		2020

REDEVELOPMENT AUTHORITY

REDEVELOPMENT AUTHORITY & CATELLUS

Mission Bay
(began in 1980; approval in 1991, then abandoned)   Mission Bay (current plans)

PLANNING DEPARTMENT

Central Waterfront Plan

Eastern Neighborhoods Plan

PORT of SF

Waterfront Land Use Plan

Central Waterfront Advisory Group

Pier 70 Preferred Master Plan

Pier 70 Waterfront Site RFQ

FOREST CITY
Pier 70 Outreach

Mission Rock Planning Process

GIANTS
Mission Rock Outreach

Map and timeline of waterfront planning processes in San Francisco

49

The lengthy community processes and planning studies along the waterfront have both shaped and been shaped by the neighborhood changes surrounding the Pier 70 site. The transformation of Dogpatch and its waterfront from an industrial workplace to a mixed-use neighborhood has been dramatic. Despite this change, the neighborhood hopes to remain grounded in the site's history as a center of shipbuilding and maritime industry.

SITE

History
Formerly known as Potrero Point, Pier 70 was perhaps the most important industrial center west of the Mississippi River. It was here where supplies for the California Gold Rush, Nevada's mining operations, and the Transcontinental Railway were produced. Additionally, shipbuilding activities at the pier supported U.S. military activity from the Spanish American War through World War II into the 1970s (Port of San Francisco, 2010a, p. 1).

Under Spanish and then Mexican rule in the late 1700s and early 1800s, cattle grazed along the site's rocky bluffs. With the growth of San Francisco in the 19th century, industrial operations moved to the site, attracted by its cheap land, deep-water access, and remoteness from the quickly developing city (Wilson, n.d.). Here, activities requiring isolation, such as gunpowder manufacturing, and those crowded out of the downtown area, such as wooden shipbuilding, found a home. By the mid-19th century, as industrial development and shipping expanded in the area, Potrero Point was transformed to increase operations. The rocky bluffs were blasted and leveled

off, landfill added to expand the area, streets laid to connect with the city, and piers built to reach into the bay. Heavy industrial companies came to the area, such as Pacific Rolling Mill, the first major steel and iron mill in the West, and others supporting the shipbuilding industry, such as Tubbs Cordage Company rope manufacturers. By the 1870s, the site had grown to 67 acres and the surrounding neighborhood began to support residential development, providing housing for the many industrial manufacturing workers moving to the area (Port of San Francisco, 2010a, p. 10).

In 1883, Union Iron Works, California's first iron casting foundry, relocated to Potrero Point. Mining machinery made up a significant portion of Union Iron Works' production. Knowing that the success of the mining industry would not last and anticipating the need for large-scale shipbuilding due to Pacific trading, Union Iron Works manager Irving Scott decided to build the first major shipyard in the West (Wilson, n.d.). Union Iron Works began obtaining government contracts, first with the U.S.S. Charleston, one of the first U.S-made steel hull ships, and followed by many other naval ships in addition to civilian ferries. Union Iron Works, and its successor company Bethlehem Steel Corporation, expanded facilities and production in the following decades. The shipyard was a key contributor during World War I, with thousands of employees launching on average three destroyers per month and 66 destroyers in total (Wilson, n.d.). By World War II, Bethlehem modernized and expanded its shipyard, reaching its maximum build-out to become one of the most productive shipyards in the country. During WWII, the shipyard produced 72 naval vessels and repaired over 2,500 ships, employing a maximum of 18,500 people working around the clock (Wilson, n.d.).

Shipbuilding greatly declined after the war, and Bethlehem manufactured the last ship commissioned by the Navy in 1956. In addition to its ship related work, Bethlehem became involved in another important mode of transportation. With the implementation of the Bay Area Rapid Transit system (BART), Bethlehem produced the steel tubes installed to allow BART trains to travel under the Bay. In 1967, they fabricated 57 sections in total, each 325 feet in length and weighing 800 tons (Wilson, n.d.).

Bethlehem continued to repair government and civilian ships, as well as commercial barges, into the 1970s, but the overall decline of the U.S. shipping industry significantly decreased business at the shipyard. Additionally, the 1974 closure of the San Francisco Naval Shipyard at Hunter's Point just a few miles south of Potrero Point, and increased competition from Asian shipyards, with cheaper labor and less stringent environmental standards, reduced demand for ship repair at the site (Rubin, 2011a, p. 37). In 1982, Bethlehem Steel Corporation, facing bankruptcy, sold the shipyard to the Port of San Francisco for $1. The Port has continued to own the property ever since, leasing the yard and drydock to various operators.
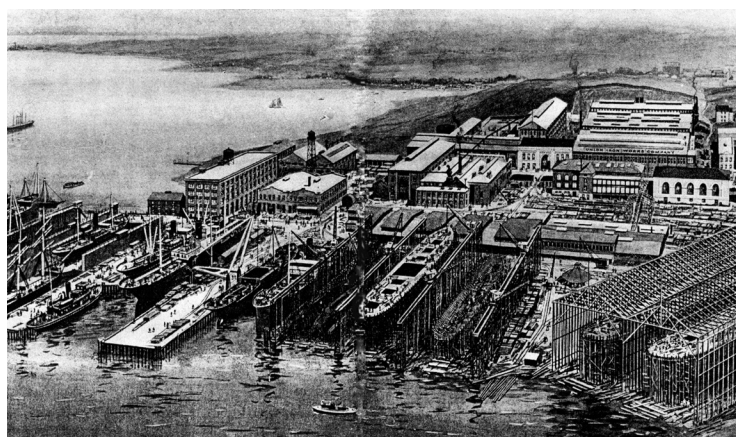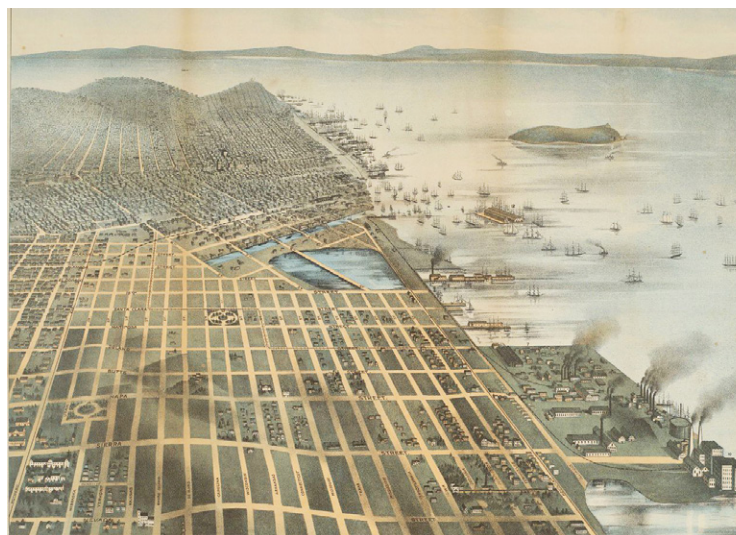
Top: Bird's-eye view of eastern San Francisco, with Potrero Point in foreground, 1892 (source: UC Berkeley, Bancroft Library); Bottom: Union Iron Works Plant at Potrero Point, circa 1900s (source: Wikimedia Commons)

Top left: Existing BAE ship repair area; top right: Pier 70 area with waterfront land fenced off, Noonan Building and Building 21 in background
Bottom left: View of Pier 70 area looking west from Noonan Building, towards Building 113; bottom right: view looking north with Building 6 & downtown n background

Current Conditions
While shipyard operations no longer command use of the entire 67-acre site, the facilities remain the oldest continuously operating civilian shipyard in the West. Today, BAE Systems maintains ship repair operations on approximately 17 acres of the northernmost part of the site. They employ about 250 skilled workers year-round, with opportunities for an additional 1,000 employees during high-activity periods (Port of San Francisco, 2010a, pp. 21, 23). The drydock is the largest repair drydock west of the Mississippi River. Its mid-coast location is ideal for serving northbound and south-bound ships, including cruise ships, merchant ships, government vessels, and barges. Over the past several decades, Pier 70's shipyard has made a relatively successful transition from military-based ship production to commercial ship repair. Pier 70 lost nearly 80% of its business with the closure of Bay Area military bases; by 2001, revenue had dropped to $21.9 million from a high of $40.8 million in 1996. Revenues have since grown, reaching $33.8 million in 2010 (Port of San Francisco, 2010a, p. 24). In addition to providing reve-nue to the Port in the form of ground rent payments and well-pay-ing blue-collar jobs to San Francisco residents, the Pier 70 shipyard provides other important economic benefits to the city. Annually, this has included $18.2 million in material purchases, $3.2 million in local taxes, and $35 million in indirect economic activity, in 2010 (Port of San Francisco, 2010a, p. 25).

Alongside the active shipyard, other arguably less active uses occupy the site. Directly south of BAE Systems is a series of fenced off parking lots. One can peek through the tarp-covered chain-link fence to see rows of brand new cars parked on the paved-over slipways, enjoying the prime waterfront views. Another lot is filled with yellow cabs and yet another is the San Francisco Police Depart-ment's impound lot. On the southeastern part of the site, also on former slipways, is a self-storage facility, with rows of units stacked perpendicularly up to the shoreline.

Sitting among the fenced up parking lots is a collection of historic buildings, many of which are vacant and in various states of dis-repair. Though not easily perceivable from the current conditions, the entire site is the most intact 19th century industrial complex in the western United States. With this collection of historic buildings, including brick offices, machine shops, and gantry cranes, the site is a significant artifact, particularly for its leading role in maritime industry from 1884 to 1945 (Rubin, 2011a, p. 37). According to the Port, "The surviving historic buildings, circulation networks, and waterfront structures at Pier 70 uniquely convey the processes of steel shipbuilding and ship repair and how they evolved over time. The layout of the shipyard was defined by the relationship of the Bay with the slipways, piers, floating drydocks, and gantry cranes necessary to support the industry" (Port of San Francisco, 2010a, p. 13).

HISTORIC RESOURCES

In the Port's efforts to create a Pier 70 National Register Historic District, recently approved in 2014, they extensively documented the site. This included surveying existing buildings, as shown in the overall site plan. Several of the most notable buildings, architecturally, culturally, and historically significant are described below:

Building 12: Plate Shop No. 2
"Significant Resource" to be rehabilitated by Forest City. 118,890 sf; steel frame/wood floor; built 1941

Building 11: The Noonan Building
"Context Resource" to be demolished. 33,000 sf; wood frame; built 1941

Building 21: Risdon Iron Works Building
"Significant Resource" to be rehabilitated by Forest City. 10,172 sf; steel; built 1900

Building 113/114: Union Iron Works Machine Shop
"Very Significant Resource" to be rehabilitated by Orton. 90,000 sf; steel and brick; built 1885

BUILDING 11: THE NOONAN BUILDING

Just west of the waterfront parking lots is the Noonan Building. This four-story structure was built originally in WWII as offices to support the Pier's war production efforts (Wilson, n.d.). Currently, it is home to the Noonan Building Artists, a group of approximately 30 artists and designers, some of whom have worked here for over three decades, who rent studio space from the Port. This group includes Jason Sussberg, a filmmaker with Dogpatch Films, claims of the Noonan Building: "This is the only place that artists can actually afford. San Francisco is a place that values its artists and innovators; that has to be more than just a slogan." (Duff-Brown, 2012, para. 18). Forest City plans to demolish the building for structural reasons and rebuild studio space for the artists elsewhere on site.

BUILDING 113/114: UNION IRON WORKS MACHINE SHOP

The Union Iron Works Machine Shop is one of the most visible, valuable, and vulnerable buildings on site. The enormous building occupies two entire blocks, standing at the "entrance" of the site at 20th Street and Illinois Street. Stretching 492 feet long by 175 feet wide and 62 feet tall, the vast one-story brick building has cathedral-like ceiling heights and a very large, open ground floor area. Built originally to house machine, boiler, and blacksmith shops, the building is in very poor condition and currently undergoing stabilization. This building is part of the 20th Street Historic Area (with Buildings 101, 102, 104, 113/114, 115, 116), to be redeveloped by Orton Development.

HISTORIC RESOURCES

- **VERY SIGNIFICANT**
- **SIGNIFICANT**
- **CONTEXT**

- **REMNANT OF IRISH HILL**
- LINE OF HISTORIC UPLANDS
- SHIP REPAIR (HISTORIC USE)
- FORMER PIER, WHARF, OR SLIPWAY
- PIER 70 AREA BOUNDARY

Mariposa Street
18th Street
19th Street
20th Street
22nd Street

Indiana Street
Minnesota Street
Tennessee Street
3rd Street
Illinois Street

SLIPWAY 4
SLIPWAY 3
SLIPWAY 2
SLIPWAY 1

SLIPWAY 5
SLIPWAY 6
SLIPWAY 7
SLIPWAY 8

101 102 104
113
114
115
116
21 11
6
12
PG&E

0 100 200 300'

N
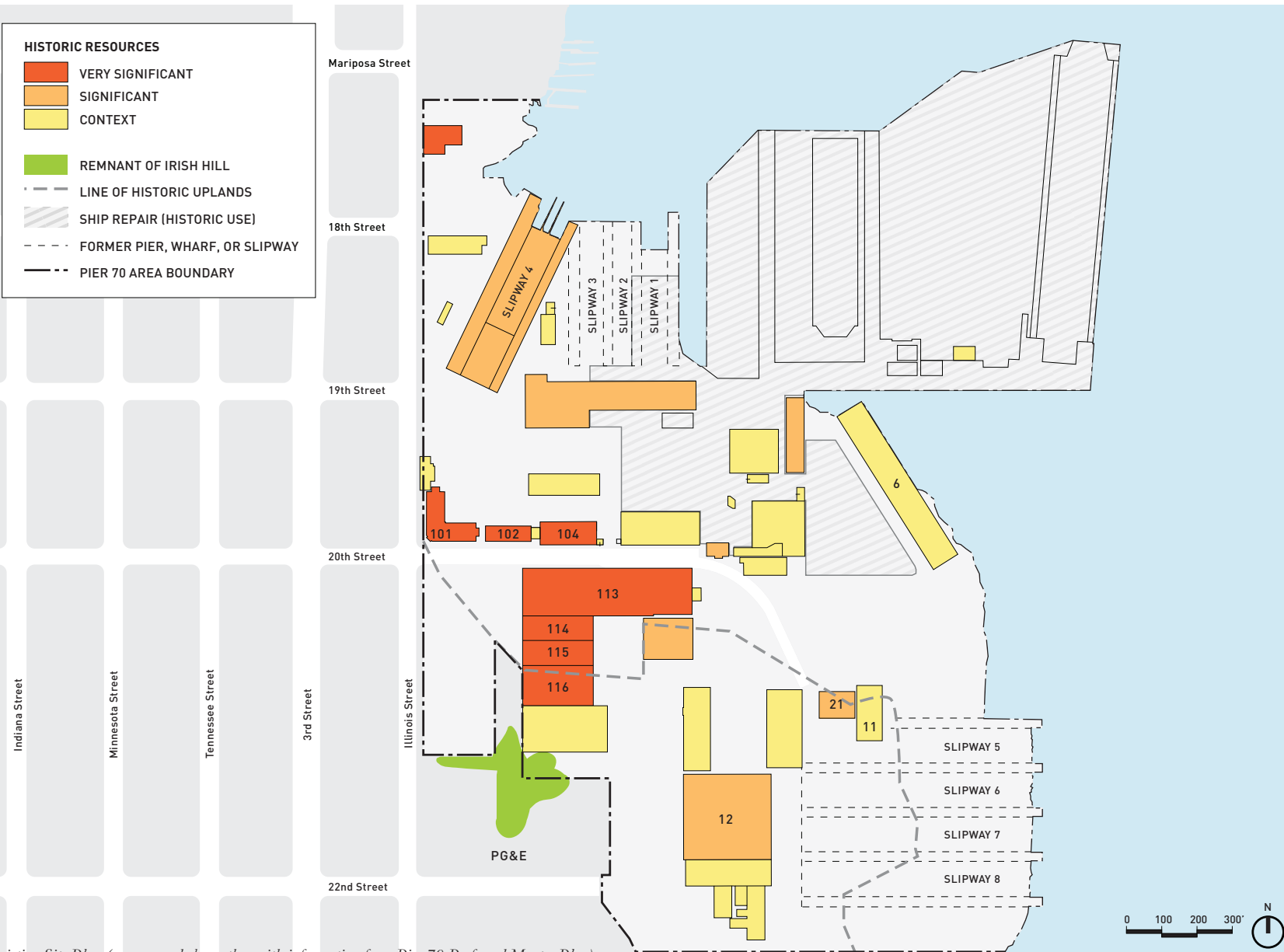
Existing Site Plan (source: made by author with information from Pier 70 Preferred Master Plan)

Map of Port of San Francisco's property (source: SPUR)

THE PORT OF SAN FRANCISCO

The Port of San Francisco controls seven and a half miles of waterfront property in the city, likely some of the most valuable real estate in the country. This includes piers and other structures built over the water as well as adjacent property and roads, and consists of over 800 acres of property with 39 piers, 245 commercial and industrial buildings totaling over 20 million GSF, and 43 seawall lots, as well as the utilities, infrastructure, and equipment needed to support operations (Metcalf, 2007).

The Port's property begins at the north at Fisherman's Wharf at Pier 39, wrapping south and east along the Bay to Pier 96 and India Basin in the south. Moving down the Embarcadero, the Port's property includes notable sites such as the Exploratorium Museum at Pier 15-17, the Ferry Building, and AT&T Park, home of the San Francisco Giants. The Port completed these projects relatively recently through new construction or rehabilitation. These projects serve to further enhance the long-standing residential and mixed-use neighborhoods that face the water. Port-controlled land in this northern part of the city stems from the spine of the Embarcadero in evenly spaced piers. South of China Basin Channel, the waterfront and the areas surrounding it are in a state of transition. As one continues south, the parcels are more irregularly configured, and often on larger landfilled areas, providing potential opportunities for larger development projects.

The Port is a semi-independent city department and enterprise agency, meaning it is financially self-supporting. Instead of receiving

money from the city's general fund, the Port raises its own revenue through commercial operations and revenue bonds. The Port's work is complex, balancing day-to-day operations with long-range planning and environmental issues in six divisions: maritime, real estate, planning and development, engineering, maintenance, and finance and administration. The leasing portfolio has over 600 tenants with a wide range of uses including retail, office, industrial, and maritime activities; this represents 26.6 million square feet and approximately $63 million in annual revenue (Port of San Francisco, 2010b, p. 7). As property owner for the Pier 70 site, the Port's Planning & Development Division is responsible for managing the development project through the project entitlement phase and ensuring it is consistent with the Port's Waterfront Land Use Plan (Port of San Francisco, n.d.).

The Port has a recent history of citizen participation in shaping plans and proposals for their waterfront property. The Waterfront Land Use Plan is the direct product of a voter initiative and extensive community planning process. Citizens concerned with the direction of the Port's redevelopment projects passed Proposition H in 1990, requiring the Port to prepare a land use plan for the first time. The Port Commission adopted the Waterfront Land Use Plan in 1997, after a six-year planning effort that included an advisory board and hundreds of public meetings to discuss the future of the waterfront.[2] For the Port's active projects, the Port regularly consults advisory groups of residents and other stakeholder organizations representing interests including business, maritime, environment, industrial, and urban design. Advisory groups influence the project ideation and drafting of new RFPs for all major waterfront

projects, sometimes staying on board throughout the development process. They also advise the Port on specific issues such as design or commerce in regards to the Port property at large. According to the Port's website, "these Advisory Groups allow the Port to actively and continuously involve the entire community in waterfront planning and development projects" (Port of San Francisco, n.d.).

The reasons for the Port's community engagement efforts go beyond the impact of their projects on surrounding neighborhoods. Instead, it is imperative that the Port considers the public because port land is public land. Under California's public trust, all navigable waters should be held for common use and be "forever free" to the citizens of the state (B. King, 2014). The California State Lands Commission has authority over the public trust lands (tidelands, submerged lands, navigable water) and administered the Port of San Francisco for many years before the 1968 transfer of the Port to the control of the city. The Port as a city agency is responsible for the management of public trust land, but the land remains under the ownership and authority of the state in trust for the people of California (Rubin, 2011a, p. 25). This brings with it many regulatory and legal complications regarding the use of Port lands, often limiting real estate development opportunities that do not support maritime operations or are not for public use (Wilmar, 1999).

Given the complicated regulations surrounding waterfront development for the Port, the real estate projects that the Port can build are especially important to raise revenue to support their capital needs, such as funding historic rehabilitation, infrastructure repairs, and resiliency strategies. Of the Port's remaining developable sites,

there are only 84 acres left in total for new development projects; this includes 51 acres already under development, including the Pier 70 project. Therefore, the 28-acre Pier 70 project is a particularly significant project for the Port in terms of raising revenue, alongside supporting the ship repair operations that are so important to the livelihood of the Port's maritime activity.
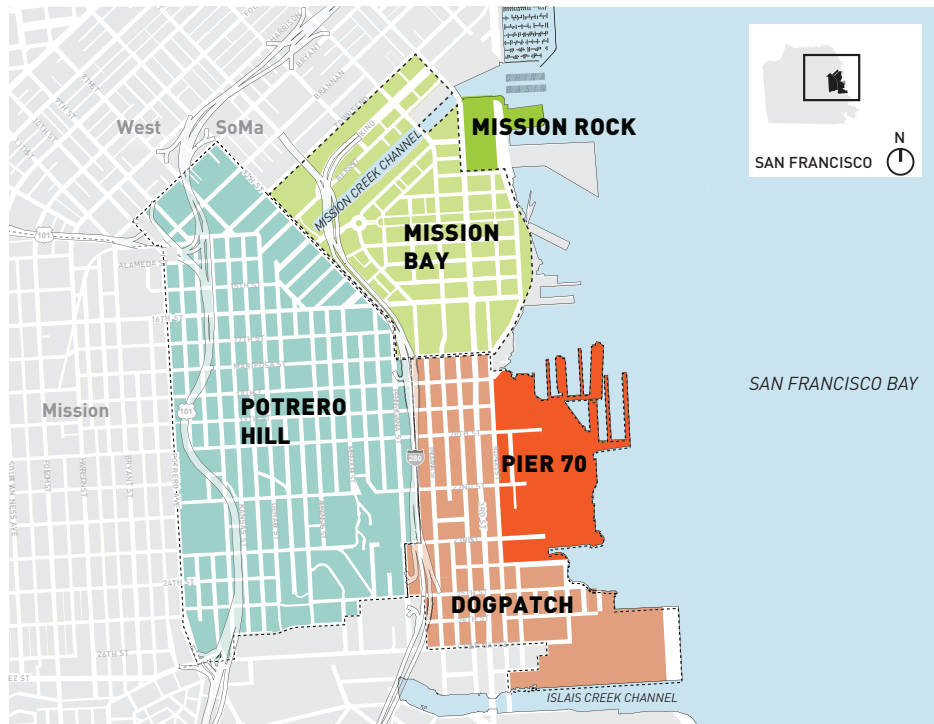
Map of Eastern Neighborhoods (source: made by author with base map from SF Planning Department)

NEIGHBORHOOD CONTEXT

Dogpatch

Located in the Dogpatch neighborhood, the Pier 70 development project comes to an area that has already seen enormous change over the past decade. More of a waterfront outpost than a neighborhood integrated into the rest of San Francisco, the nine-block area sits between the bay to the east and the interstate highway to the west, which divides Dogpatch from the Potrero Hill neighborhood rising above. The once sleepy neighborhood has seen rapid transformations in its transition from an industrial area to a mixed-use neighborhood. Much of the development over the past several decades has been in the form of new residential buildings and the conversion of industrial buildings into lofts. According to the Planning Department, the neighborhood has seen more conversions of industrial spaces into housing than anywhere else in the city. In the pipeline as of 2014, the conversion of industrial to residential use in the Central Waterfront area (encompassing both Dogpatch and Potrero Hill) makes up 30% of all conversions in the city, netting 1,080 housing units at a loss of 293,700 GSF of industrial space (San Francisco Planning Department, 2014). The Central Waterfront is one of the fastest growing residential neighborhoods, with 1,350 net new housing units currently in the pipeline; additionally, many of the residential projects are sizable, with 44% of new units in projects over 250 units, 24% in projects between 100 and 250 units, and 22% in projects between 50 and 100 units (San Francisco Planning Department, 2014).

Pier 70 will join these projects, adding thousands more housing units

and jobs to the area as the first large-scale master-planned project in Dogpatch.

Historically, Dogpatch has been one of San Francisco's most active industrial areas. In addition to the shipbuilding and related production occurring on Pier 70, the area was home to a number of factories (San Francisco Planning Department, 2008). According to legend, the name "Dogpatch" originated from the packs of wild dogs that roamed the streets seeking scraps from the area's slaughterhouses. There was a small amount of worker housing in the neighborhood, with the cottages on Tennessee Street eventually becoming part of the Dogpatch Historic District in 2002. However, even during Pier 70's peak activity between WWI and WWII, no more than 1,200 people lived there. As maritime industrial activity declined in the decades following WWII, the area remained industrial, attracting warehousing, wholesale, and distribution operations. In the 1980s and 1990s, additional manufacturing and arts-related groups, including small-scale manufacturers, design firms, and film production studios, moved into the neighborhood, drawn to the building stock and lower rents (San Francisco Planning Department, 2008).

These light industrial uses make up the Production, Distribution and Repair (PDR) activities that the Planning Department has defined as its own industrial land-use characterization, and hopes to maintain in the Dogpatch. Given the widespread demand for the production of more housing in the city, the Planning Department has two main objectives to stabilize industrial land in order to protect PDR businesses while also encouraging the development of housing

affordable to a low and middle-income households. This balance of providing for people and neighborhoods versus the economy and jobs is particularly challenging given that some PDR uses are incompatible with residential neighborhoods (San Francisco Planning Department, 2008).

The area faced its first signs of transformation during the dot-com bubble of the late 1990s. A loophole in the zoning code allowed the construction or conversion of live/work lofts without the same conditional use approvals that were required of building housing in industrial areas. Because of this, developers began building large live/work buildings along Third Street, the main artery of Dogpatch. More recently, a handful of residential buildings have been built throughout the neighborhood. Susan Eslick of the Dogpatch Neighborhood Association says, "There are so many things bubbling up here that the neighborhood group meetings have been hijacked into planning meetings" (Eslick, 2015). Yet, as an originally industrial area, the neighborhood does not have the basic infrastructure, including sidewalks, street lighting and streetscaping, typical of more traditional residential neighborhoods. Instead, the fabric of the neighborhood remains mixed, with live/work lofts and modern residential buildings scattered between the largely one- and two-story industrial factory and warehouse buildings, surrounding the pocket of historic wood-framed cottages. The architectural styles and quality of the new construction varies dramatically, ranging from generic, pastel stucco lofts to glassy, finned condominiums. The area is gaining more amenities, with ground-floor restaurants, bars, and boutiques tucked within the industrial and residential buildings, catering to the increasingly wealthy people who have

DOGPATCH

Top left and center: New residential buildings on Illinois Street in Dogpatch; top right: renovated industrial buildings on Third Street
Bottom left and center: Mix of industrial buildings, historic and new housing; bottom right: Illinois Street without proper sidewalk exemplifies the lack of infrastructure in the neighborhood

Top: New office and hospital development in Mission Bay, with boxy building masses, wide streets, and glassy façades
Bottom left and center: New residential development; bottom right: houseboats on Mission Creek with new residential development in background

moved here or who work in the studios and new tech offices in the area. However, the neighborhood still lacks basic amenities such as a grocery or drug store, and open space is limited. Thus, there are high hopes for the retail and open space amenities that Pier 70 has promised.

Central Waterfront
Dogpatch is just one neighborhood in flux that is part of the entire transforming Central Waterfront. At the northernmost part of this area, due south of China Basin and Mission Creek Channel, is Mission Bay. This 303-acre master-planning project has redeveloped the former Southern Pacific rail yard. This enormous project is the result of over a decade-long planning effort; the project is a public-private partnership between the now-defunct San Francisco Redevelopment Agency and Catellus Development Corporation, now managed by the Mission Bay Development Group. Construction began in 1998 and full build-out is expected to last several more decades, though much of the new mixed-use neighborhood is already in place. The program includes 4.4 million GSF of commercial and biotechnology space, 500,000 GSF retail, a 500-room hotel, and a new 2.65 million GSF life sciences campus and hospital for the University of California San Francisco. There will also be approximately 6,000 housing units and the necessary services and infrastructure to support a residential community, such as a new public school and library, fire and police stations, and nearly 50 acres of public open space (SF OCII, n.d.).

Planners, designers, and residents alike have criticized Mission Bay as an urban design failure. Even though the project is not yet com-

plete, there is an overwhelmingly generic and anonymous quality to the neighborhood. Corinne Woods, a resident of nearby Mission Creek and member of the Mission Bay Citizens Advisory Committee, says that the community wanted to ensure that the Mission Bay development did not turn into a Miami Beach waterfront, and thus the city imposed a 160-foot height limit on the entire site. This in turn has led to the glassy squat boxes that take up much of their parcels in order to maximize FAR and a very uniform skyline (C. Woods, 2015). Residents have also lamented that the streets are too wide and the buildings set back too far, creating a neighborhood very unlike the pedestrian scale of much of the rest of the city. Yet, despite the lackluster design quality of the development, the project has been incredibly successful economically. San Francisco's Office of Community Investment and Infrastructure estimates the entire site will create over 30,000 new permanent jobs in the city (SF OCII, n.d.). Many biotech and technology firms have already relocated here and many more will join in the coming years. This includes the technology company Uber, which plans to build their headquarters on two entitled parcels they recently bought for $125 million, at $210 per square foot (Brown, 2014). Additionally, the Golden State Warriors basketball team is planning to build a 12-acre mixed-use development, including a new 18,000-seat arena. The impact of the growth of Mission Bay extends throughout the city, in particular increasing development pressures in adjacent waterfront neighborhoods.

Directly south of Mission Bay is Pier 70 and the surrounding Dogpatch neighborhood. In contrast to the slick, new development of Mission Bay, this area is noticeably grittier. Industrial structures,

both active and abandoned, are scattered along the waterfront. Adjacent to the Pier 70 site is the former Potrero Power Plant, occupying 20 acres to the south directly on the water. Shut down in 2011, former owner PG&E is currently undertaking environmental remediation on site. The status of development plans by current owner NRG is unclear, but the Port and City hope to coordinate closely with NRG. As direct abutters sharing over 1000 feet of boundary, NRG's development plans will surely impact the Port's Pier 70 property.

The Southern Waterfront continues past Pier 70, with modern cargo facilities shipping small amounts of goods through Pier 80 and Piers 94-96. Here, the Port's maritime operations are most visible, with giant gantry cranes and grain silos rising at the water's edge. This area is also the most disconnected from the rest of the city.

Top: Potrero Power Plant site, directly south of Pier 70, looking east towards the bay
Bottom: Looking east from Islais Creek Channel at Pier 80 (left) and Pier 94 (right)

4.2 DEVELOPMENT PROCESS

THE PORT'S RFQ AND PIER 70 PREFERRED MASTER PLAN

In August of 2010, the City and County of San Francisco and the Port of San Francisco released the "Request for Developer Qualifications" for the 28-acre waterfront development site at Pier 70. The site is within the southeastern corner of the Pier 70 area, bounded by Mariposa Street to the north, 22nd Street to the south, Illinois Street to the west, and the San Francisco Bay to the east. The RFQ called for development proposals to design, entitle, develop, and operate the site under a development agreement and long-term ground lease (Port of San Francisco, 2010b, p. 21). On behalf of the City and Port, Mayor Gavin Newsom laid out the framework for the ambitious project:

> Since 1862, Pier 70 has been a place of innovation and prosperity. This site, almost 70 acres of waterfront land, has seen booms and busts while continually building or repairing ships for over 150 years… While ship repair is prospering [now], the remainder of the area awaits re-imagination. At the water's edge are opportunities for today's industries, offices, business parks, and educational or corporate campuses. San Francisco, through the Port, seeks inspired developers and users excited by the opportunity to revive historic buildings and interlay new buildings, creating a 21st century working waterfront, for 6,000 to 8,000 additional workers (Port of San Francisco, 2010b).

The RFQ calls for the new development of a maximum of 2.5 million gross square feet and rehabilitation of 260,000 square feet of historic buildings. The RFQ also suggests primary uses to recreate this "21st century working waterfront:" office, research and development, light industrial, waterfront commercial and maritime industrial uses. The Port's Pier 70 Preferred Master Plan, released in April 2010 and the result of a three-year public planning process, largely set the criteria for the project.

The purpose of the Master Plan was to balance the existing ship repair industry with new opportunities for waterfront parks, historic preservation, and real estate development (Port of San Francisco, 2010b, p. 21). The Port created a development framework with defined goals to achieve its vision to "create a vibrant and authentic historic district that re-establishes the historic activity level, activates new waterfront open spaces, creates a center for innovative industries, and integrates ongoing ship repair operations." These goals are to:

- Create a Pier 70 National Register Historic District and rehabilitate its extraordinary historic resources.
- Preserve the long-term viability of the maritime ship repair industry.
- Create a major new shoreline open space that extends the San Francisco Bay Trail and Blue Greenway to and through Pier 70.
- Promote sustainable mixed-use infill development and economic vitality that includes climate adaptation strategies appropriate to this waterfront location.
- Provide sites for office, research, emerging technologies, light

industry, commercial, cultural, and recreational uses to expand San Francisco's economic base and generate revenues to fund public benefits.

- Promote development that is pedestrian-oriented and fosters use of alternative, sustainable transportation modes and practices.
- Extend the city street grid to enhance access and integrate Pier 70 with the Central Waterfront.
- Remediate environmental contamination to enable use and public enjoyment of Pier 70 and its waterfront, and improve environmental quality. (Port of San Francisco, 2010b, p. 21)

These goals represent a diverse range of public interests, providing the criteria to evaluate specific development proposals such as the Pier 70 Waterfront RFQ and any potential changes to the Port's Master Plan (Preferred Master Plan 35). In order to develop this Master Plan, the Port combined technical studies with stakeholder meetings, including consultation with regulatory agencies, coordination with the city's planning and economic development offices, collaboration with ship repair needs, and extensive community planning. The community planning process included four community workshops, over 70 outreach meetings, and 12 presentations to the Port, Planning, and Historic Preservation Commission (Port of San Francisco, 2010b, p. 21). Through this process, the Port created a collective vision for Pier 70 and the necessary means to implement it. In addition to setting the development goals for Pier 70, the Preferred Master Plan articulates a framework of performance-based objectives and form-based design guidelines for the site. These objectives include the continued operation of ship repair

on 17 acres, planned rehabilitation of 700,000 square feet of historic buildings, 3,000,000 square feet of new infill development, 6,000-8,000 new jobs, and 11 acres of waterfront open space and 9 acres of upland open space.

In order to make this plan a reality, the Port sought a development partner for the Waterfront site to implement the Master Plan, rather than to create an entirely new vision for the site. According to the RFQ, "The Port, policy makers, and the community, including the Port's Central Waterfront Advisory Group (CWAG), have made great strides with developing the Master Plan and securing new

Pier 70 Preferred Master Plan (Source: Port)

public finance tools. Private sector expertise and investment is needed now to implement the Master Plan. The Waterfront Site is the economic key to achieving the vision" (Port of San Francisco, 2010b, p. 21).

Port Objectives for the Waterfront Site:
Building on the vision for Pier 70 set forth in the Port's Master Plan, the Port determined the following development objectives to serve as criteria for developer selection and negotiating the development agreement:

- To serve as the catalyst project for Pier 70 to achieve the site-wide goals established in the Master Plan, in particular, securing the necessary entitlements and approvals for public financing to fund site-wide public benefits.
- To create a first class jobs center at Pier 70 that complements existing ship repair operations and re-establishes Pier 70 as a major economic hub for San Francisco. At build-out, the Port expects the Waterfront Site to represent a significant employment center with jobs well matched to San Francisco's workforce.
- To generate land value, tax revenues, and investment needed to support the infrastructure, parks, and historic rehabilitation investments to realize the Pier 70 Master Plan.
- To design and develop new buildings that enhance and respect the site's historic resources and overall the historic district.
- To open the eastern shore of the site to the public with a major new waterfront park.
- To create business and employment opportunities for local

workers and businesses during the design, construction and operation phases of the project.
- To strive for a "carbon-neutral" development program minimizing the reliance on the private automobile and enhancing the pedestrian experience of this historic site and the bay shore.
- To integrate Pier 70 into the eastern neighborhoods of San Francisco through new street networks and destinations that bring people to the Bay's edge (Port of San Francisco, 2010b, p. 21).

The RFQ asked prospective developers to describe their qualifications and capacity for this project alongside their vision to achieve the Port's objectives as set forth in the Pier 70 Preferred Master Plan. The Port received six responses, four of which the Port deemed most qualified to meet the requirements of the RFQ. The evaluation process included review by Port staff and an evaluation panel of development experts and other stakeholders (including citizen representatives from the Central Waterfront Advisory Group). The Port's Central Waterfront Advisory Group also hosted a community meeting where the prospective development teams presented their ideas to residents from Potrero Hill, Dogpatch, Showplace Square, Mission Bay, and China Basin, and residents discussed the development proposals with CWAG members. Based on evaluative criteria drawn from the Preferred Master Plan and the input of the evaluation panel, the Port Commission selected Forest City as project developer in April 2011 (Port of San Francisco, 2012, p. 5).

As described in their response to the RFQ, Forest City's vision for Pier 70 called for creating a new model of innovation cluster,

attracting a diversity of "high growth sectors," including biotech, high-tech, and marine sciences. Integrated with "culture-defining magnets," such as programming for artists, makers, and entrepreneurs, they imagined the innovation campus to "organically become a destination for creativity and open exchange." Coupled with public amenities, such as a new waterfront park, Forest City envisioned the project to catalyze the site as "a next-gen workplace, a cultural asset and as a tool to create a varied new workforce" (Forest City California, 2011).

DEVELOPMENT TEAM

As a large-scale waterfront redevelopment, the Pier 70 project requires collaboration between many private and public parties.

Forest City Development California is the sole developer for the project. They are a regional office and subsidiary of Forest City Enterprises, a 95-year old publicly traded and vertically integrated national real estate firm. With total assets of approximately $8.8 billion, Forest City is based out of Cleveland and has offices across the country ("Forest City," n.d.).[3] The company has a broad range of experience with similarly large and complex projects, including public-private partnerships, urban infill development, and long-range master-planned projects including The Yards in Washington D.C. and University Park in Cambridge, Massachusetts. They also have a history of working in San Francisco, as developer of the Westfield SF Centre (a $433 million retail and office project) and the 5M Project (the mixed-use redevelopment of the San Francisco Chronicle building, still in development). Acting as both the devel-

oper and equity investor, Forest City's access to capital was particularly attractive to the Port (Port of San Francisco, 2012, p. 5). Forest City California Senior Vice President Alexa Arena was responsible for the project vision, calling for "an innovation cluster at Pier 70 coupling high quality office facilities with diverse activities and public amenities for the greater San Francisco community, in particular, artist, "makers," and other creative sectors." (Port of San Francisco, 2012, p. 5). Drawn to the site by the character of Dogpatch and the opportunity to develop a large master-planned waterfront project, which is rare in San Francisco, she brought on two employees with extensive San Francisco public sector experience to lead the Pier 70 project.

SiteLab Urban Studio is the design lead for the project, responsible for the development of the urban design plan and design guidelines. Working in coordination with the Planning Department, SiteLab and Forest City have assembled a design team to help determine design guidelines for the site. SiteLab leads the team, with Grimshaw Architects guiding the design for commercial buildings, David Baker Architects for residential buildings, and Field Operations for landscape architecture. Because this is a master-planned project with Forest City responsible for the horizontal development of the site, there will not be individual building designs at the entitlement phase. Instead, the design guidelines themselves will be entitled. These guidelines will shape future vertical development, to be built parcel by parcel by Forest City or other developers.

The development team is working in close coordination with many public agencies. In addition to working closely with the Port as the
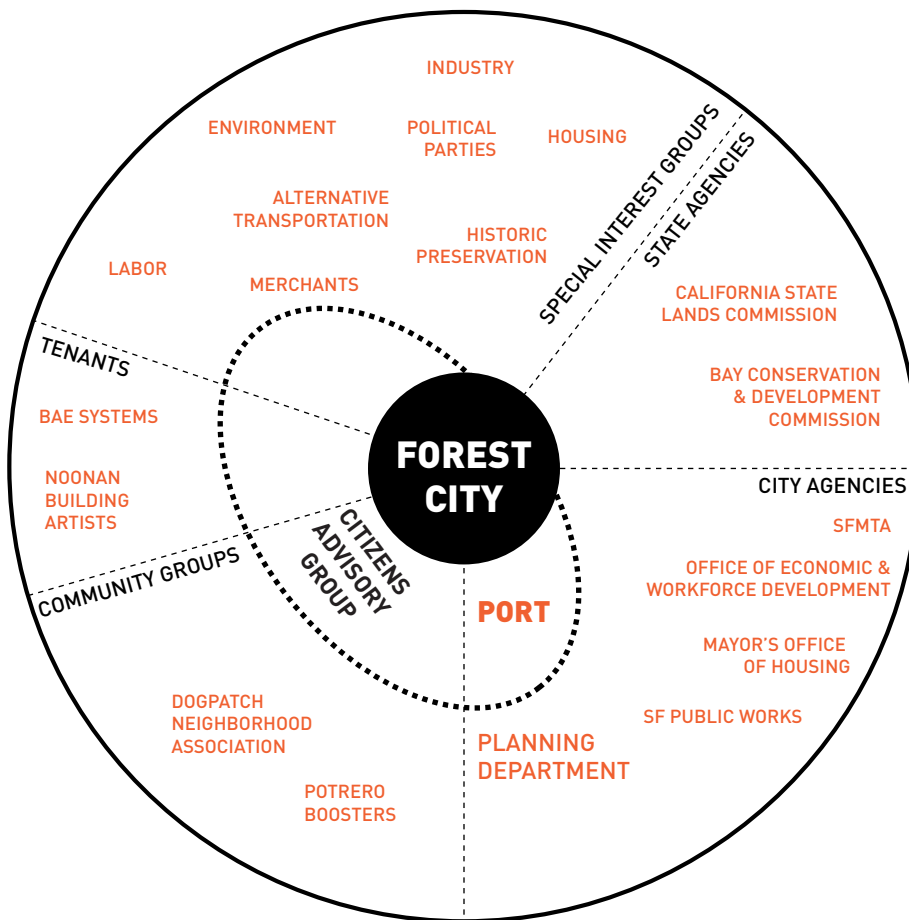
Stakeholder diagram

landowner, the team has had extensive collaboration with the Planning Department on design and environmental review issues. Other City departments with a role in the project include the Mayor's Office, the Office of Economic and Workforce Development, the San Francisco Metropolitan Transportation Authority, the Public Utilities Commission, and the Fire and Police Departments. The responsibilities of these agencies range from insuring the site is accessible to people with disabilities to evaluating the public transportation impacts of the new project.

Forest City is also working closely with Orton Development, the designated developer to rehabilitate the Historic 20th Street Area. Though the Waterfront and Historic sites are separate projects, Orton and Forest City have been in coordination to guarantee that their projects complement each other. Also, as Orton's project will be done years before the waterfront site is complete, Forest City wants to ensure that their work will accommodate Orton's needs throughout and after the construction of Forest City's project.

4.3 COMMUNITY PROCESS: OUTREACH, PROPOSITION B, RESPONSE

While much about the Pier 70 project is remarkable, from its plan to create approximately 10,000 new jobs on site to its vision of direct waterfront access for the city, the near unanimous support for the project is perhaps most impressive. This is especially true given the difficulty of real estate development in San Francisco throughout history and today, particularly for large projects on the waterfront.

COMMUNITY PROCESS: OUTREACH STRATEGY

Forest City's approach to the Pier 70's community process is grounded in an understanding of how development operates in San Francisco, a genuine interest in the culture of the Dogpatch neighborhood, and the belief that getting feedback will improve the project. Alexa Arena, VP at Forest City, explains:

> We as developers have to think of ourselves, particularly in a city like San Francisco, it's not only being skilled at finance and thinking through planning issues, etcetera, but also at being extremely responsive and thinking through community processes and community risk. For us, this was an extension of what we've already acknowledged working in San Francisco, which is getting a project passed where you don't have the community onboard with you is an extremely risky endeavor that has very real financial implications (Arena, 2015).

Kelly Pretzer, Development Manager, described Forest City's outreach approach as "under Alexa's vision and direction for the project" (2015). She says Arena and the Forest City team lead an intensive outreach process at their 5M project in San Francisco, working to find "early users" to activate the site before the larger development project begins. She explains, "It's the idea that you improve the ultimate project by having this user and stakeholder input early on" (Pretzer, 2015). With this in mind, Forest City developed a "double-pronged strategy" of project-focused meetings and broader events to get feedback, create a sense of ownership, and

foster interest and excitement for the project. Their outreach has been part of their long-term development strategy, with pre-determined goals for the number and frequency of events, but has also advanced organically as new ideas and opportunities emerge. As a result of the Exclusive Negotiation Agreement between the Port Commission and Forest City that grants Forest City the right to develop the site, Forest City also has an agreement with the Port to use the site throughout the development process.

Forest City has stressed that their involvement in the area is an extension of the Port's outreach. Shortly after the Mayor's June 2011 approval of the Exclusive Negotiation Agreement, Forest City began to meet with the Port's Central Waterfront Advisory Group (CWAG). Many representatives of the CWAG had been involved in envisioning the redevelopment of the waterfront since the group's formation in 1999. Additionally, through the four-year process of developing the Pier 70 Preferred Master Plan, the community has had nearly ten years of vested interest in the site.

Next, they reached out to immediate tenants and proximate neighbors to discuss the project. This group included BAE Systems and artists in the Noonan Building as well as leaders of neighboring community organizations such as Dogpatch Neighborhood Association and Potrero Boosters. J.R. Eppler, President of the Potrero Boosters said Forest City first reached out to him individually to discuss the project. Following this, Forest City began meeting with J.R. in a small group with other neighborhood leaders semi-regularly about the project. At these meetings, Forest City presented the big picture ideas of the project (such as building heights and land uses)

and held design charrettes to illustrate the different programmatic uses, open space, and the integration of the project with its surroundings (Eppler, 2015). Additionally, Forest City identified advocacy groups representing interests in parks, affordable housing, historic preservation, business, and local manufacturing. They have had ongoing meetings with these groups, as well as the neighborhood groups, throughout the development of the project. These working meetings, where Forest City and stakeholders discuss various ideas, options, and issues related to the project, have been held in various locations throughout Dogpatch, Potrero Hill, and Mission Bay. Forest City has held these meetings not only to inform stakeholders, but also to seek input and shape project progress, such as discussing the integration of the project with the City's larger-scale transportation planning in the area. Forest City has also regularly presented project progress at the Port's monthly CWAG meetings held at the Port's office at Pier 1 and open to the public.

Throughout this process, Forest City has reached out to and had ongoing dialogue with over 1,000 individual community members and stakeholders to better understand the site and its surroundings, as well as the goals and needs of potential users and existing community members. In doing so, Forest City met with representatives of the following groups: Dogpatch Neighborhood Association, Potrero Boosters, Potrero Hill Neighborhood House, Potrero Dogpatch Merchants Association, Noonan Building Artists, Bethelehem Shipyard Museum, Market Street Railways, Mayor's Office of Civic Innovation, manufacturers working out of the neighboring American Industrial Center, local business owners, and cultural institutions including Museum of Craft and Design, La Piccola Scoula, Romer

Young Gallery, Dogpatch Howler, SoMaArts, GAFFTA, TechShop, Seedling Project, Flux, Intersection for the Arts, DEGW, Fare Resources, Gensler, and BurningMan. They also made presentations to representatives of the following groups (including multiple presentations and ongoing meetings): Port of San Francisco CWAG, Dogpatch Neighborhood Association, Potrero Boosters, BAE Ship Repair, American Industrial Center, San Francisco Bicycle Coalition, San Francisco Housing Action Coalition, SF Architectural Heritage, Port Commission, California State Lands Commission, and Bay Conservation and Development Commission (San Francisco Board of Supervisors, 2013).

In addition to these project-focused stakeholder meetings and presentations, Forest City organized a series of events to share the project and site with the broader community. Kelly Pretzer, Development Manager for the project, explained the events as a "lighter way" to solicit feedback and get people out who would not usually attend a typical development meeting. Forest City thought of these as opportunities to allow people to explore somewhere new and somewhere that is usually forbidden, as the site is fenced off and closed to the public. Pretzer explains, "Bringing people into Pier 70 also creates a sense of ownership and interest and excitement. It is not just another thing happening down the street, but it really is something that is genuinely really exciting" (2015). Forest City hired a Development Associate to focus on their interim activation strategy and organize these events in-house. They also created an event management team, Pier 70 Partners, formed of professional event production staff that work on events across the city, to coordinate the larger events on site.

The first of such events was an art gallery opening held at a local Dogpatch event space in August 2012. In order to better understand the context of their site, Forest City commissioned local artist and Potrero Hill resident Wendy MacNaughton to document the character, culture and history of Pier 70 and the surrounding Dogpatch neighborhood. Entitled "In Its Own Words," MacNaughton created a visual narrative of Pier 70, mapping the site and its surroundings with area history and resident profiles.[4] Drawing over 200 people to the opening, this event showcased the unique character of Dogpatch and Pier 70, enforcing the idea that Forest City cares about the context of its development project.[5] Susan Eslick of DNA explained that the gallery opening was a very fun, creative way for Forest City to introduce itself and engage the neighborhood (2015). Perhaps more importantly, it also signaled Forest City's recognition of the importance of the long-standing artist community in Dogpatch. Arena has named the arts as an important part of Forest City's "fascination" with the neighborhood, and its "culture [that] brings a lot of value to the site" (Arena, 2015).
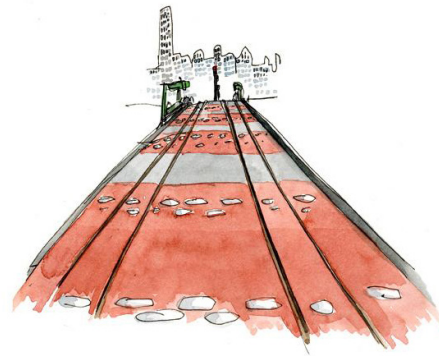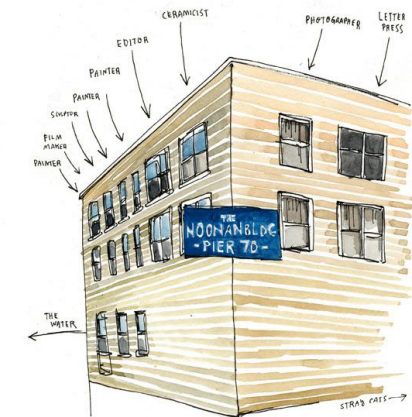

The Pier 70 Community: In It's Own Words; right: excerpts (source: pier70community.com)

Top: Pop-up Open Air Market (source: Forest City)
Bottom: Open house presentation in Building 12 (source: Forest City)

Following events included a series of project-focused open houses, consisting of site tours, presentations on the proposed project vision and design, and opportunities to give feedback. The purpose of these events was to introduce Forest City's vision for the project, share the findings that have informed the conceptual site plan, and tour the usually inaccessible site. These open houses were held on-site (with the exception of one at UCSF in Mission Bay) every month or so between 2012 and 2014. Often reaching capacity, they drew more and more curiosity as the project progressed and received more media attention. By combining more traditional models of community engagement (such as project presentations, Q&A sessions, and workshop charrettes) with opportunities for exploration of unknown territories, Forest City was able to engage much larger circles to learn about and help envision the project.

Forest City also hosted non-traditional events at Pier 70 to promote the project. Instead of focusing on sit-down discussions and presentations, these events have drawn on the unique beauty and character of the site as a desirable venue for recreation and entertainment. Events have included outdoor movie nights, festivals, kayak and bike tours, and a pop-up open air market. The urban air market drew 5,000 people, partially due to a strategically timed feature about the project in the *San Francisco Chronicle*.

Though events were not completely focused on the project, it is important to realize that for Forest City, the purpose was always to directly engage feedback. Conversations with Forest City have revealed that they do not see a distinction between the types of outreach they have held, including planning meetings, open houses,

and events. They have sought feedback in different ways throughout the development of the project. Initially, they simply asked people what they loved about the neighborhood (often hearing about its eclectic nature, ship repair, and mix of uses) and what they would want to see (access to water, green space, transit improvements). In later stages of pre-development, they set up large renderings at the events and stood by to explain the project. In total, Forest City has held nearly 100 events, drawing nearly 10,000 people.

Forest City says they tried to create an inclusive outreach process, reaching out to different groups and spreading the word in as many ways as possible (including through community group leaders, social media, targeted emails). However, they continued to draw the primarily whiter, wealthier, and well-educated residents from Dogpatch, Potrero Hill, and Mission Bay, and not the largely middle-class African-American population from the Bayview neighborhood that is directly south of Dogpatch. Though many Bayview residents work at the shipyard, the planners at the Port noticed that these residents were not present at many of the planning meetings or broader events. At the suggestion of the Port, Forest City reached out to the Bayview community (Beaupre, 2015). Upon learning that the Bayview Pop-up Community Market, comprised of local food and craft merchants, was searching for a new temporary venue, Forest City worked with the market organizers and Pier 70 Partners to set up a marketplace on the Pier 70 site. Held weekly for three months in 2014, these events brought yet another community to the site, further widening the scope of Forest City's outreach and supporting its commitment to local culture (Waddling, 2014).

Forest City's outreach strategy focused on connecting people to Pier 70, often in a very hands-on, on-the-ground manner. Their process was extensive and exhaustive, with the time and budget necessary to do what Susan Eslick describes as "incredible due diligence" (2015).[6] In order to reach out to as wide a network as possible, they combined online and in-person approaches, using their website, social media and email newsletters as well as tabling at neighborhood events and attendance at monthly neighborhood association meetings to share news about the project and advertise project events. One such social media approach includes sharing historic photos of the site, seeking to spark interest in the rich industrial legacy of Pier 70 (Pretzer, 2015).

IMPACT OF PROPOSITION B

The June 2014 passing of Proposition B, requiring public vote to increase the height limit from existing zoning on Port property, posed a major threat to the Pier 70 project. Forest City had planned a range of heights on the site including several towers, the highest reaching 230 feet. Following Proposition B's passage, they suddenly had to reconsider the viability of the entire project. Because the project already had high levels of community support, they decided to put the project on the upcoming November 2014 ballot through the initiative process with Proposition F. According to Alexa Arena, with such a short time frame, it was critical for Forest City to structure their campaign and outreach efforts as well as to revise the project in ways to reduce political risk (2015).

Technically, Proposition B only concerns the height limit of a

project. However, Forest City recognized that this ballot initiative was not really about specific waterfront projects, but indicative of larger concerns about how the city is changing. Therefore, through the wording of the initiative and reshaping of the project program, Forest City decided to emphasize the type of growth that people want to see, including the open space, jobs, culture, and waterfront access that people have mentioned throughout the Pier 70 development process. In order to assist with this, Forest City hired lawyers and consultants to better navigate the deeply political process.

The most significant impact of Proposition B is that it forced Forest City to reconsider the building heights of the project. Changing the height could have an impact on the profitability of the project. Because the project was going up for a citywide vote to increase the height from its existing zoning of 40 feet, Forest City worried that the original plan for the project would further amplify fears of a "wall on the waterfront." Forest City-initiated polls indicated that people became increasingly wary of any building with a height in triple digits (over 100 feet tall). Not only that, but it is hard for the average citizen to visualize what a building of this size would look like. As a result, they reduced the overall height of the project to 90 feet, just below the height of the tallest existing building of 91 feet 2 inches tall.

This decision, made without consultation of the Port, the Planning Department, or any of the involved community or advisory groups, reduced the amount of square footage buildable on site. According to one member of the Central Waterfront Advisory Group, Forest City only consulted a few politically powerful individuals, including

former Mayor Art Agnos and other leaders in the Proposition B initiative, about the proposed changes to the project before filing the Proposition F initiative with the city. Given the stringent regulations surrounding the voter initiative process, once an initiative has been filed, there is no leeway for adjustments to the proposed policy. For the planners and community members who had spent over a decade working on the project and related planning initiatives for the Central Waterfront, the filing of the proposed project changes was a slap in the face. The initiative seemed to disregard the long-range community process for the sake of politics. This reduction of height, at a time when the city is desperate for new housing, in an area large enough to accommodate much more, and in a deal where the Port is dependent on revenue from the project to support its capital needs, has drawn various degrees of lamenting and criticism from involved parties.[7]

Proposition F
In order to take the Pier 70 project to the November 2014 ballot, Forest City collected the requisite signatures and filed Proposition F, the Pier 70 Redevelopment Initiative, in July 2014. According to city records, they submitted 15,386 signatures, more than the 9,702 valid signatures required by the city to qualify an initiative on the ballot. Proposition F does not just list the proposed height change, but lays out project details, such as square footage and program uses, in order to give voters a better understanding of the project. Also entitled "Union Iron Works Historic District Housing, Waterfront Parks, Jobs and Preservation Initiative," Forest City emphasized the benefits that the project was providing the city. The ballot question asked:

Shall the City increase the height limit for new buildings on the 28-acre development site in the Pier 70 area from 40 feet to 90 feet; and shall it be City policy to encourage the City to proceed with public approval processes, including environmental review, for this mixed-use project, and encourage parks, housing, cultural space, and job creation for this site? (Department of Elections, 2014)

The ballot summary also included the following details:

The proposed measure would also make it City policy to encourage the following major features in developing the site:

- Nine acres of waterfront parks and recreation areas;
- Approximately 1,000 to 2,000 new residential units, with the majority available for rent and 30% affordable for middle- and low-income households;
- Restoration and re-use of historic structures;
- Space for arts and cultural activities, nonprofits, small-scale manufacturing, retail, and neighborhood services;
- Preservation of the artist community currently located on Pier 70;
- Between approximately 1-2 million square feet of new commercial and office space; and
- Parking and transportation infrastructure improvements (Department of Elections, 2014).

Though an initiative like Proposition F cannot legally mandate the requirements of a development project prior to CEQA approval, by listing out the community benefits and project parameters, Forest City essentially created a checks and balances system for itself.[8] They made it known to residents and City officials what the project would provide, and thus, would likely come under fire if the project changes drastically from what the voters approved.

With the prospect of a citywide vote, Forest City's outreach strategy did not change in its mission to connect people with Pier 70, but greatly expanded in scope. Forest City now began presenting at neighborhood groups across the city, in addition to hosting open houses and Proposition F-focused events. They also had pamphlets and signs as well as a significant amount of advertising (TV, radio, mail, newspaper) for their "Yes on F" campaign. In total, the Yes on F campaign spent $3,039,374, almost all of which was a direct monetary contribution from Forest City (San Francisco Ethics Commission, 2014).

Through savvy campaigning and political negotiations, Forest City was able to gain the support and endorsement of nearly every influential leader in the city. Supporters included Mayor Ed Lee, former Mayor Art Agnos, all 11 members of the Board of Supervisors, the Democratic and Republican parties, and the Sierra Club, among over 50 other organizations and individuals. The Ballot Digest featured 29 paid arguments in favor of Proposition F, submitted by interest groups representing neighborhood residents and businesses, environmental activists, housing advocates, labor organizations, historic preservationists, to name a few, and no paid arguments against it (Department of Elections, 2014).

COMMUNITY RESPONSE

Despite the last-minute move to reduce the scope of the project, interviews with project stakeholders have overwhelmingly commented on Forest City's tremendous outreach efforts. Community members involved in the planning process explain that this really has been a collaborative process, in which they feel that they have a real influence on the project and Forest City has truly listened and taken their ideas and concerns into consideration.

Susan Eslick of DNA commends their outreach thus far for its authenticity. She explains that the project is "so on brand" and right for the neighborhood, even seen in their graphics and events. She praised their adeptness in handling the outreach process, not only in their creative outreach approach, but also in their marketing and ability to get a lot of people to attend events and their strategic handling of the media. She also commented that by coming to the community very early into the project and "with feet on the ground," Forest City was able to build the trust of the neighborhood in a way that the Port has not (Eslick, 2015).

Keith Goldstein, Treasurer of the Potrero Boosters and President of the Dogpatch-Potrero Merchants Association shares Eslick's sentiment about Forest City's tremendous outreach efforts. He says that their above and beyond outreach efforts have proven a successful model. He too trusts Forest City and though the neighborhood fears that the development plans may change, Forest City has assured them that this will not happen. Furthermore, he thinks Jack Sylvan, Forest City's VP of Development and lead on the Pier 70 project,

has been very good for the company; as a local resident who does not seem corporate at all, he has been able to convincingly send the message that this project is community-based development (Goldstein, 2015). Goldstein remarked, "I still find it fascinating that what I see as a cold corporate culture is willing to engage in such a genuine community process, and I think that really shows that it is the right way to go." He also reiterated Arena's comments surrounding Proposition B, explaining that Forest City did more outreach surrounding their proposition initiative and did a phenomenal job of gaining support, but they did not need to drastically change opinions because they already had a great project (Goldstein, 2015).

JR Eppler, of the Potrero Boosters, stated that Forest City understands the importance of an extensive community process. He believes they are sensitive to the community's concerns about uses and density, and they are "taking a long term view" regarding the impacts of this project. Potrero Boosters unanimously endorsed Proposition F, and Eppler believes the vast majority of Potrero Hill residents are excited about the Pier 70 project. Yet, despite all of the outreach and support, Eppler also commented, "But it is important to remember that this is a private development at the end of the day, serving the needs of its investors while also incorporating neighborhood needs" (Eppler, 2015).

Moving forward with the project, community members have expressed few concerns about Forest City's implementation of Pier 70. Instead, residents have aired fears about the city itself and its ability to think holistically about the waterfront. Pier 70 is just one of several prominent projects along the waterfront, also including

Mission Rock, the Warriors Arena, and the Potrero and Hunters Point public housing redevelopments. If the city does not make the investments necessary to accommodate these developments, residents worry that the new density will only exacerbate the area's traffic, public transportation, and infrastructure issues. These concerns are heightened by the lack of agency coordination within the city government. Eppler points to the different priorities of the Port, the Planning Department, and the Municipal Transportation Agency (2015).

Community Priorities and Concerns
As part of this analysis of Forest City's community process at Pier 70, this thesis takes into account how the company has incorporated community priorities and concerns into the development plans. Table 2 summarizes the main development priorities for the Pier 70 project, as expressed in interviews with community group leaders and with the Port's Pier 70 project manager. The Port and neighborhoods' priorities were also listed in official Port documents, such as the Preferred Master Plan and RFQ. South Beach was included in this group because the South Beach Rincon Mission Bay Neighborhood Association also encompasses the Mission Bay area. However, the concerns of the South Beach and Rincon areas have a different focus than Mission Bay, and thus are listed separately. Additionally, the inclusion of South Beach and Rincon is useful for understanding the different community concerns about other projects along the southeastern waterfront, such as the Mission Rock project.

While each neighborhood has its own profile and area-specific issues, they also all share some of the same elements that they

PIER 70 PRIORITIES AND CONCERNS	PORT AGENCY	DOG-PATCH	POTRERO HILL	MISSION BAY	SOUTH BEACH
Historic Preservation	x	x			
Open Space	x	x	x	x	
Massing		x		x	
Transportation		x	x	x	x
Maritime & industrial use	x	x	x	x	
Waterfront access	x	x	x	x	
Mixed use	x	x	x	x	x
Traffic			x		x
Views			x		
Environment	x			x	x
Cleanliness					x
Security/Safety					x

Table 2: Community Priorities & Concerns (created by author from interviews)

would like to see from the Pier 70 project. Potrero Hill, Dogpatch, and Mission Bay residents listed open space, access to the waterfront, preservation of maritime and industrial uses, and creation of a mixed-use neighborhood as community priorities for the Pier 70 development. Each group also mentioned transportation as a major issue facing their neighborhoods.

Mixed-use development is particularly important to provide basic amenities and a more active public realm. Commercial uses are desired in order to have more neighborhood-serving retail in the

area; for Dogpatch and Mission Bay residents, this is particularly important since both neighborhoods currently lack grocery stores and smaller-scale convenience stores. The integration of different uses is also crucial for Mission Bay residents who complain about the inactive parts of their neighborhood on evenings and weekends due to the complete separation of campus, office and residential uses in Mission Bay. Additionally, residents are very interested in preserving industry and maritime uses as part of the mixed-use nature of the area. It is imperative for the Port's revenues and livelihood to continue to support maritime operations onsite. The current tenant, BAE Systems, recently renewed their lease with the Port, and many meetings between BAE, the Port, and Forest City have occurred to ensure that BAE can maintain operations during and after construction. Dogpatch is one of the last active industrial areas left in the city. Eppler says that these industrial jobs are not only less prone to boom and bust cycles, but also an important stable employment option for long-time Potrero residents, who have traditionally been more working class than the most recent wave of residents (2015).

Open space and waterfront access are also key priorities for the community. Eslick commented that there are 500 acres of land on the waterfront that are not publicly accessible. For Dogpatch residents, it is especially important to gain open space because the neighborhood currently does not have this kind of infrastructure given its industrial past, unlike more traditional residential neighborhoods in the city that have back yards, streetscapes, and public parks. Because of this, Eslick sees the development as only a good thing: "It is not like the development is taking away anything…The Port

always just has parking on this land. This development will only be positive for the neighborhood." She says that in the Dogpatch especially, people are open to change and acknowledge that change can be good because it brings new amenities to the area. This is especially the case since many residents have witnessed the slow transformation of the area from purely industrial to its current mixed-use nature (Eslick, 2015).

Mission Bay, Dogpatch, and Potrero Hill residents also have concerns about the architecture and urban design qualities of the project. Eslick mentions that the development of Pier 70 creates an opportunity for interesting architecture; this is especially important, as the neighborhood has seen an influx of new residential development over the past decade, including many generic projects with little relationship to their surroundings (2015). Residents have all expressed concern that the project does not repeat what happened at Mission Bay, where the glassy, boxy buildings and wide, vacant streets "do not speak to the people," says Eslick (2015). For Corinne Woods of Mission Bay, the reduction in height to 90' is especially disconcerting given the effect that height limits have had on the bulk and size of buildings in her neighborhood. She believes the height limit has in effect "squashed and flattened everything" (2015). In order to make a profit, Forest City could very well chose develop similarly uniform boxy buildings for lack of more varied options, despite their proclamations to avoid this. While bulk and mass of the project concern Mission Bay and Dogpatch residents, Potrero Hill residents are uniquely concerned about views. Overlooking the city and the San Francisco Bay, residents are very interested in maintaining their prime views of the waterfront. With the 90' height

limit below the height of the tallest existing building, their fears of losing views to waterfront towers are lessened. Additionally, Potrero Hill residents were the only group to list increased density as a concern, largely because this will increase traffic and affect the ability of people to access Potrero Hill.

Among the neighborhood groups, only Dogpatch listed historic preservation as a major priority. According to James Madsen, a developer at Orton working to rehabilitate the Historic Core of Pier 70, this is likely because the community is passionate about these buildings and the history of its neighborhood. They have been seeking a way to preserve them for years and there is a collective sense that if nothing is done, the buildings will likely disappear (Madsen, 2015). This interest in preserving the historic buildings is interwoven into a larger sense of pride in the neighborhood surrounding its industrial history.

4.4 PROJECT DETAILS: PROGRAM, DESIGN, & FINANCING

Based on their comprehensive due diligence, including community outreach, real estate market conditions, site and cost analyses, and user and industry research, Forest City formed their "Principles of Place" to guide their vision for the project. Consistent with the Port and community goals for the site, these principles call for creating "a vibrant, authentic place with character similar to that of the adjacent Dogpatch neighborhood." The principles are to:

- Integrate the industrial past and rich history of the site

- Build sufficient density to support an active, locally-inspired waterfront experience
- Include a mix of uses, reflecting the best of San Francisco's unique neighborhoods
- Create spaces for the art, making and design communities (San Francisco Board of Supervisors, 2013).

Using these principles with the help of the Port, Planning Department, and Office of Economic and Workforce Development, Forest City has developed a conceptual use program for the 28-acre site. This program includes housing, commercial office space, retail, artist and maker space, and waterfront parks.

Prior to the June 2014 passage of Proposition B, the Port and Forest City agreed on a non-binding Term Sheet detailing the proposed business terms and development program in May 2013. The San Francisco Board of Supervisors subsequently approved the Term Sheet in June 2013 by a unanimous vote. Forest City is currently developing design guidelines to shape the development project. The Term Sheet also itemizes the financial deal and implementation steps for the project, though the Port and Forest City are renegotiating some of these terms due to Proposition B and the reduction in project height.

PROGRAM

The development program, summarized in Table 3, has not changed dramatically from what was detailed in the Term Sheet.

DEVELOPMENT PROGRAM	PUBLIC PRESENTATION (FEBRUARY 2013)	TERM SHEET (MAY 2013)	PROPOSITION F (NOVEMBER 2014)	NOP OF EIR (MAY 2015) 28-ACRE PARCEL ONLY
Housing	1,000 units, 20% affordable	950-2,000 units, 15-20% affordable	1,000-2,000 units, 30% affordable	1,100-2,150 units, 30% affordable (0.95 to 1.87m GSF)
Office/R&D	2.25 m GSF	up to 2.25 m GSF	1m to 2m GSF	1.1m to 2.02m GSF
Retail/Arts/ Innovation	270,000 GSF	up to 400,000 GSF	GSF not listed (360,000 GSF)	459,300 to 468,000 GSF
Open space	8 acres	7 acres	9 acres	9 acres
Historic preservation	Historic rehabilitation of Buildings 2, 12, 21 (260,000 GSF)	Historic rehabilitation of Buildings 2, 12, 21 (260,000 GSF)	Historic rehabilitation of Buildings 2, 12, 21 (260,000 GSF)	Historic rehabilitation of Buildings 2, 12, 21 (260,000 GSF)
Parking	Parking and transportation improvements	Accessory parking	Parking and transportation improvements	2,555 to 2,700 off-street parking spaces
Height	30' to 230'	30' to 230'	90' maximum	50' to 90'
Total GSF	GSF not listed	3.25 m GSF	GSF not listed (approximately 3m)	3.43m to 3.45m GSF

Table 3: Development Program over Time

Site Plans

The site plans for the Pier 70 project have remained conceptual, at least to the public, throughout the majority of the predevelopment process. Throughout the evolution of the project, the largest change has been in the land use and site plan from the Port's Preferred Master Plan in 2010 to under Forest City's control. The most prominent land use shift is the addition of housing. The Port's Master Plan's Land Use Plan only allows for limited residential development opportunities, largely due to the site's location among industrial and maritime uses. The Master Plan designates two sites for mixed-use residential development under the pretext that design and pro-

gram analysis determines housing is compatible with adjacent uses. These sites are along Illinois Street, the location of plenty of new residential construction in the blocks north of Pier 70, and outside of the boundaries of Forest City's site, which the Port designated for office, biotech, commercial, R&D, and PDR uses (Port of San Francisco, 2010a).

Another significant shift is seen in the block structure and location of development sites. The Port's street plan brings 20th and 22nd Streets into the site and proposes a new 21st Street breaking through the site mid-block at Illinois Street. The streets converge at a Central

Legend (Top Left Map)

- HISTORIC BUILDINGS
- SHIP REPAIR (HISTORIC USE)
- OFFICE, BIOTECH, COMMECIAL, R&D, PDR
- MIXED USE- RESIDENTAL ALLOWED
- COMMERCIAL/SPECIAL USE- HISTORIC CORE
- OPEN SPACE
- BUILDING PROPOSED FOR REMOVAL
- PIER 70 AREA BOUNDARY

Legend (Top Right Map)

- VERY SIGNIFICANT RESOURCE
- SIGNIFICANT RESOURCE
- CONTEXT RESOURCE
- OPEN SPACE
- SHIP REPAIR
- BUILDING REMOVED
- NEW BUILDING PADS

Top: Preferred Master Plan Land Use (source: Port)
Bottom: Preferred Master Plan Building Envelopes, view from southwest (source: Port)

Top: Preferred Master Plan Building Sites (source: Port)
Bottom: Preferred Master Plan Building Envelopes, view from northeast (source: Port)

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PREDOMINANT LAND USES

open space
rooftop open space
residential
creative uses
office
industrial (off-site)
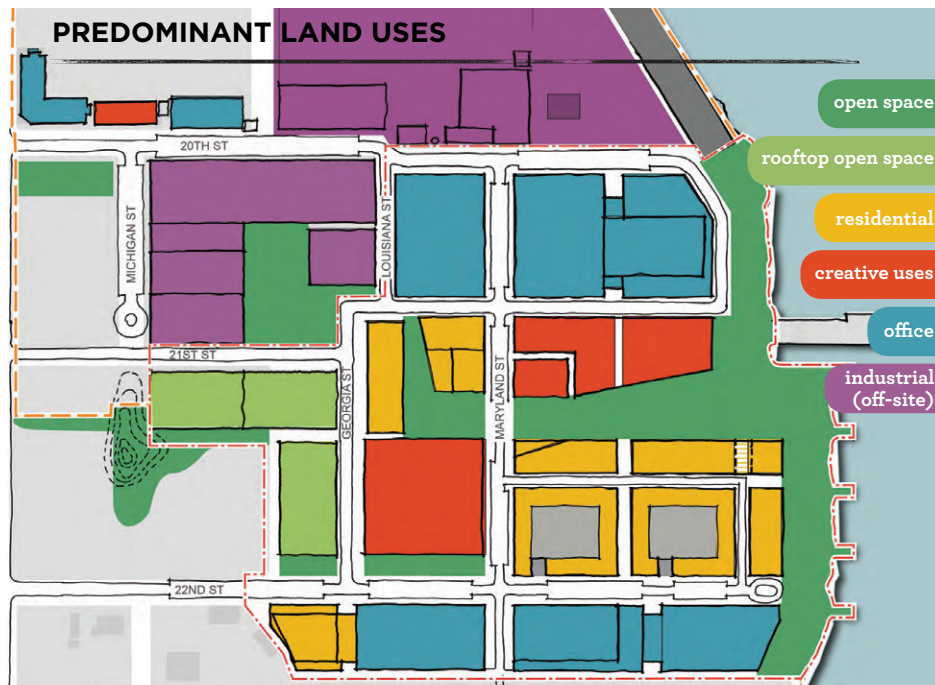
Conceptual land use plan (source: Forest City)

Plaza, where 20th Street continues to the water and meets a new road running north to south parallel along the shoreline between the waterfront park and a large block of new building pads on the former slipways. The building sites are long, approximately 100 feet by 300 feet, and sit perpendicular to the water. While the building envelopes could conceivably allow direct views to the water, the repetitive structure and narrow proportions do not create a visible hierarchy to the blocks or obvious connection to the water, as

the majority of the building perimeters face inwards at each other instead of towards the water.

Forest City's conceptual plan revises the Port's suggested street plan. The extensions of 20th and 22nd Streets and the addition of 21st Street are still in place, but the new plan removes the Central Plaza. Instead, the plan adds new open space that stretches towards the water, connecting with the large waterfront park and creating a visual and physical connection to the Bay. Additionally, the plan removes the shoreline road, instead looping the streets back into the site to Maryland Street, creating a more prominent central north-south axis out of Maryland Street. The plan also includes areas for residential development in the center of the site and towards the waterfront.

Forest City has wisely proposed a flexible land-use program, allowing them to adjust the amount of commercial versus residential uses depending on market and surrounding conditions. Because the plans for the decommissioned power plant to the south are still under development, Forest City wants to ensure that Pier 70 is compatible with whatever adjacent uses occur. The flexible land-use program allows for a combined 3 million GSF of residential and commercial space, with a minimum of 1 million GSF each (meaning they could build approximately 1 million GSF of residential and 2 million GSF of commercial space, vice versa, or something in between). While Forest City has little control over what happens outside its boundaries, they of course hope that the future development plans of the power plant site's current owner, NRG, are in coordination with the rest of Pier 70; this will also be reinforced by the Planning Depart-

ment, which has begun to meet with NRG regarding their plans.

The Proposed Land Use Plan, included in the Planning Department's Notice of Preparation (NOP) of an Environmental Impact Report (EIR) for the project, released May 6, 2015, shows an expanded scope for the project. According to the report, the project, officially titled the Pier 70 Mixed-Use District Project, now includes the 28-acre waterfront site as well as a 7-acre site on Illinois St. The inclusion of the 7-acre Illinois Parcel in the project allows for more development, and these sites have been designated for residential and commercial use, with ground floor retail, light industrial, or arts uses. The 28-acre site will accommodate up to 3,449,050 GSF of construction (ranging from 50 to 90 feet in height) and the 7-acre site will accommodate up to 801,400 GSF not to exceed 65 feet in height (San Francisco Planning Department, 2015). Though the addition of the Illinois Parcel impacts the project size significantly (increasing the project to a maximum of 4.26 million GSF), this analysis does not consider this recent addition, nor the project changes listed in the May 2015 NOP given the timeframe of the report.

Affordable Housing
The Port's Preferred Master Plan and RFQ for Pier 70 did not include any residential uses on site, largely because the Port and its working groups believed housing would be incompatible with the existing maritime uses. Correspondingly, Forest City's RFQ response did not propose housing, but instead an innovation cluster. However, upon subsequently receiving the rights to the project and developing conceptual plans, Forest City began investigating

the possibility of including housing on site to activate the area and create a 24/7 neighborhood. After analyzing the site, taking noise and vibration measurements, Forest City determined that residential use would be feasible onsite as long as commercial uses served as a buffer between the operations of BAE systems on the northern part of Pier 70 and any housing.

San Francisco has an inclusionary housing ordinance requiring market-rate projects of 10 residential units or more to provide 12% of the total units as below market rate (BMR) on-site, build 20% of the total number of units off-site, or pay a fee equivalent to the 20% cost.[9] These BMR units are typically available to households making no more than 55% of Area Median Income. Kristy Wang, Community Planning Policy Director at SPUR, explains the political nature of providing affordable housing. In theory, developers can choose which way they want to contribute, but in reality, there are political pressures and reputational concerns, as well as financial and social benefits, to build on-site (Wang, 2015). Data from the San Francisco Mayor's Office of Housing supports this sentiment: of the 222 projects completed under the Inclusionary Housing Program from 1992 to 2014, 79% of these were on-site BMR projects, 3% were off-site BMR projects, and 18% were fee projects (San Francisco Mayor's Office of Housing, 2014).

Initially, the Term Sheet called for Forest City to comply with the City's inclusionary housing requirements, providing 15-20% of units below market rate. Upon being asked why Forest City increased the amount of affordable housing in the project, Pretzer explains that as a public-private partnership, it is imperative to maximize the public

benefits of the project. Providing affordable housing is an important part of this. According to interviews with stakeholders, community groups and the CWAG requested more affordable housing. Forest City also likely felt political pressure to increase affordable housing given the citywide housing crisis and Mayor Lee's push to build more affordable housing.[10] According to the Port, the increase in the percentage of housing affordable to low and moderate-income households aligns with these mayoral policy goals. The Port believes that because the Term Sheet calls for using Infrastructure Financing District tax increment proceeds to pay for infrastructure and park costs, the City should be able to ensure that their investment in this development will meet its important policy goals (Port of San Francisco, 2014). Furthermore, increasing the amount of affordable housing beyond what the city required allowed Forest City to better promote Pier 70 in their "Yes on F" campaign.

The reduction in height of the project from 230' to 90' has restricted the buildable square footage onsite. The Port estimates that the project as proposed in Proposition F lost approximately 16 to 20% of its total size from what was proposed in the Term Sheet. For the many parties seeking to increase San Francisco's housing supply, this reduction in density is particularly disappointing. Kristy Wang says SPUR's main complaint is there could have been more of everything, beyond the project limit of approximately 3 million GSF; because of the location, there was an opportunity to build more square footage and more of a mix, and this is especially important because the city is desperate for more housing (Wang, 2015). Tim Colen of SFHAC echoed this desire for more housing, saying that it is a good project but unfortunately was downscaled

due to politics (2015). Nevertheless, both SFHAC and SPUR endorsed the project and supported the "Yes on F" campaign since there are still many benefits to the project even with the height reduction.

As the project currently exists, in addition to their promise of providing 30% below market rate units (more than double what the city requires, according to Pretzer), Forest City has guaranteed the majority of all housing units to be rental and 40% of units to be two-bedrooms or larger, thereby providing more housing for families. They plan to develop one stand-along building that is 100% affordable, while also distributing inclusionary units throughout the market-rate buildings.

Artist and industrial space
Forest City also has plans to include approximately 360,000 GSF of retail, arts, and innovation space. These uses, including local retail, arts and culture, small-scale production, and market hall uses, will largely encompass the ground floor of commercial and residential buildings in order to help activate the site. This will include ground floor space closest to the waterfront park, some of the most valuable parcels onsite, complementing the public open space. Forest City is very interested in promoting light industrial use as a way to build upon the culture and character of Dogpatch. They propose doing this by extending the uses located in the American Industrial Center (AIC) across the street of the existing area. The AIC, a monolithic building encompassing two complete blocks, however, is inward facing with little relationship to the public realm. Instead of this, Forest City is planning the project to be permeable with its sur-

roundings, with spaces designed to promote curiosity and invite the public to observe and partake. Pretzer points to Rickshaw Bagworks, a San Francisco-based bag company, as a potential tenant whose space could include a small retail component and areas for visible production (2015). Forest City has consulted current AIC tenants and SFMade, a non-profit supporting local manufacturing, to make sure they build spaces that are suitable for industrial uses.

Similar to the desire to promote light industrial activities onsite is an interest in retaining the existing artist community that currently occupies the Noonan Building. Of the total square footage designated for retail, arts, and innovation, up to 120,000 GSF will be for a smaller scale, stand-alone building for the arts and ancillary activities.

Artists in San Francisco, among many cities around the world, have struggled to find affordable studio space in the face of growing real estate pressures. Adele Shaw, a painter who works out of the Noonan Building, explains, "In the quintessential development history in San Francisco, artists are simply ignored and batted about, then forced to move on" (Dudnick, 2014, para. 2). That being said, the failed 2001 proposal for Pier 70 included a major arts center. The Port's Preferred Master Plan also called for maintaining artist-related uses at Pier 70, including studio and exhibit spaces, as part of designated Production, Distribution, and Repair (PDR) uses. Despite these designations, according to early accounts from the Noonan Building Artist, initial conversations surrounding Forest City's plans for the site did not take the existing artists into consideration. Kim Austin, who has worked in the building since 1998, explains:

It seemed like there was no awareness of the Noonan Building and that being part of the future. As we have spoken up about it and got people to know there is an existing artist community here, things have really, really changed. It's my impression that [developer] Forest City has really come around and listened to us and wants to build upon what we've been doing here for the last 40 years (Dudnick, 2014, para. 6).

Forest City quickly realized the importance of the artists and the value they bring to the community. Though they plan to demolish the Noonan Building, largely for structural reasons, as the old wooden building no longer meets city code, they have pledged to accommodate the existing artists with affordable studio space. This promise is written into the Term Sheet, and Forest City has worked with the artist group to ensure that the new building meets their needs. Forest City's Alexa Arena has since reiterated the importance of the arts, stating, "Arts are a critical part of any community. The way we see the site is not just building physical infrastructure, but building a community that's really an extension of the Dogpatch culture…Certainly our intention is to maintain space for artists as part of a long term [strategy] for the site" (Dudnick, 2014, para. 12). By working with the artists in the Noonan Building, Forest City was able to create a development solution that will likely benefit both parties. Providing affordable studio space for the artists, instead of displacement, is an obvious win for the artists. For Forest City, the inclusion of the artists has proven that they as developers are willing to collaborate and provide for the existing community, and will likely help create a more diverse and interesting neighborhood that will be reflected both in increased financial and cultural value. Furthermore,

this move won the support of the Noonan Building Artists, who officially endorsed Proposition F on the November Ballot.

Open space
The current plan proposes to build nine acres of open space, three times the amount of total existing open space in Dogpatch. Forest City conceives of the open space as a series of four outdoor "rooms," individually programmable while also functioning as a single large open space. The design and location of these open spaces is intended to complement (activate and be activated by) adjacent indoor uses. "Market Square" is a courtyard surrounded by historic buildings on two sides, designed to hold regular markets and special events. "Slipway Commons" connects Market Square and the historic buildings to the waterfront. Extending down the center of the site, perpendicular to the water, Slipway Commons is lined with active ground floor uses on either side (including space for artists, makers, retail and restaurants) forming an important axis in the project. To the north along the waterfront is "The Point," a shoreline park connecting up to the extension of 20th Street. Running south from Slipway Commons along the waterfront down to 22nd Street is "Slipway Promenade," a shoreline park facing the Bay and lined with active restaurant and art uses. The open space plan also includes rooftop areas and smaller plazas within individual blocks and parcels. Plans also complement adjacent open spaces, both existing and future, including the Blue Greenway (an existing 13-mile corridor along the southeastern waterfront that will pass through the site), the future 8-acre Crane Cove Park directly north of Pier 70 (currently under development by the Port), and the future shoreline open space to be built on the power plant site to the south.

One can certainly consider the project's waterfront parks, affordable housing, artist space, and walkability as public benefits. However, Pretzer has shied away from describing these elements of the project that way. She explains, "When you call something a public benefit, it makes it sounds like it wouldn't happen otherwise. But really, it just makes a better project. These elements are incredible for place-making…[They] are not negative at all." She continues that the project has other benefits that are defined in the Term Sheet, including a commitment to hire locally for construction (Pretzer, 2015). If carried through, these project elements and terms will benefit the city and the Port, and of course will also benefit Forest City directly and indirectly in terms of their financial success and reputation with the City, the community, future tenants and development partners.

DESIGN

Design Guidelines
The design of the project is still largely in flux given the long-term timeline and ongoing progress of the project. Instead of submitting final building and park designs for review, Forest City is working with their design team to create comprehensive design guidelines and a final site plan. SiteLab Urban Studio is taking charge of the development of the guidelines, working closely with Grimshaw Architects, David Baker Architects, and Field Operations and the Planning Department to create a framework for the architecture, landscape architecture, and urban design of the site. This includes everything from street widths and setbacks to the materials and wall-to-window ratios of façades. They have the difficult job of not being too prescriptive as to hamper creativity and flexibility at

the site, but also being prescriptive enough to prevent bad projects. They hope to set the design principles that determine the character of the project, while allowing for different programmatic and design scenarios depending on the future of the site and its surroundings.

Several design frameworks have steered the direction of SiteLab's design guidelines. First, the Port's Pier 70 Preferred Master Plan "Infill Design Criteria" is a baseline model. The Port developed these criteria to ensure that new development is compatible with the historic character of the site, drawing from the Secretary of the Interior's Standards for the Treatment of Historic Properties and from input from the community design charrettes they held throughout their planning process. The Infill Development Criteria pertain to the overall district and to specific development zones. District-wide criteria are generally vague, with declarations such as "Design new buildings to reflect their time, place, context and purpose," and "Differentiate new buildings from the old; avoid false historicism," but nevertheless provide guiding principles for the scale, massing, form, and materials of buildings and public spaces (Port of San Francisco, 2010a, p. 61). The zone-specific criteria are more definite, suggesting that buildings in Forest City's waterfront site form a porous edge with the water and maintain physical and visual connections between the site and the water, particularly with the design of the ground floor.

Second, the Mission Bay development to the north acts as a careful warning of what not to do. Community members have repeatedly said they do not want the Pier 70 development to resemble Mission Bay. Susan Eslick stated, "It cannot be like Mission Bay – that is
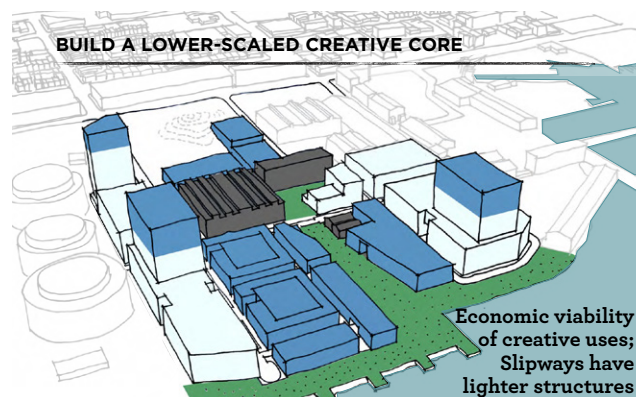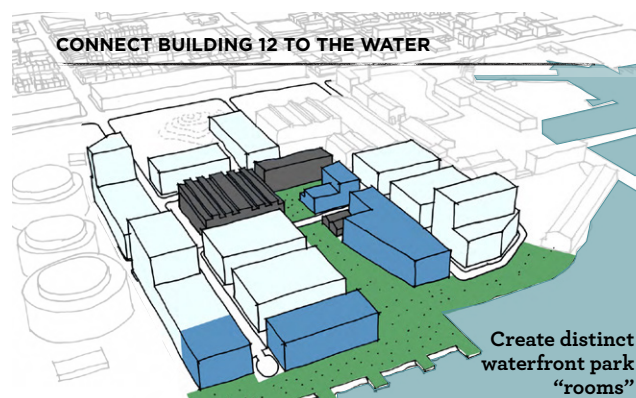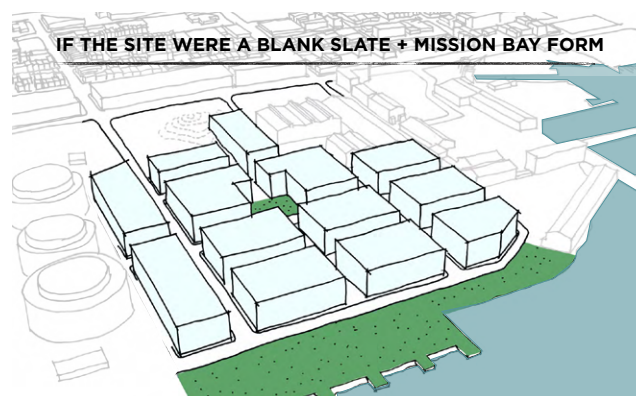
Massing diagrams of urban design and building form (source: Forest City)

Top: Initial rendering of Slipway Promenade (source: Forest City)
Bottom: Initial rendering of Slipway Commons (source: Forest City)

not a model of what we should build. Those buildings don't speak to the people. We need to do better than that" (2015). SiteLab is especially cautious to avoid this. SiteLab partner Evan Rose worked on the design guidelines for Mission Bay while a partner at the private firm SMWM, and thus has first hand experience of what does not work. In meetings with the public, SiteLab has shown comparative massing studies between Mission Bay and Pier 70, showing what the site would look like if developed like under the different design guidelines. While blocky building masses, wide streets, and unclear entrances characterize Mission Bay, the design for Pier 70 will seek to create a pedestrian-friendly environment. According to SiteLab partner Laura Crescimano, they will do this by designing for the human scale, emphasizing the ground floor, building narrower streets, and promoting walking and biking over driving (2015).

Design Representation
While the design guidelines are nearing completion, SiteLab has worked on conceptual designs and plans since the beginning of the project. Graphics and visual storytelling has been important throughout this process, helping to explain the overall vision for the project. In the first several years of predevelopment, SiteLab used a looser, sketchier style to convey the essence of the project while showing that things are still not set in place. Plan documents appear hand drawn instead of hard-lined. Renderings combine mixed-media techniques and are not so real as to prevent further design development. Earlier renderings focus on the public realm, with photographic collages on the ground-plane and hand drawing above to represent new buildings. Later renderings are purely photographic, but still maintain the hazy quality of the initial collages. The inten-

Conceptual renderings of Pier 70 project (source: Forest City)

tion of these renderings is to allow the public to imagine what could become of Pier 70, helping to build excitement for the project. Developing these conceptual ideas in imagery has been a balancing act between not being too abstract or too pretty; knowing that the public could use these images to check the credibility of Forest City, SiteLab did not want to render anything in too final a manner that seemed to promise a design or program that may not actually materialize (Crescimano, 2015). Additionally, they have avoided doing axonometric drawings, saying that no one will ever experience a project from that view; instead, they have focused renderings and massing diagrams from the ground view to show how the public would experience the place (Crescimano, 2015).

FINANCING

The financing for Pier 70 is complicated, requiring a combination of private equity from Forest City and public funding mechanisms and sources. According to the Term Sheet, Forest City is responsible for funding the entire first phase of development. This includes the initial entitlement costs, such as planning and environmental review, as well as the horizontal infrastructure costs to remediate the site and prepare the entire 28 acres for future vertical development. Upon completion, the Port will reimburse Forest City for these horizontal development costs, along with paying Forest City an 18% cumulative annual return on equity spent. In order to pay for this reimbursement, the Port will use multiples sources of funds including proceeds from the sale of a land parcel outside of Forest City's site, Port Infrastructure Financing District (IFD) bond proceeds, Port IFD tax increment revenues, and revenues from the Port's other

ground leases (San Francisco Board of Supervisors, 2013). The Port IFD will finance public improvements such as utilities and open space.

Upon the beginning of construction, estimated for 2017, build-out is expected to last another 10 to 15 years, making the entire project over 20 years in the making. The project will be broken out into four phases, beginning with the horizontal development of the site. As the project progresses, a commensurate amount of public benefits will be required for each subsequent phase. Following horizontal development, which will prepare the sites for development and include construction of streets, sidewalks, and parks, individual developers will build out the site, divided into 20 to 25 parcels. Forest City may develop some of the buildings, but will likely not develop the entire area. Instead, the Port will release the parcels for development either through sale or lease, in which each individual developer will enter into a separate 99-year ground lease with the Port.

Forest City and any other vertical developers will prepay the ground lease for the site upon Forest City's completion of all horizontal infrastructure development. This completion is expected to occur in 2030, in which the Port will receive an estimated prepaid ground lease rent of $76 million. At this point, the Port must fully repay Forest City for their initial investment. The prepaid ground lease sum could be used to directly pay Forest City for their investment and required return on equity. Following the Port's full reimbursement to Forest City, the ground leases between the Port and the developers will include annual rent payments to be shared by the

Port (receiving 55% of annual payments) and Forest City as Master Developer (45%). The total net ground lease revenue to the Port throughout the 99-year lease term is estimated at $1.68 billion (San Francisco Board of Supervisors, 2013).

Total estimated costs are $2.15 billion. The vertical development is estimated at $1.93 billion and will be paid almost entirely by private capital raised by Forest City and other developers. On the existing site, the Port receives several million dollars a year from its ground leases with the Noonan Building Artists and storage and parking facilities ($2.68 million in FY 2012-2013). When Pier 70 is finally completed, in about 15-years, estimates project that it will create approximately $28.6 million in annual tax revenue. The project will also generate an estimated $91.1 million in one-time development impact fees and tax revenue during construction. Additionally, the project will create an additional 14,320 temporary construction-related jobs (9,000 direct on-site) and 18,000 total permanent jobs, 10,000 of which will be direct (San Francisco Board of Supervisors, 2013).

SOURCES	AMOUNT
IFD Bonds	$168,566,664
IFD Tax Increment	$53,925,425
Land Sale Proceeds	$18,153,058
TOTAL	$240,645,147

USES	AMOUNT
Entitlement Costs	$21,271,676
Horizontal Development	$195,658,608
SUBTOTAL	$216,930,285
Total Developer Return on Equity	$23,714,863
TOTAL	$240,645,147

Table 4: Estimated Sources & Uses of Funds for Infrastructure (source: Term Sheet)

4.5 LOOKING AHEAD

While the project overcame a major hurdle with the passage of Proposition F, there are several key steps ahead before construction can begin. Besides the recently achieved height limit change, the project will also require rezoning to allow the proposed mixed-use programming. The site is currently zoned M-2 for heavy industrial use. The Port and Forest City plan to seek rezoning in the form of a Special Use District for the area, which would require approval by the Planning Commission, Board of Supervisors, and Port Commission.

Currently, the project is under environmental review as mandated by CEQA. This review period will likely take 18 to 24 months until completion. The Environmental Impact Report (EIR) process requires notification and publication of a draft EIR for public review, in which comments can be submitted in person or in writing at the project's public hearing.

At the end of this review period, Forest City will have the final design guidelines and infrastructure, transportation, and sustainability plans, among additional studies and reports, completed for Planning Department and Commission approval. As part of this process, Forest City will continue to engage the community for their input on specific issues, such as coordination of transportation issues or the refinement of the design. Pretzer said that Forest City has held ongoing focus meetings with stakeholders to discuss the project progress, and also plans to hold open community events to announce major milestones (2015).

Forest City predicts that construction will begin in 2017, with 10 to 15 years before full build-out. The flexibility surrounding the design and uses of the project will allow Forest City to better meet market demands and see how the neighborhood evolves over the coming years, with the impact of the neighboring Orton and NRG developments. Yet, with a cap on building heights, Forest City has lost part of its ability to flexibly tailor the project to meet market demands and financial needs. Therefore, it will be interesting to see if the final plans for the project differ from the proposal Forest City brought to the public for Proposition F. While Forest City remains publically optimistic about the success of the project, many others involved in planning and development in San Francisco have expressed their doubts as to whether or not the project will be profitable. If anyone loses, it will certainly be the Port, who relies on ground-lease revenue to continue its operations and who is contractually obligated to pay Forest City back for the infrastructure work on site, no matter the profitability of the project.

Additionally, it will be interesting to see how Forest City phases the development, and if and when the project's public benefits are built. One San Francisco developer pointed to Forest City's Atlantic Yards project in Brooklyn, where the development project has been mired in controversy over when the promised affordable housing and open space would be built. Interestingly, this project recently changed its name to Pacific Park Brooklyn in an attempt to reinforce the project's promise of a new park and its connection to the community at Pacific Street; this name change was also likely prompted by an interest in drawing attention away from the stigma surrounding Atlantic Yards (Oder, 2014).

Lastly, the project depends on larger macroeconomic conditions in the city and the country. If the lengthy development process delays the project even further, Pier 70 could very well completely miss the current market cycle. Therefore, despite Forest City's best efforts at engaging the community to collaboratively shape the future of the waterfront, so many aspects that will determine the project's success are out of the hands of the developer, let alone the community.

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1   CWAG is one of five Citizens Advisory Committees representing different areas along the waterfront and made up of key community stakeholders hand-picked by the Port to represent diverse interests, including open space and recreation, business and economic development, historic preservation, and neighborhood interests. These advisory groups are part of the Port's approach to community engagement, meeting every month or so throughout different planning processes to help balance community interests with the needs and financial realities of the Port. David Beaupre, senior planner at the Port, says that through this engagement, it is crucial to get the community to recognize that new development is often necessary to provide a revenue stream to support the operations of the Port.

2   The Port states of their Waterfront Land Use Plan: "Spurred in part by the opportunities created by the removal of the Embarcadero Freeway, the Waterfront Plan guides the Port's long-term efforts to balance and implement its maritime, public access and open space, land use development, urban design, historic preservation, and economic objectives for the waterfront" (Port of San Francisco, 2010b, p. 7).

3   At the time of Forest City's RFQ submittal, the company had an even higher valuation, holding assets of approximately $11.8 billion including over 200 projects around the country (Forest City California, 2011).

4   The art piece has statements like, "It's inevitable the neighborhood is going to change. It's about how," and "This is the original mixed-use neighborhood. It's been that way since the get-go," written within the mixed-media collage of neighborhood vignettes and portraits. Pretzer explains that MacNaughton even created a color palette inspired by the neighborhood, which Forest City then adopted as the color palette for the project.

5   Exact numbers of attendees for these events were not available. Instead, event attendance was estimated from RSVP records, available via FC Pier 70 LLC's Eventbrite page. Events have drawn neighbors from Mission Bay, Dogpatch, and Potrero Hill as well as the broader community, including many people in the planning, development, and design professions.

6   Forest City declined to comment on the budget of their outreach process, but it was no doubt very significant.

7   SPUR, SFHAC, the Planning Department, the Port, and representatives from Dogpatch Neighborhood Association and Mission Bay all mentioned this as a downfall to the project. Corinne Woods of the CWAG and Mission Bay CAC says they "chickened out," pandering to the No Wall on the Waterfront players.

8   The California Environmental Quality Act (CEQA) was enacted in 1970 to require thorough review of the environmental impacts of proposed planning and development projects. CEQA requires the preparation of environmental impact reports (EIRs) for sizable development projects expected to have a significant effect on the environment. In San Francisco, the minimum time required for the EIR process is 18 months (San Francisco Planning Department, 2011).

9   Developers also have the choice of building below market rate units for rental or ownership. The current BMR units for rental must be priced at 55% AMI and for ownership at 90% AMI. However, it is not completely accurate to say that developers have a "choice," as

this process, along with nearly every part of the development process, involves City approval. In the case of inclusionary housing, developers must work with the Mayor's Office of Housing and Community Development (MOHCD) and undergo a hearing with the Planning Commission to determine the project's inclusionary housing requirement. (San Francisco Mayor's Office of Housing and Community Development).

10   Mayor Lee has set a goal of building 30,000 housing units citywide by 2020. A recent proposal by Supervisor Jane Kim called for requiring new market-rate developments to provide 33% of the units below market rate. This proposal passed at the ballot in November 2014 as Proposition K, an advisory measure calling for at least 50% of new units constructed to be affordable to moderate-income households and 33% to be affordable to low-income households (Ballotpedia, 2014).

5.   ANALYSIS

5.1 CONTEXT

While Forest City's approach to community outreach certainly stands out in the context of more traditional entitlement processes, it is important to understand how the Pier 70 project fits within the landscape of waterfront development in San Francisco. Pier 70 is one of several large-scale projects currently in the pre-development phase along the southeastern waterfront. From north to south, these projects include Mission Rock in Mission Bay (a 27-acre project on Port-owned property), the Historic Core of Pier 70 (a 5-acre historic rehabilitation project by Orton Development Inc. on Port property), the Potrero Point power plant site just south of Pier 70 in Dogpatch (a 34-acre site owned by NRG), the Hunters Point Power Plant site in Hunters Point (a 30-acre site owned by PG&E), and India Springs at India Basin in Hunters Point (a 14-acre project owned and being developed by Build Inc.). All of these projects have or are currently undergoing community outreach processes. Though each project has its own concerns, priorities, and stakeholders to address, for the most part, they have also all engaged the community in non-traditional ways. With the exception of Orton's Historic Core project, all projects have held or plan to hold interim activation events onsite as ways to create interest and support.

MISSION ROCK

The Mission Rock project provides an important comparison to Pier 70, particularly since both projects share similar development timelines, stakeholders, and issues. This 27-acre project is another large, mixed-use development proposed on waterfront Port property. The site encompasses Seawall Lot 337, a large parking lot on the northern tip of Mission Bay, as well as Pier 48, a pile-supported pier jutting out into the bay. The professional baseball team the San Francisco Giants is the designated developer for the project, which is also the result of a Port-led RFP process in 2008.[1] For the Giants, this is a major opportunity to develop a project complementary to the operations and finances of the baseball team, which plays out of AT&T Park just north of the site. The goals for the developer are to create parking for the 43,000-seat AT&T Park, improve and enhance the fan experience with a 24/7 mixed-use neighborhood, and generate revenue for the Giants' payroll. Existing height limits on site are currently zoned for 0', as the site functions as a parking lot. Therefore, due to Proposition B, the Giants must also put the proposed project up for citywide vote. According to reports, the Giants will likely take the project to the polls in November of 2015 or 2016, becoming the second project to seek voter approval under Proposition B.

Like Forest City's Pier 70 project, Mission Rock engaged extensively with the community years before the Proposition B decision. Community planning began in 2007 with the development of the Port's RFP. According to interviews with representatives of involved parties, including the area neighborhood association, South Beach Rincon Mission Bay Neighborhood Association (SBRMBNA), the Central Waterfront Advisory Group (CWAG), and the Mission Bay Central Advisory Committee (MBCAC), the Giants embarked on an involved community process from the beginning. Jon Knorpp, Managing Director of Giants Development Services LLC (the San Francisco Giants' two person real estate development division),

explains that their approach to outreach has arisen from their corporate mantra. The organization sees the Giants as civic partners with the city, and an amenity for the city. Therefore, they believe that working with more transparency and communication is best for all parties. For the Mission Rock project, Knorpp says this translated into a strategy in which the Giants wanted to keep neighbors engaged, even to the point of over-informing. Their outreach was broad, reaching out not only to the above listed groups, but also to condominium associations, retailers and local advocacy groups (Knorpp, 2015). They held individual meetings as well as public workshops and presentations about the project. Knorpp said, somewhat jokingly, "Community outreach here starts at day one and doesn't finish until you die. It must be constant" (2015). Knorpp brings a rich perspective and history to the project, as a former Vice President at Catellus Development Corporation (the master developer for Mission Bay's redevelopment) and a senior development manager at Forest City.

According to Knorpp, what they heard is that people wanted to see the creation of a neighborhood on site; they also wanted parks, affordable housing, parking, transit solutions, and less traffic (2015). These elements echo what communities typically seek in mixed-use projects, as Musil found in his study of negotiated developer requirements and community benefits (Musil, 2014). Knorpp said that building parking is actually antithetical in San Francisco, but given the site's current use as a public parking lot used frequently for events and baseball games, residents do not want to lose this, as it would only drive people to seek parking further into the residential neighborhood (2015). Incorporating this feedback into their

Top: Mission Rock site outlined in yellow (source: Giants)
Bottom: Rendering of new park in Mission Rock development (source: Giants)

proposal, Mission Rock has very similar programmatic uses to Pier 70, with 3.5 million GSF total, with 1,000 to 1,500 housing units, 250,000 GSF retail, 1.5 million GSF commercial, 3,000 parking units, and eight acres of open space, including a waterfront park. The housing originally included 15% below market rate units, but due to pressures to include more, the Giants have been revising their housing plans.[2] The retail will include local merchants and light industrial "maker" uses; the Giants are partnering with local manufacturing non-profit organization SFMade to facilitate this. The project will also be home to a new Anchor Brewing facility located on Pier 48.

Knorpp agrees that Proposition B has changed the community planning process for waterfront projects. He says that the Giants cannot change their project in the ways that Forest City did in reaction to the new legislation. The Mission Rock plan currently calls for several mixed-use towers up to 380 feet tall. Because the site is entirely a landfilled area, construction will require 200-foot deep piles no matter the height of the building above. Therefore, the Giants know they will need to build tall and dense enough to pay for these infrastructure costs. Of Forest City, Knorpp says that they ran a great campaign with good results guaranteeing certainty, but unfortunately gave up on aesthetic and land value. He predicts that the economics of their project have changed more than people have admitted, vowing that the Giants cannot make the same choice (2015). Knorpp believes that people are uninformed about height and what a number means, and actually care about views instead. Ballot box planning does not allow the average voter to understand the nuance of the project, and thus it is even more important for the Giants to

inform the public about Mission Rock (Knorpp, 2015).

Interim Activation Strategy
Before Proposition B, knowing that they would spend at least two years securing entitlements, the Giants brought on Gehl Studio to envision how to activate the site in the meantime. Gehl Studio and the Giants developed an interim activation strategy to generate life and activity in the usually dead parking lot, while also testing different uses and tenants. Blaine Merker, head of Gehl Studio's San Francisco office, puts it succinctly, "Culture creates location." The project is not as valuable in financial or cultural terms if it is not embedded within the existing context. The problem with the parking lot was that there was very little obvious culture surrounding it (Merker, 2015). To change this, Gehl Studio and the Giants looked to public space as the framework to bring the culture and neighborhood together, creating a year-round pop-up venue called the Yard.

The Yard is an 18,000 square foot facility, occupying 73 parking spaces in the northernmost corner closest to AT&T Park. Made of 13 shipping containers, it is anchored by an outdoor beer garden on one end and a collection of food trucks on the other. A set of bleachers, the "Giants Steps," sits between, facing out towards the street and AT&T Park. Moveable, transformable benches and tables line the sidewalk. Merker stresses that the Yard is about prototyping the experience, not the actual design, of the future urban place. It also helps to build up habits and excitement for the development. This is especially true for Anchor Brewing, which is operating the beer garden and has the chance to draw customers to the area in advance of their permanent facility. Other retailers include a coffee

Top: Shipping containers and picnic tables at The Yard
Bottom: The Yard currently occupies the northwest corner of the Seawall Lot 337 parking lot

Top: The Yard's beer garden with Pier 48 and the San Francisco Bay in the background
Bottom: "Giants steps" with transformable street furniture and AT&T Park to the north

stand, a North Face store, and an outpost run by SFMade, featuring local retailers and "makers" on a rotating basis. For the Giants, the opportunity to test different uses and build relationships with different local vendors is important, as they could potentially become ground floor tenants at Mission Rock. The Yard also forges a relationship with the community, and the Giants have hired a Program Manager for the Yard to plan events such as readings, yoga classes, and music performances. They have also partnered with a local arts organization to create a children's mural on one side of the site. The Yard opened in March 2015, in preparation for baseball season, and plans to run through at least 2017. The Giants spent approximately $2.5 million on construction costs and will pay an annual rent of $77,000 to the Port. The Port will receive a 25 percent share of the Yard's revenue after the Giants have recouped their construction costs (Dineen, 2015).

Knorpp says they will also use the Yard as a venue for feedback on the Mission Rock project, particularly as plans to go to the ballot become more concrete. Proposition B has certainly cost the Giants millions, in addition to delaying construction at least two years since the project was originally scheduled to begin construction in 2015. As a local organization and as the city's beloved baseball team that recently won three World Series championships (in 2010, 2012, and 2014), the Giants are in a unique position to run a voter initiative campaign. Like Forest City, the Giants have been able to take a very neighborhood-based approach with exceptional financial backing. Forbes recently valued the team at $2 billion, with annual revenue of $387 million and operating income of $68.4 million this past year ("The Business Of Baseball," 2015). Knorpp also explains that

they have unparalleled access to the media and public dissemination, particularly for a real estate developer (2015).

Yet, while they have tried to engage the community regarding the Mission Rock project, they have struggled to motivate a wider swath of city residents. He says, "Regrettably, an election is a way to engage broadly. The problem is that beyond the immediate neighbors, people cannot form a perspective." Knorpp explains that for a normal project, developers reach out only to the immediate neighbors, for Mission Rock, they reached out to a two to three mile radius, and for Mission Bay, a five to six mile radius. Knorpp says they ran focus groups about the project, in which people received a small stipend to participate, and many people did not claim to know Mission Bay, let alone the Mission Rock site. Only after explaining Mission Bay's location next to AT&T Park did people recognize that they have been to site to park their cars on game days. Knorpp believes it is difficult for people to imagine their connection to a place; without being able to envision oneself there, it is hard to care or offer feedback on the project (2015).

Community Response
Katy Liddell, President and co-founder of South Beach Rincon Mission Bay Neighborhood Association (SBRMBNA), has participated in the Giants' community outreach process by meeting with them and attending public workshops held at the Port. She sees the Giants as "very good neighbors," who have been receptive to SBRMNA's interests. She has no major concerns regarding the Mission Rock development and is happy to see life come to the area. Her larger concerns surround issues of safety and cleanliness that

result from the baseball games, as well as traffic and transportation. Liddell herself is not worried about views on the waterfront, recognizing that her Rincon Hill neighborhood was underdeveloped when she moved there 20 years ago and that new buildings and changing skylines were inevitable. Yet, she says that many of her neighbors are still concerned about losing their views, though not due to the Mission Rock project as it will be to south of their neighborhood (Liddell, 2015).

Corinne Woods lives on a houseboat on Mission Creek, the body of water that runs between AT&T Park and Mission Bay. She has been active in the development of the area for nearly 20 years, first joining and chairing the San Francisco Redevelopment Authority's Mission Bay Central Advisory Committee in 1996. She is also co-chair of the Port's Central Waterfront Advisory Group, and has thus been involved in the string of projects along the waterfront, including Mission Rock and Pier 70. She also believes the Giants have listened to community input on the project, but says their outreach was not as intensive or expensive as Forest City's at Pier 70. With regards to the Mission Rock project, Woods says that the Giants have incorporated her feedback about building mass, programs, and phasing. She has been particularly adamant about phasing, demanding that there is a linkage in both adjacency and size between vertical development built and open space provided. She says initially the Giants planned to build commercial and residential uses first, but Woods was able to convince them of the importance of building the public benefits right away. The Giants are now looking at alternative financing models to support this. For Mission Bay, Woods believes the major priorities for the project are providing neighborhood amenities

Map showing radii of outreach area for waterfront projects

in the form of retail and other active ground floor uses. It is also important to see a mix of uses integrated together, not to replicate the lifelessness of the isolated office and campus areas in the rest of Mission Bay (C. Woods, 2015).

The response to the Yard project is mixed. Liddell is very excited about the project, but knows it is too premature to tell how it will impact Mission Rock or its success at the polls. Liddell believes the neighborhood "needs this kind of thing," to make it feel like a neighborhood (2015). Since Mission Bay is still under development, the residents in the approximately 3,000 completed units of 6,000 total future units have very few dining and retail amenities. In conversations with multiple Mission Bay residents at the Yard, they said they welcomed the project for the life and amenities they brought to the area, even if only temporary. Woods, however, is skeptical that the project will help the Giants at all at the ballot, saying the draw of what they've put there isn't enough to attract residents from across the city (2015). Currently, there is no visible connection between the Yard and Mission Rock; the only connection between the Yard and the Giants is the San Francisco Giants apparel displayed in one of the storefronts. She says that if she were in charge of the project, she would put up information about the Mission Rock project to begin steadily educating visitors. Woods believes that Forest City successfully integrated their project with events, demonstrating their savvy and pragmatic approach to community outreach (2015).

It is yet to be seen whether the Giants will be able to use the Yard as a tool for tangible input about their project, alongside its use as an entertainment attraction. John King, architecture critic for the San Francisco Chronicle, asks:

> How long does it take for an experiment in architectural urbanism to be replicated by deep-pocket developers? In the case of San Francisco and the use of shipping containers for retail and dining sheds, the answer is 47 months. That's the amount of time that has passed since local architect Douglas Burnham launched his corrugated metal compound, named Proxy, on a parking lot at Octavia Boulevard and Hayes Street, a collection of outposts and activities that has been evolving ever since. This Friday, by contrast, the 13 containers comprising the Yard at Mission Rock will open all at once, a pop-up village erected by the San Francisco Giants in part to plant the seeds for a much larger project the team hopes to build. "More power to them," said Burnham, whose firm Envelope A+D is based in Berkeley. "Any way that they can help to activate the city, create places for people to linger in and explore, it's a positive thing." (J. King, 2015, para. 1)

Furthermore, Gehl Studio is working on the interim activation strategies for all of the waterfront projects but PG&E's, where Liz Ogbu and Envelope A+D are leading the "NOW Hunters Point" community involvement project. Given the soon-to-be widespread use of interim activation strategies along the waterfront, one can only wonder if the community will begin to tire of these temporary activities. Though certainly innovative among the larger pool of development projects and development processes, after how many projects and events will San Francisco's residents consider this technique to be commonplace?

PIER 70 HISTORIC CORE BY ORTON DEVELOPMENT INC.

Orton's work developing the Historic 20th Street Area at Pier 70 provides another counterpoint to Forest City's process. Like Forest City, Orton was brought on to the project in 2012 through a separate RFP process, in which the Port invited a limited group of developers to respond following an initial RFI in 2011. Orton Development, Inc. is a local firm specializing in rehabilitation projects. Consistent with the Pier 70 Preferred Master Plan, which called for a separate developer for the historic core, Orton is responsible for rehabilitating eight historically significant building at the 20th Street entrance. Under the master plan and RFP, a broad range of uses is encouraged including cultural, institutional, office, commercial, retail, and light industrial (Port of San Francisco, 2011).

Orton plans to rehabilitate and redevelop the site with mixed-use programming totaling approximately 330,000 square feet, with 200,000 GSF light industrial, 120,000 GSF office, and 10,000 GSF food uses. There will also be 50,000 GSF of open space, including a public interior atrium and 40,000 GSF piazza with ancillary retail kiosks (Madsen, 2015).

According to Orton project manager James Madsen, the program of the site is the direct result of community feedback. In order to more comprehensively understand stakeholder needs and concerns, Orton held what they called a "Great Listening Tour" at the beginning of the project. This consisted of a series of meetings and informational presentations with different stakeholders to understand the community's preferences and concerns. Based

on market demand, Orton initially explored the options of either a single-company office campus or a venue for Cirque du Soleil. However, the community rejected the idea of the corporate campus, hoping instead for more active, diverse uses, and only half of the community supported the Cirque du Soleil plan. As a result of this, Orton chose to pursue their current mixed-use program. Madsen explains that their project was not particularly controversial and yet the entitlement process still lasted over two years. He believes the community response to the project was more muted and generally positive, because Orton is providing historic preservation for existing building, whereas new construction tends to draw more scrutiny, and also because Orton quickly changed their initial controversial plans for the site (Madsen, 2015).

Susan Eslick of the Dogpatch Neighborhood Association says that at first Orton did not interact well with the community, "They came off as really kind of arrogant. They had to do a lot of backpedaling." She says the process and relationship improved overtime, especially as Orton began sending their younger staff members to the meetings. Nevertheless Eslick concludes, "I don't think they quite get it. They don't get it like Forest City does" (2015).

David Beaupre, the Pier 70 Project Manager for the Port, describes their approach as quite different than Forest City's. In general, and partly because their project is much smaller than Forest City's, Beaupre says Orton's community process has largely relied on the opinions of the Port's Central Waterfront Advisory Group and less from the general public (2015). Madsen's description of their process confirms this. He explained that Orton preferred to

have individual meetings with key stakeholders, including from Dogpatch Neighborhood Association and Potrero Booster. They favored this over presenting at the busy neighborhood association meetings, where there is little time to walk through the steps of the project and where individuals can have a disproportionate voice and "hijack" the presentations (Madsen, 2015). Beaupre explains, "They're the type of developer that just wants to roll up their sleeves and get it done." After going to the community with a proposal to open the façade of one of the buildings and hearing that the community did not want to do this, Orton simply dropped that idea. Beaupre says, "They don't want to try to resolve conflicts; they just say 'we'll find a way to make it work.' [Orton and Forest City's] are two diametrically opposed strategies to public outreach." Beaupre also said that for Orton, "time was on their side," as they need to rehabilitate the buildings as quickly as possible since they are in such poor shape that an earthquake could bring them down, and therefore did not have time for an extensive outreach process (Beaupre, 2015).

Orton has begun demolition and abatement on site and expects construction to begin by the end of May 2015, with construction lasting 12 to 24 months.

5.2 ANALYSIS

Multiple methods of analysis are employed to understand how and why Pier 70 as a project and process was successful. Analysis considers the case study findings, standard development process, and how Forest City has met project goals and community priorities.

CASE STUDY FINDINGS

Taken in context within the broader scope of waterfront development in San Francisco, the Pier 70 case study offers an in-depth profile of an extensive community process in a complicated development environment. Analysis of Forest City's outreach process provides lessons about why the approach was taken and in what ways it was successful. Organized around four scales (the developer, project, neighborhood, and city), this analysis parses the different attributes of Pier 70 that lent itself to Forest City's approach. While there may be aspects of this process that may be project or city-specific, the community process at Pier 70 should not be taken as an anomaly. Instead, there are important lessons to be learned and applied to other projects, including those with different programs, budgets, and locations.

Developer:
The community outreach approach taken at Pier 70 of course must be attributed to the actor itself: Forest City as the developer. On the shape of the profession, Fainstein argues, "the development industry resembles the entertainment business more than heavy manufacturing in having a profound cultural influence, in

the singularity of each item produced, and in the process by which the elements of a project are combined" (Fainstein, 2001, p. 218). Despite the large role that developers play in forming the built environment, there is little academic research on "what typifies the property developer" (Adams, Croudace, & Tiesdell, 2012, p. 2579). Yet, developer behavior and characteristics play a large role in the development process for each project. Developer intuition and expertise are needed to make successful projects. According to Guy, "Knowledge of local market conditions, meshed with an almost 'mythical' instinct, is mobilised in entrepreneurial initiatives" (Adams et al., 2012, p. 2582). The importance of a strong leader can also be crucial to a project's success. Difficult long-term, public-private projects have ultimately succeeded with leaders who "knew how to cultivate coalitions of support, market their projects' strategies, and capture attention, especially from the media" (Sagalyn, 2007, p. 14). For Forest City, there are certainly qualities of the corporation, organizational structure, and individual leaders that have allowed the project to play out as it has.

Kelly Pretzer, Development Manager, described her boss, Alexa Arena, as the "visionary" behind the project and its community process. Arena pushed the team to think creatively and cohesively about the project and process, combining uses together in new ways while truly drawing from the culture and history of the site (Pretzer, 2015). With a visionary leader and a local team, Forest City was able to understand the local context and insert itself into the community in a way that resonated with residents. Susan Eslick of DNA says, "[The process] has been very genuine and creative. This speaks to their sensibilities and to them, as creative interesting people" (2015).

Though a national corporation, Forest City interacted with the community in a decidedly "non corporate" manner. According to Karin Brandt, CEO of coUrbanize, the fact that Forest City's developers were "on the ground" attending neighborhood meetings and hosting presentations themselves is very unique in itself. Furthermore, on an organizational level, Forest City did not send only their lower-level employees to interact with the community or only their higher-level manager to represent the company in public meetings, as would be typical with a hierarchical company structure. Instead, the entire development team was regularly active in the community process. Brandt says it is much more common for large-scale developers to hire public relations and strategy firms to manage their community process. She says that she has often seen PR firms work with developers to set up a "Friends of" organization, complete with blogs or social media sites set up to appear as if managed by the community instead of a professional firm (Brandt, 2015).

Forest City has benefited from this local, non-corporate outreach strategy, but their position as a national corporate firm has certainly helped support the project both financially and with development expertise. Pretzer says of the corporate headquarters, located in Cleveland:

> They see the value of having local staff that understand the area. That said, one of the benefits of having a large, national, publically traded company is that they have the capacity to withstand a long-term development. When all is said and done, there will be almost six years of predevelopment before you even put a shovel in the ground. A small

development company wouldn't have the tolerance to wait that long (2015).

Forest City would not disclose the amount of money spent on community outreach, but interviews with involved parties confirm that it required a very significant investment. As a developer with strong financial capacity and the ability to self-finance their projects, Forest City has been able to invest in the project and its process, despite market conditions, in the name of the project's longevity.[3] Furthermore, the business terms of the public private partnership are set up in a way that offers Forest City some protection from financial risk, as the Port must reimburse Forest City for their equity investment in the horizontal development costs for site infrastructure and return on equity at 18% (Term Sheet, 2013).

Embedded within the local community but financially supported by its status as a national, publically-traded corporation, Forest City's Pier 70 development team has been able to act with strong leadership and perseverance to engage the public and built trust in a genuine way.

Project:
Project characteristics, including the site's history, location, and current conditions, also lent itself to Forest City's extensive and event-based community outreach approach. The uniqueness of the site, with prime waterfront access that is so often closed off in this part of the city and historically significant architectural assets, certainly made an open house at Pier 70 very appealing in ways that other development sites could not compete with. The site is remarkable

for its beauty and sense of remoteness, yet it is only two miles from downtown and easily accessible via public transportation. The size of the project, 28 acres for Forest City's area and nearly 70 acres in total, also means there is much more to see than an average urban infill development project.

To say the site is currently underutilized is an understatement. Besides the ship repair area, the existing conditions of the rest of the site as a series of parking lots is certainly not its "highest and best use" economically or socially. Since the proposed Pier 70 project is not displacing anything or anyone, and will instead become an enormous public amenity for the area, Forest City was able to approach the project in a more collaborative, productive manner with the community. Instead of focusing on quelling fears and resistance, they largely were able to approach the community process as a way to engage residents in the creation of a new neighborhood, seeking to gain inspiration and ideas.

The aim of the project, to provide access to and rehabilitate the uniquely beautiful and historically significant site, allowed Forest City to find common ground with the community to create a pubic asset with the project, both in its short-term activation and future permanent build-out.

Neighborhood:
Forest City's extensive community outreach strategy was finely attuned to the community surrounding the Pier 70 site. The existence of industrial and artist activity, and the strong community and city interest in retaining these uses, allowed Forest City to draw inspiration from them in a seemingly authentic manner. Instead of

producing a simulacrum of artist culture, by engaging the Noonan Building Artist community and commissioning local artist Mac-Naughton to participate in research and making of their neighborhood, Forest City positioned itself in a way that residents saw as very genuine and right for the community. In this way, they were able to channel authenticity, defined by Zukin as "the look and feel of a place as well as the social connectedness it inspires," to foster cohesion and support for the project (Zukin, 2011, p. 220).

Given the long-term involvement of many neighbors in the redevelopment of Pier 70 and the southeastern waterfront, Forest City was wise to engage with these residents from the very beginning. Both to gain support and learn from these residents, particularly those who had been involved since the Central Waterfront Advisory Group's formation in 1999, it was important that Forest City not snub those so invested in the success of the project. Forest City's Alexa Arena says, "This community has years of vested interest in the site, where they felt very listened to by the Port. As developer, we were trying to follow these footsteps, saying how do we crystallize this and make this concrete and real" (Arena, 2015).

Regarding the importance of understanding the specific community and their concerns, Arena contrasts the dramatic differences between the neighborhoods of Forest City's two active San Francisco Projects, Pier 70 in Dogpatch and 5M in SoMA:

> You can't take one community process and just reapply it for every neighborhood… You have Dogpatch, which is very interested in getting to their waterfront and wants a great

culture. And then you have 5M, where people are in real economic distress. So for them it is very hard for them to understand how that project will benefit them. They're coming from a point of feeling very devalued generally, so it's just a very different psychology. So absolutely, we run dramatically different processes. We're forced to do that, because you cant just plug and play (Arena, 2015).

The demographics of the Dogpatch neighborhood have certainly influenced Forest City's approach. The average resident, compared with the rest of San Francisco, is wealthier and more educated.

	SAN FRANCISCO	POTRERO HILL*: Tract 226, 227.02, 227.04, 614,	DOGPATCH: Tract 226	SOMA: Tract 176.01, 178.01, 178.02
POPULATION	817,501	12,746	1,743	14,181
EDUCATION	College 32%, Grad, 21%, Total College/Grad 53%	College 39%, Grad, 36% Total College/Grad 75%	College 55%, Grad 27%, Total College/Grad 82%	College 23%, Grad 13%, Total College/Grad 36%
MEDIAN HH INCOME	$75,604	$131,877	$142,260	$29,133
HOUSING TENURE	Owner 37% Renter 63%	Owner 47% Renter 53%	Owner: 58% Renter: 42%	Owner: 19% Renter: 81%
RACE	White 50%	White 70%	White 64%	White 34%

*Potrero Hill neighborhood demographics include Dogpatch census tract, as is standard in many City reports.

Table 5: Socio-Economic Profile by Neighborhood (Source: ACS 2013, 5-year estimates)

According to interviews, residents tend to be "creative types" drawn to the grittiness of the area, thinking of themselves as "urban pioneers" for living in the now-changing industrial neighborhood. With the onslaught of new residential development, Susan Eslick says Dogpatch Neighborhood Group meetings have been hijacked into planning meetings, but the group has become very savvy at influencing these projects and residents are very involved with shaping the changing character of the neighborhood (2015). There is also a much higher percentage of homeowners in Dogpatch (58%) compared with the city overall (37%). Interviews with stakeholders have suggested that the Pier 70 development has the potential to increase Dogpatch property values, and thus the active participation of Dogpatch residents is congruent with Fischel's homevoter hypothesis that homeowners are more likely to engage in political processes to support "a financial interest in the success of their communities" (Fischel, 2005).

As a community and neighborhood, in its culture, long-term investment of its residents in the success of the project, and its demographics, Dogpatch was well positioned to engage actively with Forest City in the development of Pier 70.

City:
The exceedingly political nature of real estate development in San Francisco has created a system that demands shrewd dealings and due diligence from developers. Tim Colen, Executive Director of the San Francisco Housing Action Coalition, says he formed the organization precisely because it is so hard to build in the city. Colen says, "We have what some people would say, too established, too

generous public processes that go on for years" (2015). Because of this, developers must tread very carefully in order to mitigate development risk, including undergoing lengthy community processes as in the case of Forest City.

Colen points to John Rahaim, Director of the San Francisco Planning Department, who has repeatedly deliberated on the city's inefficient policies surrounding development. The planning department reviews approximately 2,000 projects a year. In contrast to this, New York City, with a population ten times that of San Francisco, handles 500 cases a year. Furthermore, it takes almost four years to build the average residential project, from initial filing to completion ("Growing pains," 2013). Rahaim says, "Every type of approval in San Francisco is discretionary, rather than administrative…. According to the city charter, any permit – not just building permits, any permit – can be appealed. We are as close as we can get to how the rest of the world [outside the United States] operates. Development is viewed as a privilege, not a right" (Johnson, 2013).

Responding to the high level of involvement of the local government and community in the development process in San Francisco, Forest City conducted an intensive outreach approach that worked to both mitigate risk and surpass expectations in the city.

COMMUNITY PROCESS

Compared to the standard process of community outreach for development projects, Forest City's approach at Pier 70 has certainly been exceptional. It is clear that their outreach strategy has worked

for them, evidenced in the community through interviews with stakeholders and in the city at large through citywide voter approval. Yet, upon analysis of their community process, it seems what was most innovative was both the quality and quantity of their approach, with nothing itself too radical from the standard process.

Forest City's approach follows the phases that Peca defines for the standard entitlement process: concept, pre-application, application, and public approval. What is exceptional is not a deviation from this process, but the degree to which they engage the community throughout these phases. Instead of turning to consultants, as Brandt says is most common, Forest City's development team itself has envisioned and facilitated the community process. By doing

this with great sensitivity, Forest City has built trusting relationships with the surrounding community groups in ways that other developers and agencies, including Orton, the Port, and the myriad other residential developers working in the area, have not. Additionally, instead of solely presenting at the standard public meetings and hearings, Forest City has hosted a wide scope of events ranging in formality and specificity to draw the broadest spectrum of citizens. Lastly, Forest City's transparent communicative approach and incorporation of feedback has demonstrated that they truly value the opinions and concerns of the community.
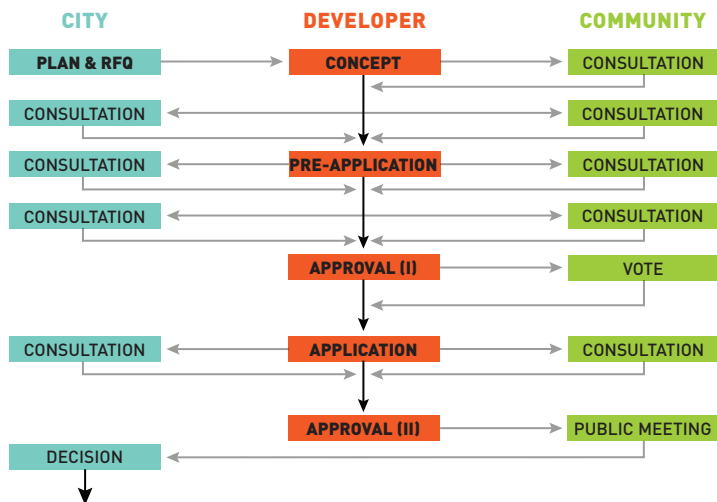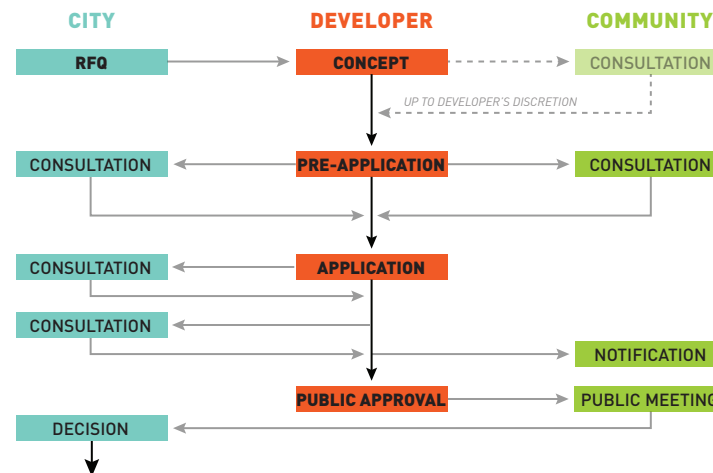

Diagram of Forest City's Community Process

Diagram of Standard Community Process

STAKEHOLDER GOALS AND OBJECTIVES FOR PIER 70 PROJECT:

FOREST CITY	COMMUNITY	PORT: MASTER PLAN	PORT: PIER 70 RFQ
Integrate the industrial past and rich history of the site	Historic Preservation	Create a Pier 70 National Register Historic District and rehabilitate its historic resources.	Design and develop new buildings that enhance and respect the site's historic resources and overall district.
	Open Space / Waterfront Access	Create a major new shoreline open space that extends the existing trails through the site.	Open the shore of the site to the public with a major new waterfront park.
	Transportation	Promote development that is pedestrian-oriented and fosters use of alternative, sustainable transportation modes.	Strive for a "carbon-neutral" development program minimizing reliance on automobiles and enhancing the pedestrian experience.
Create spaces for the art, making, and design communities	Maritime and Industrial Use	Preserve the long-term viability of the maritime ship repair industry.	Create a jobs center that complements existing ship repair operations and re-establishes Pier 70 as a major economic hub.
Include a mix of uses, reflecting the best of San Francisco's unique neighborhoods	Mixed Use	Promote sustainable mixed-use infill development and economic vitality that includes climate adaptation strategies.	
	Environment	Remediate environmental contamination and improve environmental quality.	
		Extend the city street grid to enhance access and integrate Pier 70 with the Central Waterfront.	Integrate Pier 70 into the eastern neighborhoods of San Francisco through new street networks and destinations.
Build sufficient density to support an active, locally-inspired waterfront experience		Provide sites for a diversity of uses to expand San Francisco's economic base and generate revenues to fund public benefits.	Generate land value, revenues, and investment needed to support the investments to realize the Pier 70 Preferred Master Plan.
			Create local business and employment opportunities during development and operation of the project.
			Serve as the catalyst project for Pier 70 to achieve the site-wide goals established in the Master Plan & secure the entitlements and approvals for public financing.
	Massing		
	Views		
	Traffic		

Table 6: Summary table of how project meets city, community, and developer goals

HOW PIER 70 MEETS PROJECT GOALS:

HOW?
YES: Forest City's plan supports historic preservation efforts, complementing the work of the Port and Orton. Forest City will directly rehabilitate three historic buildings on-site and new development will harmonize with existing historic buildings.
YES: The Pier 70 project will create direct waterfront access at multiple points, including with a new shoreline park. The project provides more open space for the neighborhood, with three times the amount of total existing park space in Dogpatch planned for the site.
MAYBE: Forest City's plan prioritizes alternative modes of transportation. Though the site calls itself a transit-oriented development and is within just a few blocks of existing public transportation stops, the capacity of the current systems may be overwhelmed by the amount of new development in the neighborhood.
MAYBE: The project intends to complement existing ship repair operations, but the true impact is yet to be seen. The square footage of light industrial and artist space provided may change. The project intends to become an economic hub supporting up to 10,000 new employees, but the amount to which this occurs depends on market conditions.
PROBABLY: Forest City is researching sustainable development strategies, assuming at least baseline compliance with code standards. This includes incorporating passive design strategies and new technology prioritizing energy efficiency, while also building densely near transit. They also plan to accommodate sea level rise by raising the grade of the site 55" above the 100-year tide elevation today.
PROBABLY: Forest City will perform the necessary environmental remediation and says it will integrate sustainable design and development strategies into its plans.
YES: The current conceptual site plan extends 20th St and 22nd St through the site and proposes a new street, 21st St, to penetrate the site mid-block. The project's street grid will likely enhance access and better integrate the site with the surrounding area. The urban design quality largely depends on the design guidelines and how the project is actually built out.
MAYBE: The density that Forest City will be able to build is uncertain; it is unclear if the density of their project will support enough activity and create enough revenue to make the project profitable.
YES: Terms calling for local hiring during the construction and permanent phases are detailed in the project term sheet. Opportunities for local employment during the design phase are not defined. The concept design team is composed of San Francisco design firms SiteLab and David Baker Architects, as well as the national and international firms of Field Operations and Grimshaw Architects.
PROBABLY: Forest City plans to secure the necessary entitlements and approvals to fund and develop the project, but the amount to which it "catalyzes" the site is yet to be seen.
MAYBE: Forest City's design guidelines should conceivably shape thoughtfully scaled and designed buildings. However, the height limit may force buildings to be more squat and uniform than desired in order to build enough square footage for profitability.
YES: The 90' height limits will ensure that view corridors towards the bay for existing neighbors, whether in Dogpatch or above the site in Potrero Hill, are not blocked.
MAYBE: The project will likely increase car traffic, given its relatively remote location. Forest City is working with various city agencies to provide ample parking and lobby for more public transportation.

MEETING PROJECT GOALS AND COMMUNITY PRIORITIES

Analysis of how the project meets its project goals is drawn from an assessment of how it meets the objectives of the Port's Pier 70 Master Plan and Waterfront RFQ, as well as the guiding "Principles of Place" that Forest City set for itself. Next, project goals are assessed within the framework of community priorities, collected during interviews with representatives from different community organizations. Table 6 summarizes how the project meets the goals of different stakeholders; see Appendix I for a more detailed analysis.

In summary, Forest City has been largely successful at meeting the goals of the city, the community, and itself in the development strategies and program for the site. A major caveat being that a true assessment of the actual program and design is not possible until full build-out of the project. Nevertheless, analysis of how the program matches different goals, and how this has shifted over time, is illustrative in the context of the decade-plus-long development process for Pier 70.

	YES	PROBABLY	MAYBE	NO
City: Master Plan	5/8	1/8	2/8	0/8
City: RFQ	3/8	2/8	3/8	0/8
Developer: Principles	3/4	0/4	1/4	0/4
Community: Priorities	6/10	0/10	4/10	0/10
TOTALS	**17/30**	**3/30**	**10/30**	**0/30**

Table 7: Amount to which Project Satisfies City, Developer, and Community Benchmarks

The ways in which the project will "probably" satisfy project goals regard conditions in which Forest City intends to pursue this priority, such as promoting sustainable development and the design of buildings in line with the historic character of the site, yet the amount to which they are successful hinges on how the project is actually built. The project will "maybe" meet project goals for issues regarding compatibility with maritime industry, the amount to which the project will generate revenues, the density and massing of the development, and the project's impact on transportation and traffic in the area. Forest City can influence traffic and transportation accessibility issues, but this also depends on the work of agencies outside of their control, such as the San Francisco Municipal Transportation Agency. The uncertainty surrounding maritime industry depends on larger economic and operational conditions. The other "maybes" of the project concern Forest City's Proposition F move to reduce project heights, seen in the density and design of buildings due to height limit restrictions and the resultant effect on project finances. This, alongside interviews with city and community stakeholders, suggests that Forest City worked carefully to incorporate city goals and community goals into the project, yet ultimately the political climate forced the developer to sacrifice project goals in return for decreased risk.

In order to ensure that Forest City satisfies the project financing, density, and design goals for the project, the project will need something stricter than design guidelines. Instead, the Port, as property owner, the Planning Department, as design reviewer, or Forest City itself, as the master developer of the site, should monitor the project's progress to make certain that financial and design decisions

benefit the stakeholders and surrounding urban realm. This could include minimum FAR limits to ensure the project is profitable, in combination with careful design review to promote attractive and human-scaled building designs. While the 90-foot height limit may preclude much variation in building mass, architects could use other techniques such as modifications to building materials, setbacks, and window areas to create projects that match the goals of the community, the city, and the Port.

Analysis of key findings, the process, and project goals demonstrates how Forest City has shaped the project program and community process to largely align with needs of the city and the community. It is important to reiterate that their success is not solely attributed to the number and variety of their outreach efforts, but also to less tangible, and perhaps more important, factors, such as the relationships fostered and the careful tailoring of their approach to the site, community, and the city.

housing, and then the polled indicated 45% in favor and 40% opposed (Roberts, 2015).

3   In their RFQ submittal, Forest City listed $453 million in cash available to fund their pre-development costs, stating "While many investors are pressured into conservative positions that yield the highest and safest approach to placemaking, we are able to make decisions that maximize long-term value" (Forest City California, 2011).

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1   The Giants worked with the Port to help generate the RFP. The development of this site has been part of their long-term strategy originating in 1993 to re-urbanize the franchise, moving from their ballpark at Candlestick Park to a more central urban location. Seeking to better shape the fan experience with an integrated neighborhood, they looked to Fenway in Boston and Wrigley in Chicago as examples of authentic urban ballparks.

2   The Giants have also faced pressure to add more affordable housing. A recent poll, initiated by affordable housing developer and advocacy group TODCO, indicates that support for the project is contingent on the amount of affordable housing provided. Voters polled did not support Mission Rock (51% opposed and 30% in favor) unless the project provided 33% below market rate

6.   CONCLUSION

6.1 REPLICABILITY

This thesis began by asking: **how can developers foster trust and collaborate effectively through the community process?**

The preceding chapters demonstrate what has worked for Forest City for the Pier 70 project, but how can this approach serve as a model for other community processes? Alexa Arena has stressed that one cannot just "plug and play" with the same community processes for different development projects (2015). It is true that Forest City's approach at Pier 70 was unique to the firm's capacity as developers, as well as to the specific project, community, and city. Yet, the intent of this thesis is not only to discuss the success of one project by one developer in one city. Instead, the aim is to examine the case study to extract lessons and recommendations that could be applied to other projects, including similarly large-scale, master-planned developments as well as smaller projects. Compared to more typical urban infill developments, master-planned projects are much larger in their scope, often building millions of square feet on acres of land, and more controversial in their impact, with a broad range of stakeholder interests and the ability to more greatly influence the city itself. Therefore, the need for an effective community process is especially critical. That being said, the community process can be equally crucial to other projects, no matter the scope or size, depending on the context of the project. Ultimately, these lessons could help non-profit affordable housing developers, public development agencies, and small, local developers, who face complex entitlement processes and community relations yet must find ways to engage the public with limited resources.

Much about Forest City's highly attuned process could be replicable. Their overall vision for the community process, as a collaborative approach fundamental to the creation of a project that takes the community's and city's best interests into account, can and should be adopted by other developers. Crucial to this vision, early public involvement, ongoing dialogue, transparent communication, building trust, and the "double-pronged strategy" of project-focused meetings and broader, more informal events are all methods that could be applied elsewhere. The importance of public involvement, in addition to effective leadership, strong partnerships, quality planning and design principles, and perseverance, is apparent especially when looking at the community process as a part of Forest City's overall development strategy.

Using these ideas, this chapter presents lessons learned from Forest City's Pier 70 community process, future research topics, and concluding thoughts.

6.2 LESSONS LEARNED

Analysis of the Pier 70 case study has revealed enormous complexities surrounding the process, design, program, community, and politics of the development project. It is clear that the successful completion of this multi-faceted project has and will involve effective coordination among its many stakeholders, particularly of its primary actors: the city, the community, and the developer. Since so much of the development process has required dialogue, negotiation, and activity between these groups, the lessons learned from this research generally involve how these groups can effectively

build relationships with each other and work together.

Act locally
In order to build successful projects that respond to the needs of the community and pass through the approval process, developers must fully understand the local conditions. This includes extensive due diligence, such as researching existing issues and understanding the history and culture of the place, as Forest City did at Pier 70. Building on previous planning efforts is imperative to an in-depth understanding of the project site and its neighborhood. Related to this is the importance of including the local community members and other stakeholders who are deeply vested in the development of the site, in the way that Forest City reached out to the Port's Central Waterfront Advisory Group who had been engaged in the planning processes for over a decade before Forest City's involvement. For large regional or national development firms, having a local presence, either with a local office or a local development partner, is very important. This can help ensure that developers gain better area knowledge and political connections, as well as establish a common ground with community members. To do this, it is necessary to identify key stakeholders and involve them from the beginning, both to learn from their expertise and build consensus.

In addition to acting locally in the development process, it is also imperative to do so in the design of the project. Local design references are important to the aesthetic and cultural authenticity of a place in the face of arbitrary and homogenous urban design (Zukin, 2011). This does not mean taking a neo-traditional approach, as Lang says has been a reaction to the "universalizing forces" of the

globalization of urban design (2009). Instead, this means creating a "sense of place" that draws from the local character, whether in the choice of building materials, typology, scale, proportions, and placement of buildings in relationship to each other and the existing surroundings. Though the Mission Bay development did not have any immediately local surroundings that it could reference, since the site was more of a "blank slate" atop hundreds of acres of rail lines, the designs could have better referenced the scale and architectural character of adjacent San Francisco neighborhoods. Additionally, the program of Mission Bay, with medical and research and development buildings that generally require large footprints, resulted in the blocky building masses. The history, surroundings, and mixed-use program of Pier 70 position the project well to draw from the local character of the area in a much more successful way.

Prioritize public interests
As a public-private partnership, the City of San Francisco is expending significant public resources towards the Pier 70 project. This includes expensive infrastructure investments, public financing, and a significant return on equity to be paid to Forest City. Therefore, the city must ensure that public interests are protected and provided for, and not reduced at the expense of private profit. In order to do this, first the city and community must come to an agreement to prioritize the public benefits that they need. Second, the city and community should guarantee that the project and neighborhood get the sufficient desired benefits, whether through a community benefits agreement or other arrangement. Instead of only requiring an impact fee or some other monetary exaction that will go into the city's general fund, planners and community members should ensure

that there is a direct correlation for the immediate project between benefits paid and benefits received. Build Public is a non-profit organization in San Francisco that is working with developers and the Planning Department to provide direct public realm benefits, such as public plazas and parks adjacent to new mixed-use development projects in the Dogpatch and SoMa neighborhoods. They do this through in-kind agreements with the city, using some of the project's impact fee to directly pay for project-related public benefits. Additionally, in order to ensure that public-private development projects benefit the city and community, the city should make sure they are able to approve project changes. In the case of Pier 70, having control over the proposed height limit change before Forest City filed for Proposition F could have protected the city and the Port from potentially losing much needed revenue from the project.

Engage broadly and openly
Often only the narrow group of "usual suspects" influences important development decisions, so it is crucial to develop a community outreach strategy that more widely encourages citizen participation. Create an inclusive outreach process with a range of different meetings and events that will appeal to a broad constituency. Reach out to specific groups who do not typically attend these events to understand their point of view and hold events at different times of day and at different locations in order to increase accessibility and attendance. Use different methods to spread the word about the project, including social media and in-person presence, and create different mechanisms for feedback to allow for input from people who cannot attend. Beyond holding events, it is important to make sure that these are good venues to garner feedback and disseminate

information about the project. As Forest City's work has demonstrated, the community process depends on the nature of consultation; developers must show that they truly value the engagement process and are not simply holding meetings because they must. In doing this, it is crucial to have the project developers engage in this process, instead of outside consultants, to directly connect with community members and hear their feedback.

Build Trust
The most salient lesson learned from Pier 70 is also the most intangible: to build trust with the community. Forest City took a deliberate stance to build trust in a manner that differed from what is typical, as seen in the behavior of other developers in the area and around the country. The entitlement process may never be perfect, and it is difficult to anticipate unexpected complications, as exemplified by the passage of Proposition B. Yet, since Forest City had already gained considerable community support and trust, they were able to persevere through the entitlement and voter approval process.

Engaging in a direct manner with the community is one of many ways to help build trust and partnerships. Forest City took an open, communicative approach and established personal relationships with many stakeholders. The ways to accomplish this can be simple and straightforward: listen, communicate early and often, be honest, create an ongoing dialogue, follow through, and incorporate feedback to demonstrate to people that their input matters. As part of this, it is important for developers to be clear with the community about the objectives of community outreach, including what advice

is needed, which stakeholders have genuine influence, and who has the final decision-making authority. Additionally, cultivating brand awareness and having a strong reputation as a thoughtful developer can foster trust and community buy-in (Kelley, 2007).

6.3 FUTURE RESEARCH

This examination of the role of community engagement in the development process at Pier 70 gives rise to future research topics, both project specific and general to the real estate industry:

Pier 70 Post-Completion Evaluation
While Forest City seems to have largely incorporated the priorities of the city and the community into plans for Pier 70, a true assessment of this is not possible until the project is complete. Only after full build-out in approximately 15 years will the community, the city, and the Port realize if and how the project satisfies their goals. Direct interviews with people who work and live at Pier 70, as well as with the previously interviewed stakeholders, should question how the project functions and meets expectations. At this point, it will be possible to analyze the success of the program, looking at how the mixed-use development provides needed amenities for the community, creates a 24/7 neighborhood, and is compatible with existing maritime industry. Design analysis should consider how the site design connects and interact with the waterfront and surrounding Dogpatch area, how the architecture corresponds with the character of the historic district, and how the ground floor interacts with the public realm to create a pedestrian-scaled project. Analysis should also investigate how the 90-foot height limit has impacted

the buildable density and massing, as well as the project finances. Additionally, this assessment should examine how Forest City as master developer stays connected to the project after completion: will they manage and operate Pier 70 to create a long-term relationship with the place and community they have just developed or will they build the project and subsequently put it up for sale? Lastly, research should consider the ultimate impact of Forest City's community process on the project and if and how the project is successful according to the stated goals and as assessed by key stakeholders.

Gender in Real Estate Development
Forest City California's Vice President of Development Alexa Arena in charge of the Pier 70 project is a woman under the age of 40. Though interviews were conducted with the Giants' Jon Knorpp, their Director of Real Estate responsible for the Mission Rock project is Fran Weld, also a woman under the age of 40. Given that young, female leaders, early into their careers, had the control of and responsibility for these very large and prominent projects, an examination of the role of gender and age in real estate development would be interesting. Traditionally, the real estate development industry has been a male-dominated field. Kern and Wekerle, quoting Fainstein, argue that the gendered nature of the industry is deeply engrained in the production of the built environment:

> The property-led strategy for economic development has meant that public resources that might have been used elsewhere became embedded in real estate. This is primarily male dominated. Men are the developers, the real estate entrepreneurs and the investors. And while this development is fueled

through global capital flows and the investments of multinational corporations, it is also an industry that is substantially male dominated and reflective of male values and interests (Kern & Wekerle, 2008, p. 235).

Despite this, the industry is changing. With higher education programs focused on real estate development, alongside larger shifting attitudes surrounding gender and age, the industry is becoming more diverse (Pauli, 2011). Arena and Weld's leadership roles are prime examples of this, and offer an opportunity to analyze how these changes are impacting the industry.

Specifically, perhaps gender has influenced the community processes undertaken on San Francisco's waterfront. Arena and Weld's extensive community outreach and interim activation strategies demonstrate progressive styles of communication, management, and risk-taking. Particularly in Forest City's approach, communication has been transparent and frequent, with engagement efforts focused on building relationships and reaching consensus. The Port's Pier 70 Project Manager, David Beaupre, confirms this, saying that Forest City worked to resolve conflicts in a way that Orton did not (2015). The management of Forest City's Pier 70 development team, with a horizontal organizational structure as opposed to a more traditional, hierarchical structure, has also meant that all staff members have been extensively involved in the firm's outreach. Additionally, Forest City's community engagement strategy has been a significant investment in time and money, but perhaps the efforts to act transparently and build trust represent a more straightforward way to manage and decrease development risk. Kelly Pretzer of Forest City

says that their strategy has not been so directly tied to reducing risk as to just helping to create a better project (2015). Yet, even without a conscious correlation between risk and community engagement, their work nevertheless illustrates a different approach to risk-taking. While it may be speculative to attribute the approaches taken with these projects to the gender of the leaders, there is an opportunity to explore how gender influences development, both traditionally and given more recent shifts in the industry.

Generational Differences in Development
Generational shifts, both in the age of developers as well as the expectations of younger generations, are also influencing changing practices in real estate development. For Arena and Weld, both under the age of 40, their engagement strategies, including interim activation events and on-going dialogue, represent a generationally-different approach to development. Instead of following what has been standard, and enduring the problems inherent to this, they have tried to innovate throughout the entitlement process. With this, they have created a new approach to engagement that is open, personal, and genuine, symbolic of a different set of values in which connecting with the community is a vital part of building a successful project.

The growing expectations of younger generations are also likely changing the real estate industry. Perhaps newer generations have higher demands for the built environment and the amenities that developers provide. The lengthy entitlement and predevelopment process of the Domino Sugar Factory redevelopment in New York exemplifies this shift. As the Williamsburg neighborhood trans-

formed, with younger and wealthier residents moving into the formerly industrial area, the demand for amenities such as waterfront parks and retail also increased. The shift from the original Rafael Viñoly-designed Community Preservation Corporation proposal to Two Trees' SHoP Architects proposal illustrates the changing context of development, with increased parkland that expands into the neighborhood, interesting architecture by a trendy firm, and interim activation art and open space programming.

In San Francisco, the increase of interim activation strategies, providing temporary recreation and leisure amenities, is also a sign of this generational shift. At Pier 70, the inclusion of arts and light industrial space is not only a nod to the existing artist community and surrounding industrial uses, but perhaps also an appeal to more critical, younger users seeking a new and "hip" environment. The extensive use of social media throughout the entitlement process is another example of how communication and relationships between developers and the community are changing to accommodate younger generations.

Media and the "Democratization" of Development
In addition to shifting attitudes and practices surrounding who is involved in real estate development, the industry is also facing changes regarding how it functions. Advances in technology, the influence of media, and increased access to information have changed how the public perceives real estate development. With the increased attention paid to development projects, through avid reporting by journalists and citizens alike in newspapers, blogs and user-review websites, developers face much more pressure to

establish a positive reputation with the community and preserve it throughout the development processes. Kaliski argues that technology and increased access to information have changed how the community learns about and influences projects:

> In a digital age, democratization of planning is accelerated through the ever-increasing availability of information that laypersons use to interpret and manage the impacts of projects…. In this environment, the planning discourses of everyday life and professional plans for the form of the metropolis gradually become one. "Everyday" people are asked to consume and form opinions about everything from large-scale infrastructural decisions to tot lot beautification. Information is posted online and citizens – particularly those that are obsessed – know that armed with these data they too can be experts (Kaliski, 2005, p. 30).

The use of technology has made it easier to engage people and spread information, but it has also made it easier to spread false information. Real estate consultant Libby Seifel says this becomes particularly problematic when people, knowingly or not, post incorrect or even slanderous information about projects, and this is further sensationalized by the media (2015). Kaliski's idea of the citizen expert is particularly relevant to large and controversial projects such as Forest City's Pacific Park Brooklyn project (formerly known as Atlantic Yards), where citizens have created "watchdog" blogs such as the Atlantic Yards Report to cover the project (Oder, 2014).

Further research could investigate how increased reportage and

scrutiny of real estate projects have influenced developers to act more accountably and protect their reputation. This research could link to an examination of the changing relationships between developers and the communities with which they work. An increased interest in corporate responsibility is just one example of this, as Forest City published its first Corporate Social Responsibility Report in 2012. Another example concerns how developers maintain a connection to their projects post-completion, whether they continue operations and build a relationship with the community, also becoming a long-term stakeholder in the project, or if they sell the project upon completion and stabilization. Additionally, research could consider how the size and location of development firms influence public perceptions of trust.

6.4 FINAL OBSERVATIONS

Will large-scale development projects in San Francisco ever become profitable, or will the lengthy and expensive entitlement process prevent this? Certainly in this city, community and government involvement in the built environment is extreme.

In *Suburban Nation*, Duany and Plater-Zyberk write:

> Developers somehow have devolved from admired figures into reviled characters, challenging drug dealers and pimps for position in the public's esteem. How could this have happened? Are they of no use to society? In fact, developers provide the nation with products that it needs: they build houses, shops, offices, even streets and roads, and they often

do so at great financial risk (Duany, Plater-Zyberk, & Speck, 2010, p. 100).

That being said, this research on Pier 70 has focused intentionally on a high profile, high stakes mixed-use development that has had several hallmarks of success thus far with the public. This analysis has identified a set of strategies and methods used by the developer in the community processes that align the interests of project stakeholders. The lessons presented in the conclusion offer the developer, the city, and the community guidelines for effective partnerships in complex development projects, in which the developer does indeed provide the community with the valuable amenities needed to shape an inclusive waterfront.

APPENDIX I: MEETING PROJECT GOALS

PIER 70 MASTER PLAN GOALS

- Create a Pier 70 National Register Historic District and rehabilitate its extraordinary historic resources.

    Yes: Forest City's project will complement the Port's historic preservation efforts. The Port, responsible for securing National Register Historic District designation, and Orton Development, responsible for rehabilitating the historic core, play much larger roles in fulfilling this goal. Forest City's project will support their efforts with the redevelopment of three historic buildings on-site and with careful site planning in coordination with Orton to ensure that the projects work with each other during construction and upon completion.

- Preserve the long-term viability of the maritime ship repair industry.

    Maybe: The project is planned around the ongoing operations of BAE systems, with the placement of streets and program uses in a way that takes maritime operations into consideration (by placing office use as a buffer between maritime uses and residential and cultural programming). However, it is too early to understand the impact of the project on these operations until the project is fully built out.

- Create a major new shoreline open space that extends the San Francisco Bay Trail and Blue Greenway to and through Pier 70.

    Yes: Forest City's project includes significant public open space, including a shoreline park that the Blue Greenway runs through.

- Promote sustainable mixed-use infill development and economic vitality that includes climate adaptation strategies appropriate to this waterfront location.

    Probably: Forest City is currently researching sustainable design and development strategies to employ in their project; they plan to assume baseline compliance with the California Energy Code and Building Standards Code and are further analyzing what else is possible. Part of this will incorporate new technology prioritizing energy efficiency and passive design, while another aspect of their strategy is to build densely. They also plan to accommodate sea level rise, currently planning to raise the grade of the site 55" above the 100-year tide elevation today.

- Provide sites for office, research, emerging technologies, light industry, commercial, cultural, and recreational uses to expand San Francisco's economic base and generate revenues to fund public benefits.

    Maybe: Actual tenant leases will not be finalized for several years, but the project plans to include space for a variety of uses that will certainly help expand the city's economic

base. Given the reduced scale of the buildings (limited by 90' heights), the amount to which the project generates revenue for public benefits is yet to be determined. Uses will include primarily space for residential, office, commercial, cultural, and recreational uses, and a small amount of space for light industry and other "creative uses." Though Forest City's initial concept included space for research and technology in its "innovation cluster," the office space will likely be more standard office space than for R&D purposes. That being said, given its unique site and location as an industrial redevelopment within a historic district, the office tenants will likely not be the traditional downtown user. Furthermore, the largest project change has been the addition of housing (1,000 to 2,000 units), making up approximately 35 to 65% of the project. This addition has greatly shifted the focus of the project from a jobs-centered "cluster" to a mixed-use neighborhood.

- Promote development that is pedestrian-oriented and fosters use of alternative, sustainable transportation modes and practices.

    Yes: Plans prioritize the pedestrian realm, focusing on smaller street widths and reduced setbacks between buildings. Primary parking facilities are at edge of site (closest to Dogpatch) and accessible with minimal intrusion into the rest of the site. Also, the Blue Greenway bike trail passes through the site.

- Extend the city street grid to enhance access and integrate Pier 70 with the Central Waterfront.

    Yes: The current conceptual site plan does extend 20th St and 22nd St through the site, and also proposes a new street, 21st St, to penetrate the site mid-block, breaking up the very long blocks (over 500' long along 3rd St and Illinois St) characteristic of the neighborhood. The project's street grid will likely enhance access and better integrate the site with the surrounding area; this is not much to ask because the site currently feels very disconnected, but the amount and urban design quality to which it reconnects with the neighborhood is yet to be determined as site plans have not been finalized.

- Remediate environmental contamination to enable use and public enjoyment of Pier 70 and its waterfront, and improve environmental quality. (Port of San Francisco, "Request for Developer Qualifications, Pier 70: Waterfront Site Development Opportunity" 9-10)

    Yes: Forest City plans to undertake the environmental remediation necessary to redevelop the site.

PORT OBJECTIVES FOR WATERFRONT SITE (FROM RFQ)

- Serve as the catalyst project for Pier 70 to achieve the site-wide goals established in the Master Plan, in particular, securing the necessary entitlements and approvals for public financing to fund site-wide public benefits.

    Probably: Forest City plans to secure the necessary entitlements and approvals to fund and develop the project, but the amount to which it "catalyzes" the entire site is yet to be seen.

- Create a first class jobs center at Pier 70 that complements existing ship repair operations and re-establishes Pier 70 as a major economic hub for San Francisco. At build-out, the Port expects the Waterfront Site to represent a significant employment center with jobs well matched to San Francisco's workforce.

    Maybe: The project intends to complement existing ship repair operations, but the true impact is yet to be seen. Furthermore, the project intends to become an economic hub supporting up to 10,000 new employees (with up to 2 million GSF of traditional office space), but the amount to which this occurs depends on the market and how much new office space the project can feasibly support relative to residential use.

- Generate land value, tax revenues, and investment needed to support the infrastructure, parks, and historic rehabilitation investments to realize the Pier 70 Master Plan.

    Maybe: The project will generate land value and tax revenue, but the amount to which it can do this is uncertain. After the Port pays Forest City back for its preliminary infrastructure costs (estimated at $242 million), it is unclear what remaining project-generated income (including ground rent payments) they will have to put towards other capital needs.

- Design and development of new buildings that enhance and respect the site's historic resources and overall the historic district.

    Probably: Design guidelines have been developed to promote architectural quality and cohesiveness of the site, but the actual nature of this cannot be determined until individual buildings are designed and constructed.

- Open the eastern shore of the site to the public with a major new waterfront park.

    Yes: The new waterfront park will open up the shoreline.

- Create business and employment opportunities for local workers and businesses during the design, construction and operation phases of the project.

    Yes: Terms calling for local construction and permanent

phase hiring are detailed in the project term sheet. Opportunities for local employment during the design phase are uncertain, but likely not as plenty given the international spread of design firms. The concept design team is not composed of neighborhood-local designers (the team is a mix of local designers, SiteLab and David Baker Architects, and non-local firms, Field Operations and Grimshaw Architects).

- Strive for a "carbon-neutral" development program minimizing the reliance on the private automobile and enhancing the pedestrian experience of this historic site and the bay shore.

  Maybe: Sustainable development strategies beyond the minimum standards have yet to be finalized, though Forest City is only required to comply with the code.

- Integrate Pier 70 into the eastern neighborhoods of San Francisco through new street networks and destinations that bring people to the Bay's edge.

  Yes: Forest City and the Planning Department are working to create a site plan that reconnects with the area.

FOREST CITY'S "PRINCIPLES OF PLACE"

- Integrate the industrial past and rich history of the site

Yes: The inclusion of light industrial uses, redevelopment of historic buildings, and coordination with existing abutting maritime industry demonstrates Forest City's commitment to integrating the industrial past and history of the site with the new development that will occur.

- Build sufficient density to support an active, locally-inspired waterfront experience

  Maybe: It is unclear if the density of their project will support enough activity and create sufficient revenue for the project.

- Include a mix of uses, reflecting the best of San Francisco's unique neighborhoods

  Yes: Forest City will integrate residential, office, retail, food and beverage, light industrial, and cultural uses within the site. They will also provide space for local merchants and restaurateurs in an attempt to create an "authentic" San Francisco neighborhood.

- Create spaces for the art, making, and design communities

  Yes: Forest City has committed to provide studio space for the Noonan Building Artists and will also provide space for light industrial and other "maker" uses, hoping to use such activities to catalyze the ground floor public realm.

COMMUNITY PRIORITIES

- Historic Preservation

  Yes: Forest City's plan supports historic preservation efforts (largely undertaken by the Port and Orton). They will directly rehabilitate three historic buildings on-site and new development will complement existing historic buildings.

- Open Space

  Yes: Forest City's plan provides more open space for the neighborhood, with three times the amount of total park space in Dogpatch planned for the site.

- Massing

  Maybe: Forest City's design guidelines should conceivably shape thoughtfully scaled and designed buildings, however, the height limit may force buildings to be more squat and uniform than desired (in order to build enough square footage to make it profitable).

- Transportation

  Maybe: Forest City's plan prioritizes alternative modes of transportation, including bicycle and pedestrian access. Though the site calls itself a transit-oriented development, and is within just a few blocks of existing public transportation stops, the capacity of the current systems may be overwhelmed by the amount of new development in the neighborhood (Forest City's project among others).

- Maritime and Industrial Use

  Maybe: The current plan calls for compatibility with existing maritime uses and provides for light industrial use, but the amount to which these uses are compatible with the existing neighborhood and how they will compete in the future market (against pressures for more commercial or residential development) is yet to be seen.

- Waterfront Access

  Yes: The Pier 70 project will create direct waterfront access at multiple points, including with a new shoreline park.

- Mixed Use

  Yes: The project calls for the mix of uses, and will provide the neighborhood amenities, that the community so badly needs.

- Traffic

  Maybe: The project will likely increase car traffic, given its relatively remote location. Forest City is working with var-

ious city agencies to provide ample parking and lobby for more public transportation.

- Views

    Yes: The 90' height limits will ensure that view corridors towards the bay for existing neighbors, whether in Dogpatch or above the site in Potrero Hill, are not blocked.

- Environment:

    Yes: Forest City will perform the necessary environmental remediation and has said it plans to integrate sustainable design and development strategies into its plans.

APPENDIX II: INTERVIEW SUBJECTS

David Beaupre, Senior Waterfront Planner, Port of San Francisco (1/20/2015)

Karin Brandt, co-founder and CEO, coUrbanize (3/31/2015)

Tim Colen, Executive Director, San Francisco Housing Action Coalition (SFHAC) (1/21/2015)

Laura Crescimano, Partner, SITELAB urban studio (1/22/2015)

J.R. Eppler, President, Potrero Boosters (1/20/2015)

Susan Eslick, Former President & Vice President, Dogpatch Neighborhood Association (1/22/2015)

Keith Goldstein, President, Potrero-Dogpatch Merchants Association; Treasurer, Potrero Boosters (1/20/2015)

Jon Knorpp, Managing Director, Giants Development Services (3/25/2015)

Katy Liddell, President, South Beach Rincon Mission Bay Neighborhood Association (3/25/2015)

James Madsen, Partner, Orton Development (3/27/2015)

Jared Press, Project Manager, Build Public (3/26/2015)

Kelly Pretzer, Development Manager, Forest City California (1/21/2015 and 3/23/2015, phone)

Jasper Rubin, Associate Professor of Urban Studies and Planning, San Francisco State University; Central Waterfront Advisory Group Member (1/20/2015)

Libby Seifel, President, Seifel Consulting (1/22/2015)

Hannah Smith, Project Manager, UP Urban (1/23/2015)

Joshua Switzky, Senior Planner, San Francisco Planning Department (1/22/2015)

Kristy Wang, Community Planning Policy Director, SPUR (1/21/2015)

Corinne Woods, Mission Bay CAC and Central Waterfront Advisory Group Member (3/24/2015)

Panel Discussion: "Ballot Box Entitlements," West Coast Back to School Day 2015, MIT Center for Real Estate, 1/24/2015
    Libby Seifel, Seifel Consulting; Mary Murphy, Gibson Dunn; Alexa Arena, Forest City Enterprises; Diane Oshima, Port of San Francisco

Site Tour: The Yard at Mission Rock, organized by SPUR, 3/23/2015
    Jon Knorpp, Giants Development Services; Blaine Merker, Gehl Studio; Mark Hogan, OpenScope Studio; Anna Muessig, Gehl Studio

All interviews in person unless otherwise noted.

BIBLIOGRAPHY

Adams, David, Croudace, Robert, and Steve Tiesdell. "Exploring the 'Notional Property Developer' as a Policy Construct." *Urban Studies* 49.12 (2012): 2577–2596.

Arnstein, Sherry R. "A Ladder Of Citizen Participation." *Journal of the American Institute of Planners* 35.4 (1969): 216–224.

Bagli, Charles V. "Plan to Redevelop Domino Sugar Factory in Brooklyn Hits Snag: De Blasio." *The New York Times* 27 Feb. 2014. *NYTimes.com.* Web. 19 Apr. 2015.

Beck, Sara. "A Tepee Flourishes, Temporarily, in Brooklyn." *The New York Times* 19 June 2014. *NYTimes.com.* Web. 20 Apr. 2015.

Been, Vicki. "'Exit' as a Constraint on Land Use Exactions: Rethinking the Unconstitutional Conditions Doctrine." *Columbia Law Review* 91.3 (1991): 473–545.

Ben-Joseph, Eran. "Subdivision Regulations: Practices and Attitudes: A Survey of Public Officials and Developers in the Nation's Fastest Growing Single Family Housing Markets." Cambridge, MA: Lincoln Institute of Land Policy, WP03EB1, 2003.

Brown, Kristen V. "Uber Expanding with Mission Bay Offices in S.F." *San Francisco Chronicle* 4 Sept. 2014. Web. 25 Apr. 2015.

Brown, Peter Hendee. *America's Waterfront Revival: Port Authorities and Urban Redevelopment.* Philadelphia: University of Pennsylvania Press, 2009.

Brugmann, Bruce, & Greggar Sletteland. *The Ultimate Highrise San Francisco's Mad Rush Toward the Sky.* San Francisco: San Francisco Bay Guardian Books, 1971.

Caen, Herb. "A City Is like San Francisco, Not a Faceless 'Burb." *San Francisco Chronicle* 31 Oct. 2010. Web. 11 Feb. 2015.

Callies, David L., and Julie A. Tappendorf. "Unconstitutional Land Development Conditions and the Development Agreement Solution: Bargaining for Public Facilities after Nollan and Dolan." *Case Western Reserve Law Review* 51 (2000): 663-696.

"City of San Francisco Additional Affordable Housing Policy, Proposition K (November 2014)." Ballotpedia., 2014. Web. 27 Apr. 2015.

Corbett, Michael R. *Port City: The History and Transformation of the Port of San Francisco 1848-2010.* San Francisco: San Francisco Architectural Heritage, 2011.

Coté, John. "Mayor Lee Has a Plan to Get Housing Built for S.F.'s Middle Class." *San Francisco Chronicle* 15 Jan. 2015. Web. 11 Feb. 2015.

Covert, Adrian. "Bay Area Tech Boom Not Cause of Region's Problems." *San Francisco Chronicle* 19 Dec. 2013. Web. 20 Feb. 2015.

Cutler, Kim-Mai. "How Burrowing Owls Lead To Vomiting Anar-

chists (Or SF's Housing Crisis Explained)." *Tech Crunch*. 14 Apr. 2014. Web. 20 Feb. 2015.

DeLeon, Richard Edward. *Left Coast City: Progressive Politics in San Francisco, 1975-1991*. First Edition. Lawrence, KA: University Press of Kansas, 1992.

Department of Elections. "Voter Information Pamphlet and Sample Ballot, November 2014." 4 Nov. 2014: 106-120.

Dietsch, Deborah. "Five Projects That Will Transform Washington: The Yards, by Forest City." *Washington Business Journal* 25 Feb. 2011. Web. 18 Apr. 2015.

Dineen, J. K. "Giants Plan Pop-up Beer Garden, Shops in Section of Parking Lot." *San Francisco Chronicle* 13 Jan. 2015. Web. 7 Mar. 2015.

DiPasquale, Denise, and William C. Wheaton. *Urban Economics and Real Estate Markets*. First Edition. Englewood Cliffs, NJ: Prentice Hall, 1995.

Dougherty, Conor, and Zusha Elinson. "San Francisco Rushes to Ease Housing Pinch." *Wall Street Journal* 28 Jan. 2014 Web. 20 Feb. 2015.

Duany, Andres, Elizabeth Plater-Zyberk, and Jeff Speck. *Suburban Nation: The Rise of Sprawl and the Decline of the American Dream*. 10th Anniversary Edition. New York: North Point Press, 2010. Print.

Dudnick, Laura. "In Rare Form, Artists Embrace Development Project – and Vice Versa." *The San Francisco Examiner* 14 Aug. 2014. Web. 21 Feb. 2015.

Duff-Brown, Beth. "Historic Dogpatch Pier Braces For Big Overhaul." *The Huffington Post* 6 Feb. 2012. Web. 23 Feb. 2015.

envelopeA+D. "Proxy." Web. < http://www.envelopead.com/proj_octaviakl.html>.

Fainstein, Susan S. *The City Builders: Property Development in New York and London, 1980-2000*. Second Edition. Lawrence, KA: University Press of Kansas, 2001.

Fischel, William A. *The Homevoter Hypothesis: How Home Values Influence Local Government Taxation, School Finance, and Land-Use Policies*. Cambridge, MA: Harvard University Press, 2005.

Fischer, Michael Anthony. "Real Estate Development Exactions in Boston : Implications for Linkage and Planning in the South Boston Seaport District." Thesis. Massachusetts Institute of Technology, 1999. *dspace.mit.edu*. Web. 18 Feb. 2015.

Forest City. "Forest City." Web. < http://www.forestcity.net>.

Forest City California. "Port of San Francisco Pier 70 Waterfront Site RFQ Executive Summary." 10 Jan. 2011. Web.

Geltner, David M. et al. *Commercial Real Estate Analysis & Investments*. Third Edition. Mason, Ohio: OnCourse Learning, 2013.

Gregor, Alison. "Brooklyn: New Towers for Williamsburg." *The New York Times* 19 Dec. 2014. Web. 15 Apr. 2015.

"Growing Pains." *The Economist* 7 Dec. 2013. Web. 4 Apr. 2015.

Harkless, Lawrence Bernard. "Monkey See, Monkey Do : Establishing New Real Estate Development Frameworks for the Land Optioning and Assembly Process in Singapore." Thesis. Massachusetts Institute of Technology, 2014. *dspace.mit.edu*. Web. 14 Mar. 2015.

Harvey, David. "The Right to the City." *New Left Review* 53 (2008): 23–40.

Heywood, Will, and Jeremy Nelson. "Can We Improve the Public Planning Process with Texting?" *San Francisco Housing Action Coalition*. 16 Jan. 2015. Web. 1 Mar. 2015.

Hoch, Charles J., Linda C. Dalton, and Frank S. So, eds. *The Practice of Local Government Planning*. Third Edition. Municipal Management Series. Washington, DC: International City/County Management Association, 2000.

Innes, Judith E., and David E. Booher. "Reframing Public Participation: Strategies for the 21st Century." *Planning Theory & Practice* 5.4 (2004): 419–436.

Johnson, Alison. "A City That Takes Planning Very Seriously." *Urban Land Institute*. 11 Dec. 2013. Web. 4 Apr. 2015.

Kaliski, Jon. "Democracy Takes Command: New Community Planning and the Challenge to Urban Design." *Harvard Design Magazine* Spring 2005. Web. 6 Apr. 2015.

Kelley, Scott Edward. "Entitlement Advantage : The Balance of Local Knowledge and Capital Access in Real Estate Entitlements." Thesis. Massachusetts Institute of Technology, 2007. *dspace.mit.edu*. Web. 12 Mar. 2015.

Kern, Leslie, and Gerda Wekerle. "Gendered Spaces of Redevelopment: Gendered Politics of City Building." *Gender in an Urban World*. Bingley, UK: Emerald Group Publishing, 2008.

King, Brian. "The Public Trust Doctrine and Mixed-Use Development: The Proposed Golden State Warriors Arena and the Implications for Future Development on the San Francisco Bay." *Hastings College of Law West Northwest Journal of Environmental Law & Policy* (2014): n. pag.

King, John. "Urban-Chic Shipping Pods Catch on in Giants Development." *San Francisco Chronicle* 17 Mar. 2015. Web. 24 Mar. 2015.

Lang, J. "International Urban Design: Theory and Practice." *Proceedings of the ICE - Urban Design and Planning* 162.1 (2009): 7–17. Web. 15 Apr. 2015.

Lee, Edwin M. "2014 State of the City Address." *Office of the Mayor*. 17 Jan. 2014. Web. 19 Feb. 2015.

Logan, John R., and Harvey Luskin Molotch. *Urban Fortunes: The Political Economy of Place*. Berkeley, CA: University of California Press, 1987.

Long, Charles. *Finance for Real Estate Development*. Washington, DC: Urban Land Institute, 2011.

Malone, Patrick. *City, Capital and Water*. London: Routledge, 1997.

Marshall, Richard. *Waterfronts in Post-Industrial Cities*. New York: Spon Press, 2001.

McGovern, Stephen J. *The Politics of Downtown Development: Dynamic Political Cultures in San Francisco and Washington*. Lexington, KY: University Press of Kentucky, 1998.

Metcalf, Gabriel. "Hard Choices at the Port of San Francisco." *SPUR.*. 1 June 2007. Web. 20 Feb. 2015.

Metcalf, Gabriel, Sarah Karlinsky, and Jennifer Warburg. "How to Make San Francisco Affordable Again." *SPUR*. 11 Feb. 2014. Web. 20 Feb. 2015.

Molotch, Harvey. "The City as a Growth Machine: Toward a Political Economy of Place." *American Journal of Sociology* 82.2 (1976): 309–322.

Muessig, Anna Catherine. "The Re-Industrial City : What Case Studies from New York and San Francisco Tell Us about the Urban Manufacturing Resurgence." Thesis. Massachusetts Institute of Technology, 2013. *dspace.mit.edu*. Web. 19 Feb. 2015.

Musil, Thomas A. "Developer/Community Contracts: The Emergence of Community Benefit Agreements in Real Estate Development." *Real Estate Finance (Aspen Publishers Inc.)* 30.5 (2014): 31–40.

Newsham, Jack. "Developer Joe Fallon Follows His Vision to Reshape a Waterfront." *The Boston Globe* 7 Dec. 2014. Web. 22 Apr. 2015.

Oder, Norman. "After 11 Years of Controversy, Atlantic Yards Becomes Pacific Park Brooklyn." Next City. 26 Aug. 2014. Web. 28 Mar. 2015.

Pauli, Karin. "The Real Estate Industry from a Gender Perspective." Thesis. Royal Institute of Technology Kungliga Tekniska Högskolan, 2011. Web. 28 Apr. 2015

Peca, Stephen P. *Entitlement Process and Public-Private Partnerships*. Hoboken, NJ: John Wiley & Sons, Inc, 2012.

Port of San Francisco. "Pier 70 Preferred Master Plan." Apr. 2010. Web. 13 Oct. 2014.

---. "Pier 70 Project Progress Report." 20 Sept. 2012. Web.

---. "Request for Departmental Analysis, Ballot Simplification Committee." 24 July 2014. Web.

---. "Request for Developer Qualifications, Pier 70: Waterfront Site Development Opportunity." 30 Aug. 2010. Web.

---. "Request for Proposals, Pier 70: 20th Street Historic Buildings." 4 Oct. 2011. Web.

Quill, Lee. "A New Framework of Community Engagement." *Real Estate Review* 36.3 (2007): 9-17.

Roberts, Chris. "Approval for Giants' Mission Rock Hinges on Housing Mix, Poll Shows." *The San Francisco Examiner* 17 Mar. 2015. Web. 26 Mar. 2015.

Ross, Casey. "Mayor Says Boston Needs 53,000 New Housing Units by 2030." *The Boston Globe* 9 Oct. 2014. Web. 11 Feb. 2015.

Rubin, Jasper. *A Negotiated Landscape: The Transformation of San Francisco's Waterfront since 1950*. First Edition. Chicago: Center for American Places, 2011.

---. "San Francisco's Waterfront in the Age of Neoliberal Urbanism." *Transforming Urban Waterfronts: Fixity and Flow*. Ed. Gene Desfor et al. New York: Routledge, 2011.

Sabatini, Joshua. "Report: No Signs of Slowing SF Economy Thanks to Success of Tech Industry." *The San Francisco Examiner* 7 Apr. 2014. Web. 20 Feb. 2015.

Sagalyn, Lynne B. "Negotiating for Public Benefits: The Bargaining Calculus of Public-Private Development." *Urban Studies* 34.12 (1997): 1955–1970.

---. "Public/Private Development." *Journal of the American Planning Association* 73.1 (2007): 7–22.

San Francisco Board of Supervisors. "Agenda Packet: Resolution, Budget and Legislative Analyst Report, Term Sheet for Pier 70 Waterfront Site, Findings of Fiscal Responsibility and Feasibility." 5 June 2013. Web.

San Francisco Ethics Commission. "San Francisco Ballot Measures, November 4, 2014 Election." 2014. Web.

San Francisco Mayor's Office of Housing. "San Francisco Inclusionary Housing Program: Developer Choices for Projects Completed 1992 - 2014." 2014. Web.

San Francisco Planning Department. "Central Waterfront Area Plan." 2008. Web.

---. "Environmental Review Process Summary." 17 Mar. 2011. Web.

---. "Notice of Preparation of an Environmental Impact Report and

Notice of a Public Scoping Meeting: Pier 70 Mixed-Use District Project." 6 May 2015. Web.

---. "San Francisco Pipeline Report: Quarter 3 2014." Dec. 2014. Web.

SF OCII. "Mission Bay Project Area." *San Francisco Office of Community Investment and Infrastructure*. Web.

Silberberg, Susan Crowl. "South Boston: Planning in a Reluctant Community." Thesis. Massachusetts Institute of Technology, 1998. *dspace.mit.edu*. Web. 18 Feb. 2015.

Silva, J. Fred. "The California Initiative Process: Background and Perspective." *Resource Material for The Speaker's Commission on The California Initiative Process*. Public Policy Institute of California, 2000. Web.

Smith, Stephen Jacob. "Two Trees Drops Buzzword Bonanza on Vacant Domino Lot." *New York Observer* 21 Mar. 2013. Web. 20 Apr. 2015.

Stillman, Mike. "Public Funding Could Spark Pier 70 Redevelopment." *The Potrero View* July 2009. Web. 5 Apr. 2015.

Terplan, Egon, and Jennifer Warburg. "How Are the Bay Area's Biggest Cities Planning for Growth?" *SPUR*. 12 Dec. 2014. Web. 20 Feb. 2015.

"The Business Of Baseball." *Forbes*. Mar. 2015. Web. 2 Apr. 2015.

United States Census Bureau. N.p., 2014. Web.

Velsey, Kim. "Two Trees Cedes to de Blasio's Demands, Agrees to Build More Affordable Housing at Domino Site." *New York Observer* 3 Mar. 2014. Web. 15 Apr. 2015.

Waddling, Chris. "D10 Watch: Bayview Underground Community Pop-up Market Comes to Pier 70." *D10 Watch*. 7 Apr. 2014. Web. 21 Mar. 2015.

Warburg, Jennifer. "Forecasting San Francisco's Economic Fortunes." *SPUR*. 27 Feb. 2014. Web. 20 Feb. 2015.

Wildermuth, John. "8 Washington Condo Project Loses Big in S.F." *San Francisco Chronicle* 6 Nov. 2013. Web. 21 Apr. 2015.

---. "Plan to Bring Pier 70 back to Life." *San Francisco Chronicle* 29 Apr. 2014. Web.

Wildermuth, John, and John Coté. "S.F. Voters OK Prop. B on Waterfront Development." *San Francisco Chronicle* 4 June 2014. Web. 22 Apr. 2015.

Wilmar, Michael. "The Public Trust Doctrine." *SPUR*. 1 Nov. 1999. Web. 9 Mar. 2015.

Wilson, Ralph. "Pier 70 San Francisco." Web. < http://pier70sf. org>.

Woods, Elizabeth (Elizabeth Seavey). "Designing an Integrated
        Waterfront : Responsive Redevelopment at the Philadelphia
        Navy Yard." Thesis. Massachusetts Institute of Technology,
        2012. *dspace-test.mit.edu*. Web. 1 Apr. 2015.

Yee, Vivian. "At Brooklyn's Domino Sugar Site, Waning Opposition
        to Prospect of Luxury Towers." *The New York Times* 16 Oct.
        2013. Web. 19 Apr. 2015.

Yee, Vivian, and Mireya Navarro. "Some See Risk in de Blasio's Bid
        to Add Housing." *The New York Times* 3 Feb. 2015. Web. 11
        Feb. 2015.

Zukin, Sharon. *Naked City: The Death and Life of Authentic Urban Plac-
        es.* Reprint Edition. Oxford: Oxford University Press, 2011.

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