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Brownfields Revitalization and Affordable Housing: An Evaluation of Inclusionary Models of Brownfield Redevelopment in Oakland, California

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Brownfields Revitalization and Affordable Housing: An Evaluation of Inclusionary Models of Brownfield Redevelopment in Oakland, California

by

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Dedication

This report is dedicated to the memory of my Grandfather whose passion for learning inspired me to pursue my Master's degree. A special thanks to my family, friends, and mentors that have encouraged me throughout my academic career.

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Abstract

Brownfields Revitalization and Affordable Housing: An Evaluation of Inclusionary Models of Brownfield Redevelopment in Oakland, California

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Brownfield redevelopment is called upon to remedy damaged ecological, economic, and social conditions due to contamination from prior land use(s). It can be utilized as a means for revitalizing low-income neighborhoods and communities of color that have suffered from years of economic disinvestment and a polluted environment. Critics of brownfield redevelopment in low-income neighborhoods argue that this form of revitalization can backfire when property values and rental prices rise and existing residents are pushed out. The City of Oakland has demonstrated a form of inclusionary brownfield redevelopment that incorporates housing that is affordable to existing residents in the area and thus avoiding the form of exclusionary housing witnessed in other cases of brownfield redevelopment in central cities. This report builds on the hypothesis that inclusionary brownfield redevelopments in Oakland can serve as a model approach for other cities in preventing displacement of lower income, residents of color through gentrification.

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Introduction

This professional report explores the principles, strategies, and goals leading to inclusionary brownfield redevelopment in the City of Oakland, and how they can be applied to other cities. As a native of Oakland, my research began with a desire to understand the process behind revitalization efforts occurring in the early 2000s. While growing up in North Oakland, I was aware of differences in physical conditions between more affluent neighborhoods in the "Hills" in the Northeast compared with less prosperous neighborhoods in the "Flatlands" closer to the San Francisco Bay. However, it was not until high school that I witnessed firsthand the inequities in both quality and availability of services and resources in the Flatlands, where the majority of my classmates resided.

For the last two decades, most neighborhoods in the Flatlands have remained disproportionately low-income compared with the rest of the city. This is in stark contrast to the concentration of growing wealth in the Hills. Below are a series of three maps showing median family income by census tract from1990 through 2010 to demonstrate increasing geographic disparities:

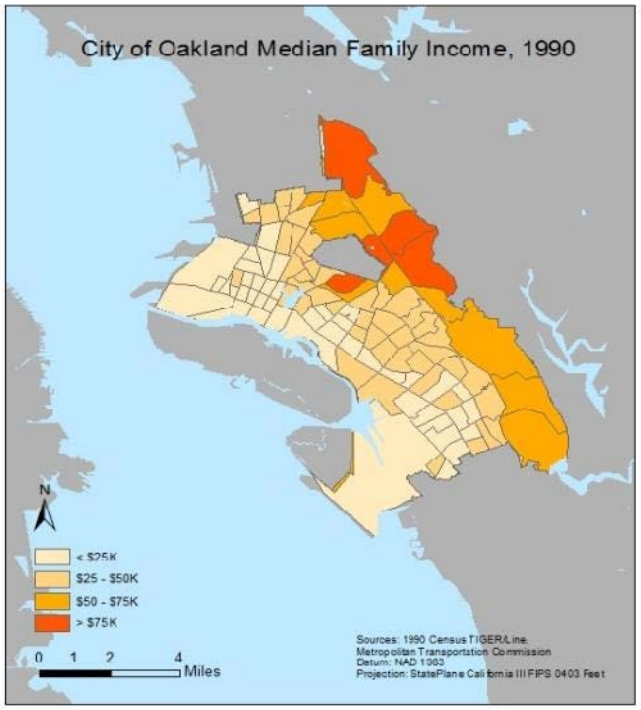

Figure 1: Oakland Median Family Income by Census Tract, 1990

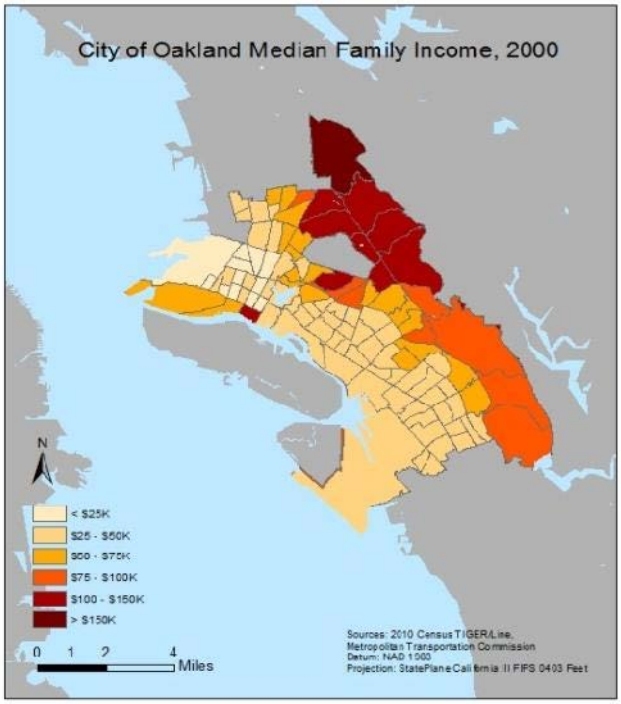

Figure 2: Oakland Median Family Income by Census Tract, 2000

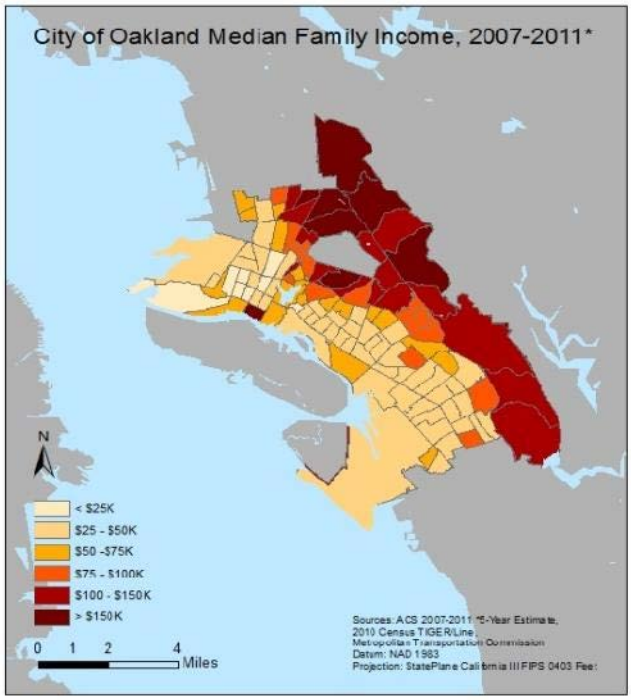

Figure 3: Oakland Median Family Income by Census Tract, 2007-2011 (ACS 5-Year Estimate)

During my trips home while in college (2003-2008), I noticed new apartments, restaurants, and bars popping up seemingly overnight in both downtown and around transit stations in the Flatlands. Furthermore, Oakland was receiving considerable media attention and praise for building quality residential, business, and retail opportunities near transit hubs. At the time, I was unaware that these "mixed use and mixed income developments" were being built on formerly blighted and contaminated land, known as brownfields (i.e. old gas stations, parking lots, and abandoned factory sites). For a city that is nationally better known for its homicide rates, these positive changes were showcasing what many Oakland residents knew to be possible: the potential for a vibrant, diverse, and sustainable city.

My passion for neighborhood improvement in Oakland has led me to study equitable development practices that provide opportunities that afford vulnerable populations access to new mixed use, mixed income communities. I discovered that affordable housing was incorporated in a number of new brownfield redevelopments in Oakland which led to the topic of my professional report. My research is informed by theories of sustainability. The first is Scott Campbell's perspective which holds that the ideal of sustainability can be achieved if the "triangle of conflicting goals for planning," known as social equity, economic prosperity, and environmental protection are balanced with one another when pursuing long term planning goals (1996). Campbell notes that one movement that has successfully combined environmental, economic, and equity issues, is the environmental justice movement. This social movement began in the early 1980s in response to health risks that were disproportionately impacting communities of color and low-income neighborhoods. Campbell argues that the poor are less likely to have the means to move away from a polluted environment; therefore, their fate is tied to the decisions of local planners and government officials. For instance, planners must have the tools to prevent the siting of housing and employment facilities near unsafe environments and/or remediate formally contaminated land for healthy live, work, and play spaces.

Julian Agyeman takes Campbell's argument a step further by formally calling for the fusion of environmental justice and sustainability movements to form "just sustainability". He argues these two movements must join together in order to expand their base of support and achieve long-lasting social equity and justice in the sustainability movement (Agyeman, 2005). Although both sides have worked together to tackle short term issues, no ongoing partnership has emerged between the two movements. Agyeman's main criticism is that too often, the sustainability movement

overlooks social equity issues related to race, class, and justice and focuses on natural environment issues alone. This is not surprising considering advocates of the sustainability movement have primarily come from top-down, high level international or government groups within the traditional environmental movement (Agyeman, 2005).

Environmental justice organizations, on the other hand, tend to come from grassroots activism inspired by the civil rights era and are mostly comprised of local advocacy groups. The limitation of the environmental justice movement, Agyeman claims, is that it tends to be reactive, though not by choice. In fact, the Principles of Environmental Justice advocate otherwise. Nevertheless, without sufficient resources, most low-income communities are unable to tackle environmental threats before they arise. This is where sustainable development and sustainable community advocates could unify to strengthen the environmental justice movement: by more proactively demonstrating a shared vision of what a healthy community should look like (Agyeman, 2005).

BROWNFIELDS OVERVIEW

Brownfield redevelopment has the potential to bridge conflicting sustainability goals by repairing damaged ecological, economic, and social conditions due to contamination from prior land use(s). It can be utilized as a means for revitalizing communities that have suffered from economic disinvestment and a polluted environment. The proliferation of brownfield sites from past industrial uses has proved there is no shortage of opportunities for revitalization. The U.S. Environmental Protection Agency (U.S. EPA) estimates that there are more than 450,000 brownfield sites in the United States which have or are perceived to have contaminants. In 1995, the EPA formed the Brownfields Program to help states, cities, and communities with funding and

technical guidance to assess, clean, and redevelop land sustainably. In 1998, the EPA distributed small amounts of funding to local governments which led to hundreds of two-year brownfield "pilot" projects across the country. In 2002, due to the success of the program, the Small Business Liability Relief and Brownfields Revitalization Act passed. This Act amended the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) by allocating funds for assessing and remediating brownfields (U.S. Environmental Protection Agency [U.S. EPA], n.d.).

Cities have increasingly looked to revive activity in downtown areas and key transit corridors where brownfields were left behind from previous industrial uses. These sites are ideal for infill development geared towards mixed use developments to help boost tax revenues, increase public transit ridership, and reduce congestion. However, when investing significant funding and resources into a brownfield cleanup, often the needs of existing residents near brownfield redevelopments are not met by the city or developer. Instead, these mixed use developments are often targeted for high end retail and housing. Critics of brownfield redevelopment in marginalized neighborhoods in the city core have argued that the goal of mixed use, mixed income neighborhoods can backfire when current residents can no longer afford to live in their neighborhood as a result of soaring property taxes and rental prices.

OAKLAND AS A CASE STUDY

The City of Oakland provides a classic example of a city with many brownfield sites as the result of highly successful shipbuilding, canning, and automobile industries during World War II. With the end of the war, however, came the slow decline of industrial prosperity and the loss of blue collar jobs during the 1950s and 60s. The "White Flight" phenomena also left Oakland with a depleted middle class population that

contributed to disinvestment of jobs, housing, and services. During this time, Oakland also became more auto-centric with the addition of 580 and 880 interstate highways which cut through predominately African Americans neighborhoods in West Oakland from downtown and divided low-income communities of East Oakland, isolating businesses, services, and people from one another. In the 1960s and 70s, the construction of Bay Area Rapid Transit (BART) led to heavy rail public transit access between San Francisco and other Bay Area cities. Critics have accused patterns of construction for BART to be discriminatory because underground construction took place in mostly white commercial districts of Oakland, Berkeley, and San Francisco, while above ground construction took place in predominately African American commercial districts in West Oakland (Mayne & Murray, 2001). In addition to the economic and physical devastation to these neighborhoods, drugs and violence have also plagued parts of East Oakland since the 1980s crack cocaine epidemic. Oakland's history of decline, particularly for low-income communities and people of color has presented numerous challenges to city and community leaders for ways to revive brownfield sites equitably in the core city. Fortunately, a combination of new political platforms, redevelopment funding opportunities, and tireless advocacy has changed the outlook on Oakland's future.

RESEARCH QUESTIONS

As noted above, many areas of Oakland were once considered undesirable for new development activity due to severe blight, disinvestment, and crime; yet, they are now experiencing a rise in mixed use, mixed income developments, particularly on former brownfield sites. Unlike other cities which are redeveloping brownfields solely for market-rate housing and high-end shops, Oakland is building housing and businesses that match the needs of residents in the neighborhood. This is largely the result of inclusive

brownfield strategies on the part of advocates and non-profit developers that are mindful of making affordable housing a viable option. In addition, strong tenant laws and rent control have helped prevent pricing out long-time, low-income residents in Oakland (Shaw, 2012).

In this professional report, I will explore how strategies for inclusive brownfield redevelopments used in Oakland have empowered communities to remain affordable for residents while still implementing infrastructure and environmental improvements. Furthermore, my research will build on the hypothesis that inclusionary brownfield redevelopments in Oakland can serve as a model approach for other cities in preventing displacement of lower income, minority residents through gentrification. Specifically, my research question is: What strategies can cities use for brownfield redevelopment projects in lower income communities in order to provide affordable housing and avoid displacing residents? I will address this broad question through the case of Oakland, California, asking:

- What, if any, have been the demographic changes in and around brownfield redevelopments in Oakland?
- What were the strategies used by non-profits, developers, residents and city agencies (public-private partnerships) to include affordable housing in the brownfield redevelopments in low-income areas in Oakland?
- What have been the economic and built environment outcomes from the brownfield redevelopment projects in Oakland?
- How was the community involved in brownfield redevelopment in Oakland?
- For brownfield redevelopment projects in marginalized communities elsewhere, what strategies employed in Oakland can help other cities provide affordable housing and avoid displacing residents?

CHAPTER OUTLINE

The first chapter will discuss the history and definition of brownfields, the evolution of federal and state policies, and examples of typical brownfield redevelopment

cases. The second chapter will provide a literature review of gentrification as the unintended consequence of brownfield redevelopment and social justice arguments for including affordable housing in brownfield revitalization efforts. The third chapter will further expand upon the history of Oakland's political economy and planning legislation, social environment, and early brownfield redevelopment work. The fourth chapter will introduce findings from the three case studies as best practices models. Lastly, chapter five will outline lessons learned and provide recommendations to cities for implementing inclusionary brownfield redevelopments.

Chapter 1: Brownfield Redevelopment

HISTORY OF BROWNFIELDS IN THE U.S.

Contaminated, formerly industrial sites known as "brownfields" are common across the country, particularly in the urban core as a result of the steady decline in industrial and manufacturing production after the end of World War II. As businesses began relocating their manufacturing production overseas for inexpensive labor as well as more lenient regulations, families began moving from the central city to the suburbs. By the 1970s, large cities that once thrived on industrial and manufacturing production were plagued by abandoned contaminated properties from previous onsite industrial waste (Fisher, 2011).

A study performed in 1999 by the Council for Urban Economic Development (CUED) surveyed 107 brownfield projects nationwide and found that more low-income communities of color lived within a mile of these projects when compared with statewide averages (Wernstedt, Heberle, Alberini, & Meyer, 2004 and Fisher, 2011). Environmental justice advocates have raised concerns over these findings, in part because they suggest that brownfield programs have failed to target disadvantaged communities. According to Solitare and Greenberg (2002), the U.S. EPA is now proactively addressing this issue by providing more brownfield grants to inner city areas with higher concentrations of low-income and minority residents (as cited in Fisher, 2011). Nevertheless, numerous state, city and community programs may not have the same authority.

DEFINITION AND REGULATIONS

According to the U.S. EPA, brownfields are defined as: "real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant." DeSousa (2005) notes that the term "brownfield" was first denoted in the early 1990s to remove the stigma associated with words like "contaminant" or "derelict" (as cited in Fishman 2011). Although the term is relatively recent, brownfields first drew national attention in 1980 after the Love Canal lawsuit in Upstate New York. This case stemmed from the discovery of a toxic waste landfill underneath homes and an elementary school after toxic chemicals were found in the Niagara River, sewers, and surrounding creeks. Subsequently, 950 families were evacuated from 10-square blocks and the community was deemed an "Emergency Declaration Area" (Armstrong, 2007).

After the Love Canal disaster, Congress passed the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), which is more commonly referred to as the Superfund act (Solitare and Greenberg 2002). The act permits the federal government to assess and/or clean up contaminated sites and oversee emergency response when dealing with hazardous materials. CERLCA addressed owner liability issues by defining responsibility for contaminated properties as "retroactive", "strict", and "joint and several" (Armstrong, 2007, p. 30); however, CERCLA was criticized for not considering the degree of contamination attributable to each individual (Fisher 2011). Ultimately, severe fines and costly lawsuits for owners and land purchasers slowed redevelopment of Superfund sites to a halt (Solitare and Greenberg 2002). In order to make sites more appealing for redevelopment, the U.S. EPA enacted the Superfund Amendments and Reauthorization Act (SARA) in 1986. This act included

changes to CERCLA such as offering more settlement tools and encouraging greater citizen participation in choosing the type of cleanup for their neighborhood (U.S. EPA, n.d.).

The Brownfields Assessment Demonstration Pilot program was introduced in the early 1990s as a second attempt to reform CERCLA. The program provided greater incentive to redevelop parcels, particularly those less contaminated (Lange & McNeil, 2004). In 1995, roughly 30,000 of these less polluted properties were removed from the Superfund list (made up of 40,000 total). The U.S. EPA hoped removing the Superfund label from these brownfields would trigger more revitalization projects.

Since initiation, the Brownfield Pilot two-year program has awarded over 300 jurisdictions with grants in the amount of $200,000 for brownfield site assessment, characterization, community involvement, and remediation plans (but not the actual cleanup process itself) (Solitare and Greenberg, 2002). Other sources of funding were available through the U.S. EPA for cleanup including the revolving loan fund grants and cleanup grants. In 2002, the success of the pilot program led to the Small Business Liability Relief and Brownfields Revitalization Act which established it as a federally funded program, which in turn provided greater protection to owners and developers (Fisher, 2011). The following year, the U.S. EPA awarded $75 million in grants to government entities and non-profits across the U.S (Wernstedt, et al., 2004). In addition to federal programs, states also encourage the redevelopment of brownfields through voluntary cleanup or voluntary action programs (VCPs or VAPs) which provide financial assistance, release from liability, and cleanup processes that match how the site will be reused. By relaxing some of the environmental requirements and offering state support, owners and developers are more willing to properly deal with contaminated property. There are currently 47 states that run VCPs or VAPs (Lange & McNeil, 2004).

More recently, the Brownfield program has continued to offer funding through Brownfield Assessment Grants, Brownfield Cleanup Grants, Brownfield Revolving Loan Fund, and Brownfield Job Training Grants (U.S. EPA, n.d.). According to the EPA, as of April 2013, the Brownfield Program including State and Tribal projects have assessed 20,237 properties, completed cleanups for 854 brownfields, and leveraged $19.3B and more than 87,032 jobs. Under the American Recovery and Reinvestment Act signed into law in February of 2009, the Brownfield Program received funding and has achieved well over targets for properties assessed, cleanups completed, jobs leveraged, acres made ready for reuse, and dollars leveraged (U.S. EPA, n.d.). Unfortunately the Brownfield Tax Incentive signed into law in 1997 ended in December 2011 and has not been renewed. This incentive helped encourage cleanup and reuse of brownfields by allowing environmental cleanup costs to be tax deductible in the year the cleanup occurred (U.S. EPA, n.d.).

In addition to federal programs and legislation, the State of California has also passed a significant piece of legislation to aid redevelopment agencies in cleaning up brownfields. This legislation is known at the Polanco Redevelopment Act and allows the following:

- Allows a redevelopment agency to order parties responsible for contaminating property in the redevelopment project area to perform the necessary cleanup.
- If the responsible party does not cooperate, the redevelopment agency can perform the cleanup itself or arrange for a third party to clean up the property.
- The redevelopment agency can require a property owner to provide all environmental information related to the property, including Phase 1 assessment or subsequent environmental tests.
- The redevelopment agency can perform cleanup on property owned by the agency as well as property owned by another party.
- The Act can be found at Health and Safety Code Section, 33459 et seq.

-California Redevelopment Association, n.d.

This act has been instrumental in expediting the cleanup of brownfield properties across California and ending stalemates between current and former landowners (California Redevelopment Association, n.d.).

TYPICAL BROWNFIELD REDEVELOPMENT STRATEGIES

Brownfields today are known for negatively impacting the quality of neighborhoods by attracting pests, fires, trash, crime, and by causing air, water, and soil pollution. Brownfield grants for assessments and cleanup strategies represent an opportunity for cities to revitalize blighted land and stimulate economic activity, create local jobs, provide affordable housing, and establish healthier environments. Brownfield redevelopment within the urban core has also become a popular smart growth infill development strategy because it preserves green space and prevents sprawl (Solitare & Greenberg, 2002). Before outlining common redevelopment strategies, it is important to recognize that each place is unique and will require a unique combination of redevelopment tactics. However, certain cases have had less success than others often due to a lack of public engagement and regard for neighborhood needs and desires. In light of the disproportionate burden of brownfields on poorer residents of color, it is critical to understand how brownfield redevelopment strategies can adequately meet the needs of surrounding vulnerable communities.

First, in understanding redevelopment strategies, it is useful to identify indicators of brownfield redevelopment success. Sustainability indicators are commonly used for evaluating brownfield redevelopment success, although the greatest emphasis tends to be placed on economic benefits. This is to be expected considering brownfields are typically tied to “lost property taxes, foregone revenues and unrealized wages” (Armstrong, 2007,

p. 39). However, Pearsall (2010) argues that sustainability goals should do a better job of incorporating environmental justice issues by promoting "equitable distribution of benefits and burdens among populations and places, but also with the process by which decisions regarding the environment occur." When cities place too much emphasis on stimulating economic growth, without an adequate needs assessment, vulnerable populations are more likely to be displaced. Furthermore, if developer interests dominate the process, they are more likely to build structures that maximize profit rather than benefit community members.

Typical brownfield redevelopments include several examples from New York City's Brownfields Program established in 2003. The intent of this program was to revive economic activity in predominately low-income areas (Chester, 2011). A study performed by Environmental Advocates of New York (EANY) revealed that between 2008 and 2010, nearly $465 million in tax credits were allocated to developers through the state Brownfield Cleanup Program. The majority of these tax credits went to middle to upper class, white neighborhoods while less than two percent of the tax credits have gone to African American and Latino communities (EANY, 2011).

In the Brownfields section of PlaNYC 2030, the city acknowledges the disproportionate number of low-income neighborhoods and communities of color are exposed to brownfields. Despite this reference, there is no direct initiative addressing the issue of maintaining affordability. The plan also addresses social equity by highlighting the importance of community involvement in brownfield redevelopment, but there is little evidence that the city has engaged in meaningful community outreach in low-income communities (PlaNYC, 2030).

Brownfield redevelopment in New York City highlight a problematic trend occurring across the nation: brownfield subsidies are benefitting tourists and the wealthy

more so than existing neighborhoods. Furthermore, there is a lack of public outreach during the redevelopment process to give residents a voice in deciding the future uses for cleaned brownfields (Checker, 2011). For example, current brownfield projects in the city consist of market rate apartments in south Williamsburg, a six-story hotel near Yankee Stadium, and what are deemed "affordable" housing units for *middle* income families in Eastchester. There is a clear developer preference for more expensive housing which dampens the prospect of future brownfield redevelopment that will benefit low-income communities.

The Southeast Federal Center project known as "The Yards" in Washington, D.C. is another example of a brownfield redevelopment utilizing typical strategies with mixed results. The goal of this project was to reconnect the Southeast Washington communities with Anacostia, a historically neglected community. Although leaders of the project conducted significant public outreach, the participation levels were low due to limited community and non-profit capacity. Furthermore, the lack of unity between partners culminated into a bureaucratic nightmare. This left the neighborhood unsure of which agency to consult for taking advantage of resources (NEAJC, 2006).

A lack of public participation may have contributed to residential and retail choices that did not match resident needs in the area. This is evidenced by the fact that the new development consists of mostly luxury apartments—even though the Anacostia neighborhood is predominately comprised of low-income African American families. Although 20% of the units in the new development are affordable for residents at 50% Area Median Income (AMI) or less, this requirement is less helpful for low-income families because there are only 1-2 bedrooms options (Bachman, 2012). Lastly, it remains unclear whether future "neighborhood friendly" amenities will cater to the low-income, African American community or to newcomers leasing a market-rate apartment.

Even though a mixed-income, mixed-use development is capable of reviving economic viability, affordable housing cannot be the only element accessible to low-income residents: services and retail options must be available for all income levels (Bachman, 2012).

Although housing affordability should not be the only feature of brownfield redevelopment accessible to low-income people and families, it is a major element for mitigating the exclusion or displacement of vulnerable communities. In Susan F. Fainstein's, "The Just City" (2010), she notes that during the deindustrialization era, cities increasingly emphasized the importance of economic growth because of the belief that these policies lead to more opportunities for a greater number of people. Subsequently, new development projects are typically framed in terms of their ability to raise property values and increase city competitiveness in order to entice more corporations, tourists, and private investment (Fainstein, 2010). She argues that the focus on economic growth and prosperity has excluded the issue of equitable outcomes in the city. The economic growth model assumes that more people are better off with increasing prosperity. More often, however, policies favor private investment in higher revenue generating developments such as stadiums, retail malls, and tourist attractions than quality schools and affordable housing (Fainstein, 2010).

As discussed previously, brownfield redevelopment also tends to favor projects that are most profitable to developers and have the highest potential to stimulate city economic growth. For this reason, I argue that one of the most important elements of a new residential development on a former brownfield is affordable housing. Fainstein calls for a new urban theory of justice for the city that incorporates equity, democracy, and diversity. She makes the case that these three elements of justice should impact all public decisions at the same level as economic growth potential (Fainstein, 2010). By

incorporating subsidized housing on former brownfield redevelopment, cities will be working towards a more just environment that result in more equitable outcomes for the poor and greater diversity within the city.

Chapter 2: Brownfield Redevelopment, Gentrification and Affordable Housing

GENTRIFICATION

As demonstrated in the previous chapter, brownfield redevelopment serves as a catalyst for improving the overall economic and environmental health of a city, leading to more productive uses on previously underutilized land. However, typical redevelopment processes rarely devote enough attention to their unintended socioeconomic consequences. Therefore, low-income residents living near brownfield redevelopment projects are less likely to benefit. One overarching problem facing neighborhoods after brownfield revitalization is gentrification, and more specifically a lack of affordable housing.

In *Gentrification in the context of `risk society'*, Skaburskis (2009) provides a concise definition for the complex and contested issue of gentrification as, "the redistribution of the housing stock to favour more affluent users" (p. 896). Another more detailed definition by Benzhaf and McCormick (2007), describe three elements of gentrification:

> (1) rising property values and rental costs; (2) new construction or renovation upgrading the housing stock and converting it form rental to owner-occupied units; and (3) a turnover in the local population, bringing in residents with higher socio-economic status. (as cited in Fisher, 2011, p. 22)

This paper focuses on gentrification in the context of changing neighborhood demographics and income levels. In many cases, this process is influenced by the re-investment of private-market capital in downtown centers (Zukin, 1987). The term gentrification was first coined in the 1960s by the British Sociologist Ruth Glass, who

had observed the systematic displacement of working-class and multi-family dwellings by “gentry”, a reference to more affluent residents (Essoka, 2010).

In the United States, the first signs of gentrification occurred during major economic and structural changes in downtown centers during the 1950s and 60s in response to the decline of manufacturing industries and increase in immigrants and people of color. Government officials responded by demolishing older buildings and developing major thoroughfares and highways for vehicular traffic in the name of “slum clearance”. This evolved into the urban renewal movement, which destroyed the walkable and human scaled urban fabric of many neighborhoods and displaced thousands of low-income residents of color. Additional consequences of urban renewal efforts were a lack of affordable multi-family units, diminished homeownership opportunities, and fractured community social ties (Essoka, 2010). By the 1970s and 80s, however, government funds shifted from demolition to incentives for home improvements in the 1960s. This shift in government funding, in addition to private-market capital reinvestment, helped further propel gentrification pressures in small areas of the inner city (Zukin, 1987). The trend of disinvestment, structural decay, and loss of middle class residents began to slow as higher income people and capital have begun to return to the inner city (Hamnett, 1991). Gentrification, therefore, has the potential to return the urban core to the “zone of privilege reminiscent of the inner-most residential ring in Sjoberg’s model of the pre-industrial city.” (Ley, 1981, p. 145, as cited in Hamnett, 1991). Although this process is capable of returning a larger tax base to the city, the reverse flow of capital back to the city also has the power to eliminate the inner city working class population (Hamnett, 1991).

In Neil Smith's, "Toward a Theory of Gentrification" (1979), he discusses relationship of home rehabilitation and rent-gap theory to explain the process of gentrification:

> Gentrification occurs when the rent-gap is wide enough that developers can purchase shells cheaply, can pay the builders' costs and profit from rehabilitation, can pay interest on the mortgage and construction loans, and can then sell the end product for a sale price that leaves a satisfactory return to the developer. (p. 545)

The modern-day rent-gap is also triggered by the increase in cost for suburban land as sprawl increases infrastructure costs and commuter costs grow. As a result, relatively cheaper inner-city land has become more appealing for development (Essoka, 2010). Smith's rent-gap theory is compelling for the case of typical brownfield redevelopments. He argues that urban reinvestment is the root cause for an expanding rent-gap which causes gentrification (Fisher, 2011). The tendency for land values to increase after redevelopment in inner cities is often the reason developers choose land uses that maximize profit (i.e. luxury condos and retail). Therefore, standard brownfield revitalization efforts that exclude the needs of low-income communities are more likely to contribute to gentrification.

In addition to the rent-gap theory, production/consumption theory also attempts to explain the process of gentrification. David Ley (1986), argues the decrease in the blue collar, manufacturing industry and rise in the white collar service industry are the major economic factors shaping market forces that promote property activity in the inner city (as cited in Hamnett, 1991). With the increasing corporate investment in downtown centers, gentrifiers justify the need for new central business districts and push the demand for housing in the urban core, causing "altered consumption patterns and preferences"

(Essoka, 2010, p. 44). The inner city morphed from a fearful and undesirable place to an idealized new frontier in service of corporate America, and full of profitable possibilities.

The gentrifiers of revitalized downtown centers tend to be middle to high income young, white professionals. Mullins (1982) notes, however, that the service industry cannot explain all of the newcomers to the inner city. She cites the arts industry as drawing a creative and educated workforce back to the city largely because it is the area with the highest intensity of cultural resources and facilities (as cited in Hamnett, 1991). This demographic also tends to purchase older or historic homes and rehabilitate them. Furthermore, these newcomers have often moved from other urban neighborhoods or major cities and not the suburbs as popularly portrayed by the "back to the city" movement. On the other hand, displaced residents are typically older, people of color, homeowners of inexpensive property, members of the working class, and unemployed (Essoka, 2010).

With brownfield redevelopment, there are many positive aspects realized by the neighborhood such as improved air quality, reduced criminal activity, and greater economic opportunities. The question of housing affordability for residential or mixed-use brownfield redevelopments is raised because rising housing costs can potentially trigger or intensify gentrification pressures. This is particularly critical in an era when affordable housing is becoming scarcer, particularly in city centers.

THE NEED FOR AFFORDABLE HOUSING

The supply of affordable housing, particularly multifamily housing, has declined dramatically in the United States despite its high level of construction between the 1950s and 1970s (Lang, Anacker, & Hornburg, 2008). After World War II, a severe housing

shortage became a high priority in the 1948 presidential election. The movement to provide housing for returning veterans and their families led to the Housing Act of 1949 which stipulated "a decent home and a suitable living environment for every American family" (Orlebeke, 2000, p. 489). Nevertheless, this Act was mainly in response to a housing shortage that impacted the middle class. In recent years, however, housing affordability has not resonated with the middle and upper class or policy makers in part because national homeownership is thriving at 68 percent (U.S. Census Bureau 2006, and Lang, et al, 2008). However, the rates of homeownership for young people and minorities continue to lag significantly. In particular, homeownership rates have declined in expensive areas like the Northeast and California. It is important, therefore, to understand the historical events that have contributed to this lack of affordable housing.

In addition to the Housing Act of 1949, other federal agencies promoted homeownership through programs like mortgage insurance by the Federal Housing Administration (FHA) and mortgage guarantees by the Veterans Administration (Lang, et al, 2008). Ironically however, these initiatives led to greater private sector developments that mostly benefited middle income families in the 1950s. These efforts were not enough to address the housing shortage among low-income families. (Colton, 2003 as cited in Fogel, Smith, and Williamson, 2008). During the 1960s, political activism helped draw attention to issues of poverty and housing supply for low-income families. In an effort to more efficiently address housing issues, the agencies leading various housing programs joined under the Department of Housing and Urban Development (HUD). Furthermore, new incentives were provided by the federal government to increase the production of low-to-moderate income housing. Yet, by the 1970s, public housing had gained a negative reputation due to its prevailing trend of concentrating poverty in prison-like

buildings, budget shortfalls, and mishandled programs by HUD (Fogel, et al, 2008). To make matters worse, in 1973, President Nixon enforced a moratorium on all government subsidies which brought the subsidized housing production to a halt (Oberleke, 2000). In the 1980s, there was a push for the private sector to take over housing needs after experiencing the unraveling of social problems largely due to ineffective government action. During this decade, the deficit grew tremendously after major tax cuts and a rise in defense spending (Lang, et al, 2008). As a result, government spending for affordable housing was targeted to families with the greatest need. Meanwhile, there was a growing public consensus that market forces had led to an improvement in the general housing stock and supply of affordable housing.

During the 1990s, the federal government's involvement in affordable housing further diminished with the passing of two key acts that promoted the private market's role in housing issues: the 1990 Cranston-Gonzalez Affordable Housing Act (which led to the HOME Investment Partnership Program) and the Housing Opportunities for People Everywhere (HOPE VI). The HOME program provided subsidies to public housing residents to pursue rental and homeownership opportunities in the private market (Fogel, et al, 2008). In 1993, the HOPE VI program was established to help cities improve the conditions of declining public housing. Grants were awarded to cities for demolition, new construction, and/or the addition of social services (Oberleke, 1991). In addition, the Low-Income Housing Tax Credit (LIHTC) program that began in the 1980s was granted permanency by Congress in 1993. This program offers an incentive in the form of a tax credit to developers for new construction or significant rehabilitation of rental housing with set percentages for units to be occupied by very low to low-income tenants (Fogel, et al, 2008).

Although affordable housing today is generally viewed as an important need, surveys by the National Association of Realtors shows that this need can differ drastically depending on the location. Nevertheless, in the early 21st century, a lack of affordable housing persists, particularly for vulnerable populations (Fogel, et al, 2008). Although affordable housing is widely supported regionally, it is generally not seen as an immediate threat to the middle class; i.e. the constituency with the greatest voting power (Lang, et al, 2008). Unlike the Great Depression and World War II eras, which were defined by a strong sense of solidarity, the steady increase of economic prosperity from the late 1980s through the mid-2000s have contributed to a widening income gap and the development of a middle class that is more and more out of touch with the needs of disadvantaged communities. Even with the housing market crisis in 2008, housing policy issues remain missing from political platforms or debates in the last two presidential elections (Fogel, et al, 2008).

Arguably, the greatest need for affordable housing is in the central city where communities with 40 percent or higher poverty rates have grown from 12.4 percent to 17.9 percent between 1970 and 1990 (Anderson, et al, 2003). Moreover, the poor continued to become more segregated from higher income level neighborhoods, leaving them with fewer resources and upward mobility social ties. This phenomenon presents a critical opportunity for residential brownfield redevelopment to incorporate affordable housing. Often, brownfields are ideal sites for multifamily residential development "due to market factors or their size, and the location of many brownfield sites near existing residential areas" (Schopp, 2003, p. 1).

Aside from practical benefits of residential brownfield redevelopment, affordable housing should be incorporated in new infill development projects of the central city for

social equity reasons. As previously mentioned, Fainstein's call for equity, democracy, and diversity in all planning and policy related issue in order to further justice in urban areas is a compelling argument for supplying more affordable housing to achieve a "just city". She describes a just city as "a city in which public investment and regulation would produce equitable outcomes rather than support those already well off" (Fainstein, 2010, p. 3). In addition, Fainstein notes that although cities often have less control over redistributing resources, positioning social justice as equal to economic prosperity and environmental protection is still possible with city-backed initiatives and agendas that promote values such as quality affordable housing and public services (2010). As Castells (1977) points out, cities can be viewed as the natural setting for building community capacity because they bring together people for "collective goods that make up deficiencies in earnings." (As cited in Fainstein, 2010, p. 18) Similarly, Castells argues that urban social movements have transformative power to further justice in terms of producing equitable outcomes in the distribution of resources even when they develop at the city level (as cited in Fainstein, 2010).

The strategies for urban social movements tend to fall under two categories: transformational (disrupting the existing institutional framework) and affirmative (operating within existing institutional frameworks) to rectify social injustices (Fraser, 2003, as cited in Fainstein, 2010). Although transformational strategies may lead to quicker results, they are extremely challenging to implement whereas affirmative strategies may fail to achieve any significant change. Fraser calls for "nonreformist reform" as an alternative strategy that works within the existing capitalist structure yet, at the same time, establishes a foundation for building transformative social change in the future (as cited in Fainstein, 2010, p. 18).

Essentially, affordable housing built on former brownfields in the urban core embodies the nonreformist reform strategy because it can be implemented within existing regulations and social structures. The current residential brownfield redevelopment model furthers social injustice by allowing luxury housing and profit maximization to dominate development outcomes; this model asserts the central city as a space exclusively for the wealthy. However, by incorporating affordable housing in brownfield revitalization efforts, inclusionary redevelopment practices become the precedent and can lay the groundwork for a city that welcomes all residents, regardless of income.

In addition to social equity reasons, the need for affordable housing impacts other issues related to public health, safety, environmental protection, and economic productivity. In Chester Hartman's "The Case for the Right to Housing" (1998), he argues that development of affordable housing can easily be justified through cost-benefit analysis. For instance, supplying quality affordable housing is crucial to preventing overcrowding, the spread of diseases, safety risks, criminal activity, and even poor diet. These issues become a problem when low-income people pay exorbitant housing costs that are well over their household income (according to HUD, the threshold for housing cost burden is typically more than 30 percent of household income). A lack of affordable housing has also been shown to lead to:

> segregation, discrimination, and isolation based on race and ethnicity, as well as class, deprive residents of access to employment, economic development opportunities, and public facilities, and/or result in less good opportunities and services—a phenomenon Massey and Denton (1993) label ''hypersegregation.'' (as cited in Hartman, 1998, p. 225)

Ironically, cities that overemphasize economic growth in the name of more opportunities for all people may not realize the ramifications of dismissing the need for affordable

housing. As demonstrated above, hyper-segregation is what many cities are now facing due to exclusionary housing policies that favor market rate housing and high end retail. Ultimately, these policies reduce the economic capacity of cities if low-income people work downtown but cannot afford to live or shop nearby.

Understanding the social and economic arguments for greater affordable housing opportunities in the urban core will better equip cities, developers, and affordable housing advocates with knowledge to push for subsidized housing in future city policies, initiatives, and platforms. Nevertheless, understanding the challenges to residential development, let alone affordable housing, on former brownfields is vital when confronting public opposition or developer hesitation. Danielle Schopp (2003) notes that cost, stigma, and social justice issues often impede the process of building homes on former brownfields. First, it is difficult to convince developers to build housing if there is little to no market incentives to make the cleaning process and reuse worth the time and investment. Second, affordable housing tends to be at the bottom of the list for redevelopment options because there is less certainty of return on investment. In general, building housing is a more costly reuse option as opposed to commercial or industrial uses because there are more stringent cleanup requirements in order to reduce contamination to safe levels for households. Fortunately, however, there are an increasing number of grants, revolving loan funds, and tax credits available to incentivize the clean-up and reuse of brownfield sites.

An additional challenge is the potential for community members to object to affordable housing built on previously contaminated land due to equity reasons, unless low-income members support living on a former brownfield (Schopp, 2003). On the other hand, critics argue that redeveloping market rate housing on former brownfields will lead to gentrification or rising property values that can push out nearby established residents.

The argument for affordable housing on former brownfields is most compelling in instances where gentrification is the barrier to revitalization efforts. When a local agency receives a U.S. EPA Cleanup Grant, community members may be more supportive of redeveloping a brownfield for housing because public comments are required for the draft proposal and Analysis of Brownfield Cleanup Alternatives (U.S. EPA, 2013). During this process, residents are made aware of the benefits of brownfield revitalization which include a safer, healthier, and more equitable neighborhood. In addition, residents gain confidence that their neighborhood will be revived with fewer vacant or abandoned lots that contribute to crime and overall deterioration (Schopp, 2003).

Although the goal of revitalizing brownfields in historically neglected areas of the urban core provides numerous community benefits, key players must exercise great care in redeveloping for housing in low-income areas to avoid displacing long-time residents. The evolution of housing developing in the U.S. has led to a scarcity of affordable housing in the urban core. This scarcity is influenced further by developer goals to build development types that will give the greatest return on investment. Economic prosperity goals directly conflict with the social justice goals that Fainstein (2010) encourages for building a just city, accessible to all. A just city can be achieved by distributing resources more equitably across the city through nonreformist reform techniques that work within the existing structure. Building more affordable housing is one way to establish a precedence of social equity in the redevelopment of brownfields in the urban core. This form of inclusionary redevelopment also helps to reduce hyper-segregation which may occur when low-income people are excluded from brownfield redevelopment in their neighborhoods. Displacing residents from one area of concentrated poverty to another goes against the just city principles. Instead, new housing on former brownfields should provide opportunities for a mix of people and incomes.

This is one strategy several brownfield redevelopment projects are implementing in Oakland, California. Out of the three case studies in this report, the two located in low-income communities have had little objection to building affordable housing with market-rate housing but these projects have taken years of visioning and coordination between public, private, and non-profit partners before construction. The most contentious redevelopment occurred in downtown because affordable housing activists refused to accept the Mayor's decision to build only market-rate housing. The following chapter provides a brief history of Oakland's social and political economy, a background on the industry that has led to brownfields, and Oakland early brownfield redevelopment work.

Chapter 3: The City of Oakland

Oakland is known around the world for its dynamic political activism. It was the birthplace of the Black Panther Party and more recently, a major hub of the Occupy Movement. Examining the historical roots of the city demonstrates how it has nurtured many progressive platforms, including the Environmental Justice movement, which continues to help spearhead brownfield awareness and clean-up, particularly in West Oakland. The movement for providing low-income communities with a healthy environment in West Oakland has helped catalyze additional brownfield clean-up and reuse in other parts of East Oakland, particularly along Highway 880 and International Blvd where above-ground or below-ground gasoline and oil storage tanks were abandoned by businesses. In order to fully understand the momentum behind brownfield redevelopment in Oakland, it is essential to understand the social and political economy of Oakland, the forces that have contributed to an abundance of brownfield sites, and early community involvement and brownfield policies that laid the groundwork for many success stories.

OVERVIEW OF POLITICAL ECONOMY

Since the early 20th century, West Oakland has attracted a wide variety of people from all different backgrounds and supported many industries from ship building to the arts. In the 1880s and 1890s, the area gained a diverse population with the arrival of both immigrant and domestic workers looking for railroad jobs (Walker, 2008). In the 1940s, thousands of African Americans from the Deep South and more international immigrants flocked to Oakland for shipbuilding and other war related industries which stimulated tremendous economic and residential growth (Self, 2003). The incredible cultural and

ethnic diversity that has shaped Oakland since the early twentieth century have undeniably cultivated grass roots political and social justice activism.

Arguably, the most influential event in the political, economic, and social history of Oakland was the post-war deindustrialization of the central city and "white flight" to the suburbs between 1945 and 1970. The shift in population from the inner city to the suburbs had profound consequences for Oakland's urban core, namely urban decline (Solari, 2001). This transformation also triggered the "nation's most controversial political ideologies: a black power politics of community defense and empowerment and a neopopulist conservative homeowner politics among whites." (Self, 2003, p. 1) In the 1940s, whites imagined the future of Oakland as harmoniously balancing both urban and suburban interests and lifestyles. This vision was also held by a growing populist movement in East Oakland of mostly whites that were against big business interests and pushed for labor unions, lower taxes, fair wages, homeownership, and property rights. Simultaneously, African American primarily located in West Oakland championed social democracy goals of affordable health care, housing, and public transportation. However, African Americans were still not recognized or treated as equals. By the 1970s, blacks viewed mostly white suburbanites as controlling the city's assets and political power and profiting from disenfranchised low-income residents and communities of color which fueled the fight for equal rights (Self, 2003).

Aside from city level politics, national politics also played a role in the development of major cities like Oakland, in part through the New Deal and Great Society programs. These federal initiatives contributed to the concentration of new housing in suburban areas and limited homeownership through redlining tactics to mostly whites. Furthermore, housing programs often benefited white homeowners through subsidies and loans while rejecting blacks (Self, 2003). In contrast, urban renewal

demolished and displaced mostly communities of color that were deemed “slums.” Slum clearance in Oakland led to the demolition of 8,000 housing units between 1960 and 1965 and 6,000 of those units were located in the lower-income areas of the Flats. Even though 13,000 additional units were constructed, the majority were located in mostly higher income areas in the Hills and near Lake Merritt (Solari, 2001).

Tension peaked after the passing of Proposition 13 in 1978, a property tax reform law which limited property tax rates to no more than 2% and set property tax values at their 1976 assessed value level (California Tax Data). Previously, there was no limit to property tax, although it had averaged a little less than 3%. This tax reform severely significantly reduced funding for public schools which has contributed significantly to disparities in quality across districts (Sonstelie, Brunner, and Ardon, 2000). Furthermore, the consequences of this proposition have disproportionately disadvantaged the segregated inner city poor and minority communities that depend on public services. However, Self is careful to point out that despite the challenges, this community was not helpless; it is the African American community that has led the charge to stop the downward spiral of Oakland’s urban core and presented solutions to issues of poverty, joblessness, and crime to create a just political economy (Self, 2003**).**

BROWNFIELD ORIGINS

Although deindustrialization, segregation, and tax reform have contributed to the decline of Oakland’s urban core, it has not collapsed, as was the case with other industrial cities like Detroit. The industrial boom leading up to World War II was highly successful and employed thousands of people in Oakland; however, the labor force never compared to cities like Chicago, Detroit, and Los Angeles where hundreds of thousands of workers were employed. In fact, a smaller industrial sector worked in Oakland’s favor because its

economy was able to survive the ups and downs of postwar America (Self, 2003). The proliferation of brownfields in Oakland and other major cities across the U.S. is largely due to the deindustrialization of war-time industries, such as the Naval Shipyard and Port for Oakland. In addition, many small businesses such as dry cleaners, canneries, and recycling facilities also left behind underground storage tanks or containers of chlorinated solvents. Over time, these toxic chemicals contaminated the soil and/or groundwater on abandoned sites and led to a new political fight for Environmental Justice during the 1990s (Smith-Dahl, July 26, 2011).

ENVIRONMENTAL JUSTICE MOVEMENT

Community involvement in the Environmental Justice movement in Oakland, particularly during the early 1990s, has significantly raised awareness about brownfields present in low-income neighborhoods. One of the major environmental justice cases that arose during this time period dealt with the replacement of the Cypress Freeway in West Oakland after the 7.1 magnitude Loma Prieta earthquake of 1989. Both the upper deck of the Bay Bridge and a section of the Cypress Freeway in West Oakland collapsed (U.S. Department of Transportation, Federal Highway Administration [U.S. DOT FWHA], 2011).

The California Department of Transportation (CalTrans) initially planned on re-building the collapsed section of the freeway in the same location. Instead, West Oakland residents took the opportunity to demand the re-routing of the freeway so that it no longer cut through their neighborhood (U.S. DOT FWHA, 2011). They formed a coalition called the Citizens Emergency Response Team (CERT) that included a BART Director, former Port of Oakland CEO, Alameda County Supervisor, and former mayor

of Berkeley. Thus began an intense process of deciding how to re-route the freeway in order to meet the needs of both commuters and West Oakland residents.

After more than 200 meetings over 18 months, a new route for the freeway was proposed that only impacted a small residential area of West Oakland. During construction, CalTrans detected a plume of cancer-causing vinyl chloride where the new freeway was proposed to be built. This area was not far from a neighborhood of minority residents. After two years of negotiations, CalTrans compromised with community members by taking responsibility for cleaning a contaminated park that was across from the toxic plume. Almost nine years after the earthquake, the new section of the Cypress Freeway was completed. This case resulted in a number of community benefits such as local and minority hiring for construction and replacing the old freeway corridor with a green parkway (U.S. DOT FWHA, 2011). Success from this project laid the groundwork for future brownfield revitalization projects by demonstrating the power of a coalition of residents and government agencies in addressing environmental justice concerns and obtaining community benefits.

SOCIAL ENVIRONMENT

Oakland continues to be a forerunner in progressive political activism but the city has recently experienced a change in demographics that threaten the cultural and ethnic diversity that has contributed to its revolutionary politics. Currently, the ethnic and racial breakdown of Oakland residents is highly diverse: 28% black, 34.5% white, 25.4% Hispanic, and 16.8% Asian. However, according to the U.S. Census, between 2000 and 2010, the city lost 33,000 African American residents, while the number of whites, Hispanics and Asians grew. Meanwhile, more suburban cities near Oakland experienced increases in their African American populations. Overall the city lost about 8,700

residents between 2000 and 2010 despite the so-called “10K” political platform of former Mayor Jerry Brown which aimed to add 10,000 new residents to downtown Oakland (Glantz, 2011). This is a very different demographic composition compared with the City’s racial and ethnic breakdown in 1980: 47% black, 38.6% white, 9.5% Spanish origin, and 8.3% Asian (MTC-ABAG). The drop in African Americans is being attributed to a number of factors including gentrification, and the desire to live in safer areas with less crime and drug activity (Glantz, 2011). Many African American families are moving to the suburbs and exurbs or leaving California for the U.S. South as a result of skyrocketing home prices and crime rates. This can also be seen in declining African American church memberships, nightclubs, and City Council membership (Johnson, 2006).

Despite the current decline in African American populations, a legacy of political activism from the 1960s Black Panther Party to the Environmental Justice movement in the late 1980s and 1990s and the Cypress Freeway replacement in West Oakland, has provided a foundation for more just brownfield redevelopment in traditionally African American and low-income communities. As noted by Fainstein (2010), citizen activism is the key to achieving justice in the city because powerful constituencies can form to address concerns over distribution of resources. The importance of civic engagement suggests that cities with a vibrant history of political activism can contribute to more democratic redevelopment strategies. With this push for brownfield revitalization and the combined effort of developing mixed use and affordable housing, it is possible to mitigate the forces of gentrification that threaten to displace more low-income and African American families.

OAKLAND'S EARLY BROWNFIELD REDEVELOPMENT POLICIES AND FUNDING

Brownfield redevelopment in Oakland has largely been successful due to the level of federal and state funding awarded to the City, other agencies, and non-profit developers. In fact, Oakland is one of the leading cities in the country for brownfield grant awards (City of Oakland, 2013). However, prior to the U.S. EPA Brownfield Cleanup Program in the mid-1990s, there were several state programs and legislation that addressed the clean-up of toxic sites. For instance, the Voluntary Cleanup Program was established in the late 1980s by the California Department of Toxic Substances Control (DTSC). This program provided guidance to property owners that voluntarily reported low-threat brownfield sites for site investigation or assessment and removal or remediation (California EPA, 2002). In 1989, the Underground Storage Tank Cleanup Fund was created and implemented by the Water Board. The purpose of this fund was to provide financial assistance for cleaning up contaminated soil and groundwater.

As previously mentioned in Chapter 1, the Polanco Act of 1990 has also empowered redevelopment agencies across California to redevelop brownfields. This Act gives agencies authority to collect all environmental conditions information from property owners and the right to initiate the clean-up process if the responsible property owner fails to submit a clean-up plan within 60 days of notification (Garzon, 2003). However, it was not until 2001 that the Oakland City Council agreed to allow the Oakland Redevelopment Agency to implement stipulations from the Polanco Act.

Grassroots community activism surrounding health and safety of West Oakland residents has continued to make brownfields a forefront issue. For example, the West Oakland Environmental Indicators Project (WOEIP) created in 2002 has identified 17 indicators that were generated by community members to signify vitality and health (U.S.

EPA-Congressional Black Caucus, [U.S. EPA-CBC] n.d.). This has helped all of Oakland by putting a spotlight on the commitment of residents to achieve a non-toxic environment. In 2005, the U.S. EPA and WOEIP established a formal Partner Agreement to perform a truck study led by the community and funded by the U.S. EPA to determine effects from the Port of Oakland. This led to the West Oakland Toxics Reduction Collaborative (WOTRC) which focuses on a variety of issues including brownfields with U.S. EPA funding. This group has also helped put together a Brownfields Discovery Roadmap that explains the process of brownfield cleanup and working with local, state, and federal agencies.

Since 1995, the City of Oakland has received $4 million in funding for brownfield assessment and cleanup. All together, the City of Oakland, Oakland Housing Authority, Oakland Redevelopment Agency, BART, several local-non-profits, and Oakland Private Industry Council, have obtained nearly 20 grants totaling almost $5.3 million between 1997 and 2009 (Smith-Dahl, July 29, 2011). The effort to clean and reuse brownfield sites in Oakland began in 1996 as one of the first pilot cities to receive a grant from the U.S. EPA for $200,000 under the Brownfields Assessment Demonstration Pilot Grant Proposal Program (Garzon, 2003). These funds could be used for "brownfield mapping, identification, surveying, investigation, and public outreach/education" (Garzon, 2003, p. 10). Through this grant, the City identified two sites for redevelopment including downtown Oakland and the Coliseum Redevelopment Area in East Oakland. The City received an additional $100,000 in 1997 for the site assessment of the Fruitvale BART Transit Village project. This same year, the City established the Oakland Urban Land Redevelopment (ULR) Program in order to provide guidance for cleanup and redevelopment environmental requirements.

Federal funding for brownfields continued to flow into Oakland when it was chosen as one of ten cities to participate in the U.S. EPA's Brownfields Workforce Development Pilot Grant Program. Oakland received $200,000 for job training targeting low-income residents, specifically those individuals in the Temporary Assistance to Needy Families (TANF) program. These funds were given to the Private Industry Council (PIC) who then established a 14-week apprenticeship program at the Cypress Mandela/WIST Training Center in West Oakland to train residents in construction skills such as lead and asbestos abatement (Garzon, 2003).

In addition to brownfield assessment and training programs, the U.S. EPA awarded the City with $500,000 to start a Brownfields Cleanup Revolving Loan Fund (BCRLF). This fund would be used to offer "low cost loans for remediation activities at qualifying sites" (Garzon, 2003, p. 11). The U.S. EPA's Underground Storage Tank (UST) Initiative also awarded the State of California with $100,000 to target petroleum-contaminated sites and the State then designated Oakland as a municipal partner. This funding was directed towards the East Bay Habitat for Humanity project in the Fruitvale/San Antonio district and the Housewives Market Block project in downtown Oakland for cleanup of several former gas stations.

Additional state funded programs include the California Recycles Underutilized Sites (CALReUSE) Program in which the City of Oakland was chosen for an initial pilot grant in 2001. This grant awarded $1 million for "low-cost loans for site assessment and the development of remedial action plans for Oakland brownfield projects….on a per project basis" of no more than $300,000 per loan for a maximum of 5 years (Garzon, 2003, p. 11-12). Notably, the first project in California to receive this loan was the MacArthur Transit Village in 2002. Another important state source of funding utilized by Oakland was the Cleanup Loans and Environmental Assistance to Neighborhoods

(CLEAN) Loan Program, managed by the DTSC. This program gives priority for site assessment and cleanup loans in urban brownfields in disadvantaged areas that will improve "property values, economic viability, and quality of life of the surrounding community" (Garzon, 2003, p. 12). Paul Kibel (2003) notes that urban brownfields tend to be located in disinvested neighborhoods that are also "ideally suited for small-scale affordable housing". This holds true for numerous brownfield success stories in low-income neighborhoods of Oakland that have included affordable housing. DTSC's Voluntary Cleanup Program has also played a significant role in encouraging cleanup and reuse of brownfield sites in Oakland that are not on the state or national priorities list. The program gives flexibility to property owners in site assessment and cleanup timelines as long as they abide by DTSC requirements (Garzon, 2003).

Nevertheless, there still remains plenty of work in brownfield cleanup and redevelopment in Oakland. In 2011, the California State Resources Control Board had identified 125 Leaking Underground Storage Tank (LUST) sites located in East Oakland near Highway 880 and International Blvd and in West Oakland from Lake Merritt to the City's border with Emeryville (Sherbeam, 2011). Furthermore, there are an estimated 350 brownfield sites identified in greater West Oakland and over 700 sites in the Coliseum Area (Garzon, 2003 and U.S. EPA, 1997). This coincides with current targeted areas funded by the U.S. EPA which include the Coliseum Area, West Oakland, and Foothill-Seminary intersection (City of Oakland, 2013). Future funding may also go to the San Pablo corridor in West Oakland after a recent application was proposed for the full $200,000 U.S. EPA Brownfield Grant (City of Oakland, 2012).

Notably, a number of brownfield redevelopment projects in Oakland have included residential developments and in particular, affordable housing within mixed income developments. This is partially attributable to the partnership between the City of

Oakland and the Community and Economic Development Agency (CEDA), who have teamed up to acquire properties that have minimal contamination, fund the clean-up, and sell these properties to a private developer. Moreover, the extent of the clean-up is what makes Oakland unique from other cities: most properties have undergone clean-up standards to meet residential use requirements (Smith-Dahl, July 29, 2011). For example, Oakland has cleaned up numerous former gas stations and manufacturing sites to levels safe for housing, not simply commercial or industrial uses. This trend has appealed more to nonprofit affordable housing developers that are interested in improving the quality of life for underinvested and polluted communities.

Including affordable housing within brownfield redevelopments in Oakland also speaks to the city's roots in political activism and community engagement. The fight for racial equality during the Civil Rights and Environmental Justice movements has helped make brownfield cleanup a high priority for the City of Oakland, particularly in disinvested and low-income areas. Furthermore, the City's success in obtaining U.S. EPA grants demonstrates the care and skill with which past brownfield redevelopments have been managed. Part of this success has to do with including community input during the process and building developments that are accessible to all income levels. In the next chapter, I will analyze three brownfield redevelopment case studies and common strategies each project used to incorporate affordable housing.

Chapter 4: Findings and Analysis

The Bay Area is one of the most expensive areas to live in the country, which makes infill housing development a vital strategy for increasing the supply of affordable housing. The City of Oakland's 2010-2015 Consolidated Plan for Housing and Community Development identifies major challenges for extremely low-income renters, low-income large families, and moderate to middle income homeowners due to a lack of affordable housing options (Community and Economic Development Agency [CEDA], 2010). Achieving greater housing affordability is complex, particularly without sufficient funding sources and/or political support. Fortunately, the Consolidated Plan recognizes Environmental Remediation of brownfield sites as a strategy for increasing subsidized housing in Oakland:

> Apply for funding for brownfields cleanup. Explore possible funding sources and other ways to assist prospective housing developers in addressing soil contamination on potential housing sites. If appropriate funding can be identified, develop and implement a remediation assistance program. (CEDA, 2010, p. 134)

This strategy is already incorporated in numerous brownfield redevelopments across Oakland. For this report, I chose to focus on the development of Fruitvale Transit Village, the Uptown Apartments and Fox Courts, and Lion Creek Crossings (formerly Coliseum Gardens), which have all helped mitigate gentrification pressures by incorporating affordable housing for a mix of income levels. Furthermore, each of these projects has come to fruition through successful partnerships, community participation strategies, and flexible development strategies during multiple phases lasting over decades. Without these three elements, arguably, affordable housing would not have become a central component of the redevelopment—and perhaps the redevelopment

would not have occurred to begin with. Below is a reference map with the locations of each case study site.

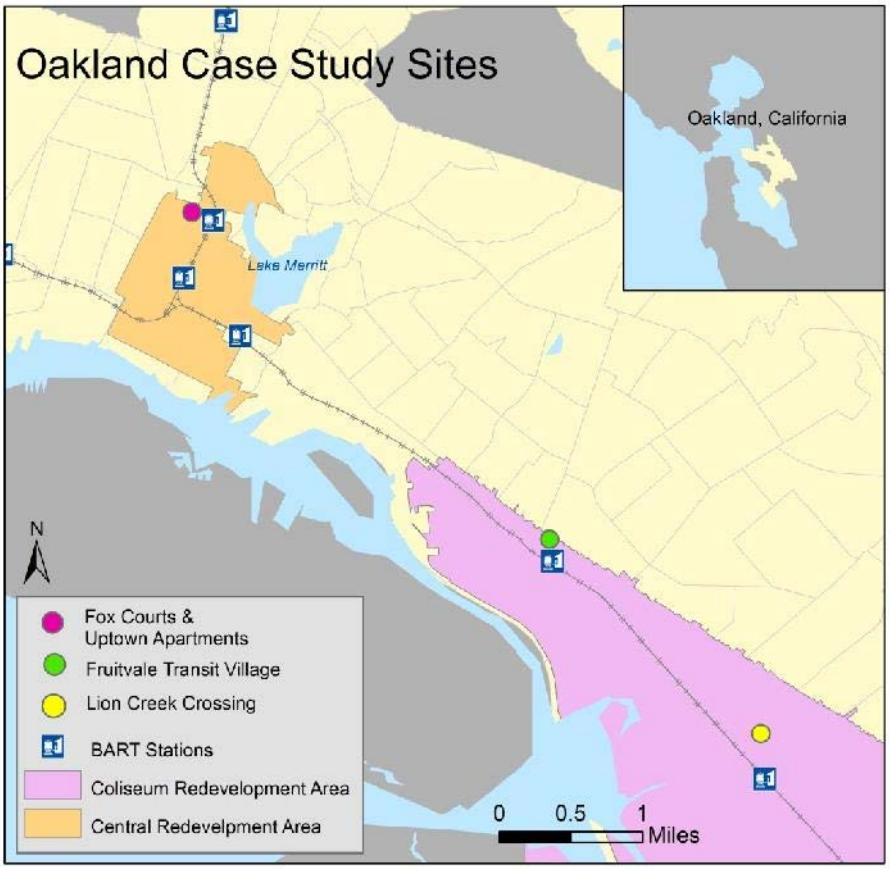

Figure 4: Oakland Case Study Site Locations

FRUITVALE TRANSIT VILLAGE PHASES 1 AND 2 (1991- PRESENT)

Of the three case studies, Fruitvale Transit Village is the most well-known and has the longest running planning and development process. Currently, the Transit Village is recognized by numerous entities ranging from federal agencies to non-profits as an innovative, equitable, and sustainable transit-oriented development. The Fruitvale District is only a few miles south of Downtown Oakland, and was formerly recognized as the

"second downtown" of Oakland during the first half of the twentieth century during its industrial peak. In fact, the name of the district originates from a history of fruit canning in the area that began with German settlers growing fruit orchards in the 1800s (Bruner Foundation, 2005). During World War II, an abundance of economic opportunities brought many African American and Latino workers to the area. However, after the war ended, the area became economically depressed with the closure of factories. This economic decline only worsened during the 1960s following the construction of the elevated train line and surface parking, which resulted in the destruction of many homes and businesses (Orozco, G., Austin, M., and Beale, E 2008). The once thriving commercial center of Fruitvale was nearly nonexistent by the 1980s. Many residents from surrounding wealthier areas used the Fruitvale BART station to commute to San Francisco because of its free parking, despite the area's poor reputation. By 1991, according to the U.S. EPA Brownfields 1997 Assessment Pilot Fact Sheet, the Fruitvale District at the time was a community of approximately 56,000 residents with a minority population of 92% and with more than a third of residents living in poverty.

In 1991, BART was suffering from a decline in transit ridership due to a lack of parking. They proposed building a multilevel structured parking facility on BART surface parking lots between the Fruitvale Station and International Blvd, a popular, yet run-down retail corridor. The site was a nine-acre surface parking lot bounded by 37th Avenue to the east, 12th Street to the north, Fruitvale Avenue to the west and the BART Tracks to the south. Below is a map of the redevelopment:

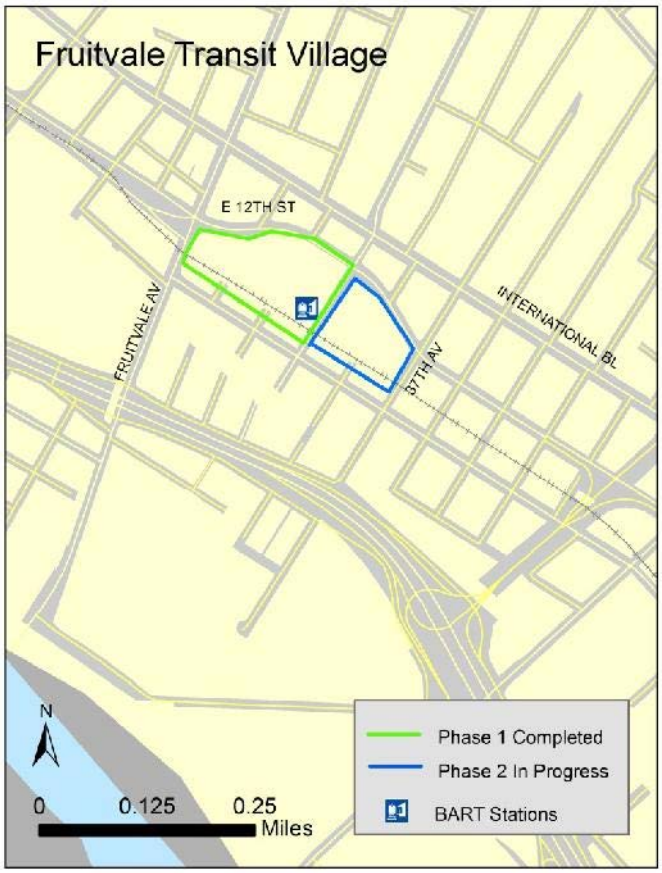

Figure 5: Map of Fruitvale Transit Village

Their proposal was met with strong opposition from residents and the leading neighborhood organization, the Spanish Speaking Unity Council, now called the Unity Council, which has roots in the area since 1964 (HUD, n.d.). Residents expressed concerns about safety since the Fruitvale station had the second highest crime rate of all the BART stations at the time, and they argued that a parking facility would exacerbate crime and neighborhood decline. The Unity Council emerged as a vehicle for the community sentiment and led the charge in rejecting BART's parking lot proposal. BART eventually retracted their proposal after realizing they lacked neighborhood support and agreed to meet with Unity Council to listen to the community's vision for the

transit station, which included building an indoor public market and mixed income residential units in hopes of providing more affordable homeownership opportunities for minority residents (Orozco, et. al, 2008).

The initial U.S. EPA grant money was awarded to the City of Oakland for environmental site assessments and remediation planning. The 1997 site assessment led to the discovery of petroleum hydrocarbons in the soil and ground water as well as several underground storage tanks (U.S. EPA, n.d.), which is not surprising considering the former use of the surface parking lot was auto service and sales related (U.S. EPA, 2003).

Phase 1 construction was completed in 2004 on nearly six acres of the nine-acre site (New Haven-Hartford-Springfield Rail Program [NHHS Rail Program], 2011). Phase 2 of the project is still in progress with a completion date set for 2014 (ESA Associates, 2008). It is likely brownfield revitalization efforts helped catalyze the movement for the Main Street Program on International Blvd in 1996, only one block north of the Transit Village, which has suffered from years of disinvestment and blight (Unity Council, n.d.). Below is a photo of the previous site conditions:

Figure 6: Former BART Parking Lot (copyright FHWA DOT, 2011)

FOX COURTS AND THE UPTOWN APARTMENTS (1999-2009)

The Uptown Area Residential Development is a two-phase, mixed-use project on six and half acres that includes 665 market-rate units in the Uptown Apartments, 80 subsidized units in Fox Courts, a 25,000 square foot park, and commercial space. This brownfield redevelopment has gained recognition for incorporating affordable housing in a project that would probably not have included subsidized units without non-profit advocacy groups and activists demanding for housing for low-income families. Most recently, the Great Community Collaborative (GCC), an organization that promotes mixed-income transit-oriented communities in the Bay Area, toured the development and video-taped interviews with a number of the original stakeholders involved in the process. This led to the publication of the Uptown Development TOD Case Study by Christopher Andrews in 2013, which has greatly helped inform my own research.

Similar to the history of Fruitvale District, downtown Oakland has experienced severe disinvestment due to the loss of manufacturing industries post World War II, the departure of residents to suburbs, and an increase in crime and blight. From past industrial uses, many parcels of land have remained brownfields. In fact, the Uptown development site has been a potential site for redevelopment since the 1980s. Originally, the CEDA planned for big box stores. In the 1990s, plans for an entertainment complex fell through in 1995 and 1997. By this time, CEDA had managed to acquire 44 parcels bounded by Telegraph Avenue to the East, Thomas L. Berkeley Way (or 20th Street) to the North, San Pablo Avenue to the West, and 19th Street to the South. This area expanded to include the parcel behind the Fox Theater, making 18th Street the furthest boundary to the South (Andrews, 2013). Furthermore, it was within walking distance to two BART stations. Below is a map of the redevelopment location:

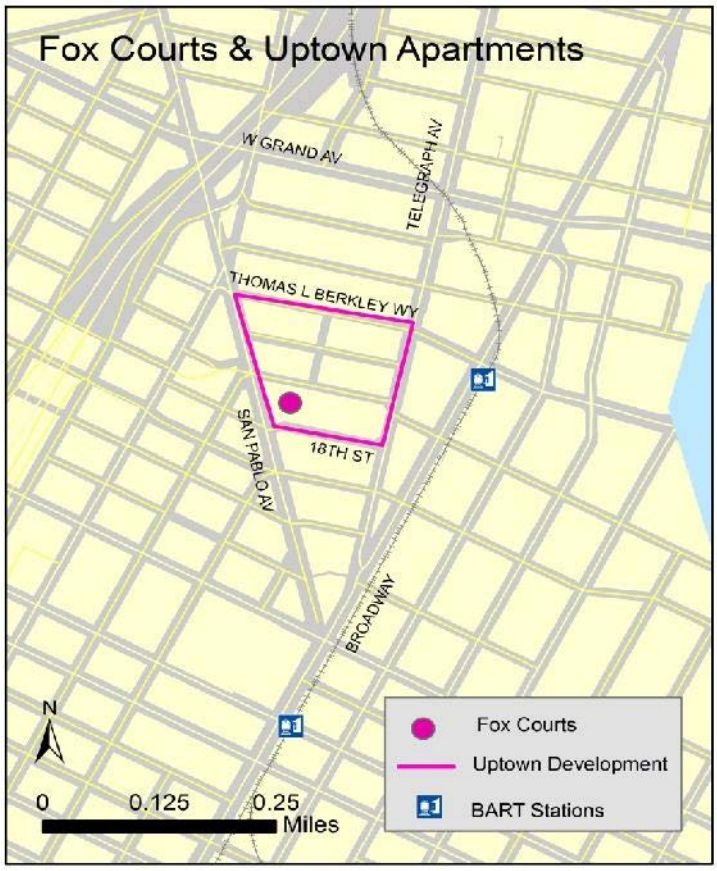

Figure 7: Map of Fox Courts and Uptown Development

Plans for the site took a dramatic turn when Mayor Jerry Brown was elected in 1998 on a political platform to increase the number of residents downtown by 10,000, touted as the "10K Initiative." Rather than build more retail centers, Brown argued that more residents would help stimulate economic activity downtown. His first approved proposal to City Council was to build 600 market-rate units in four different project sites. The East Bay Housing Organization (EBHO) opposed the proposal immediately because they argued that the development should include affordable housing options. Brown dismissed objections from housing advocates about the need for affordable housing and continued to push for a market-rate development that would cater to middle- and upper-

income residents. A number of affordable housing groups, including EBHO and the East Bay Alliance for a Sustainable Economy (EBASE), mobilized to create the Coalition for Workforce Housing that refused to give up their demands for affordable housing (Andrews, 2013).

Ultimately, the redevelopment consisted of two sites: the Uptown Apartments and the affordable housing development called Fox Courts. The former uses of the brownfield beneath the Uptown Apartments were a gas station and a Sears Tire Warehouse. During the environmental site assessment, a plume of toxic gases and liquids was detected 12 feet underground but additional testing determined that the plume would not be harmful to future residents (Andrews, 2013). Across the street from the Uptown Apartments is the Fox Courts 0.88 acre site, behind the Fox Theater and the Oakland Arts School. In the early twentieth century, this site was occupied by homes. After 1928, however, a number of commercial activities ranging from a parking garage to a metal/machine works shop occupied the parcel (U.S. EPA, 2010). In 2006, the Fox Courts site assessment detected petroleum hydrocarbons and low levels of lead. As a result, the remediation consisted of removing the contaminated soil (U.S. EPA, n.d.). Both phases of the development were completed in 2009. Below is a photo of the previous site conditions in 2002 (i.e. mostly parking lots). Parcel 6 is the location of the Fox Courts:

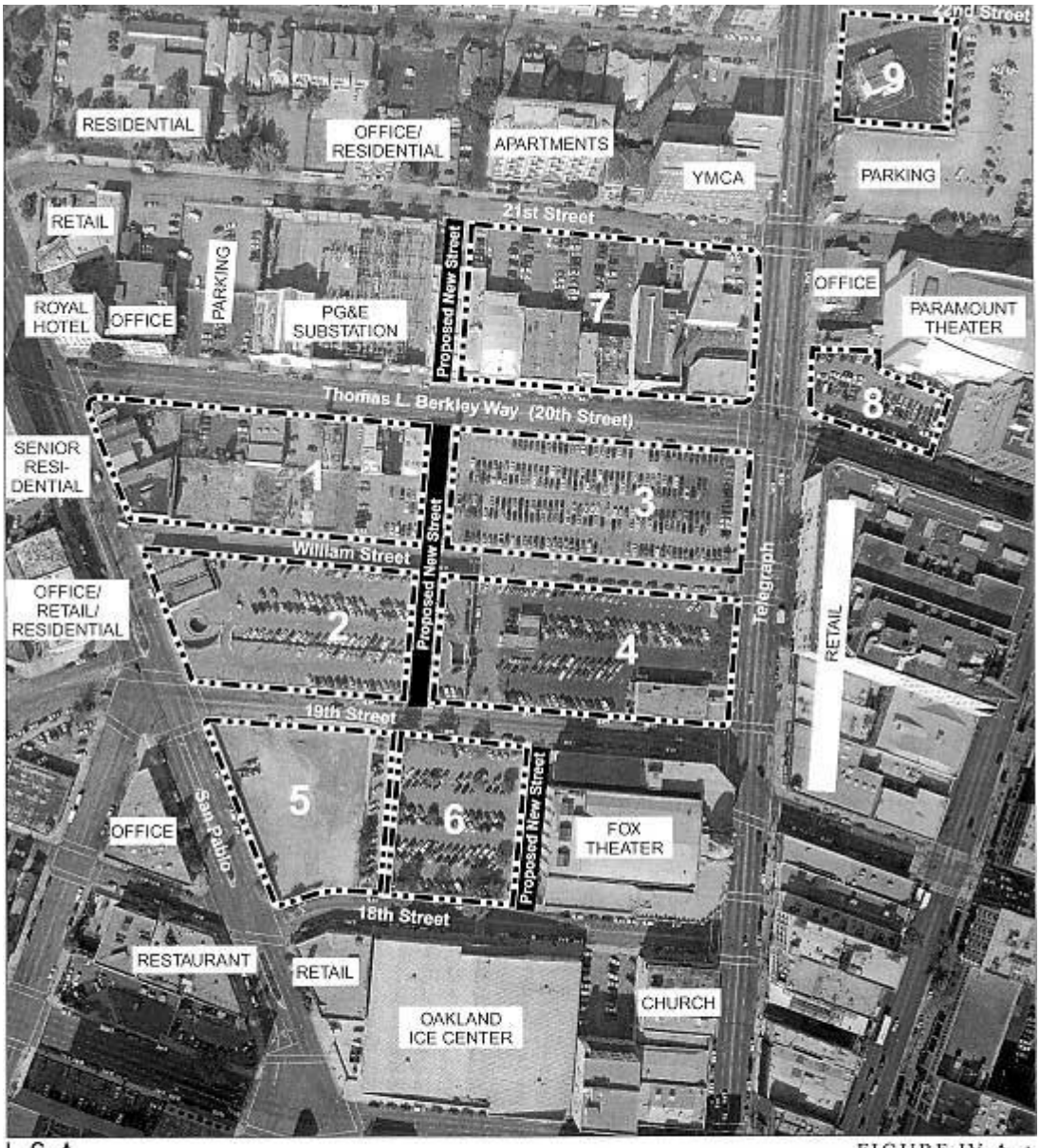

Figure 8: Historic Land Use of Uptown Project Parcels, 2002 (copyright ESA Associates)

LION CREEK CROSSINGS PHASES I-V (2000-PRESENT)

Lion Creek Crossings was a five-phase redevelopment project that began with a Master Plan in 2002 drafted by community members, former residents, and the Oakland Housing Authority. The goal of the redevelopment project (which totaled 22 acres) was to replace contaminated, underutilized land and Coliseum Gardens, a 178-unit public housing project built in 1964, with mixed-income residential units and on-site services. The site is bounded by 66th Avenue to the northwest and commercial buildings to the northeast and 69th Avenue and the Union Pacific Railroad tracks to the southwest. It is only a five-minute walk to the Coliseum BART Station. Below is a map of the redevelopment location:

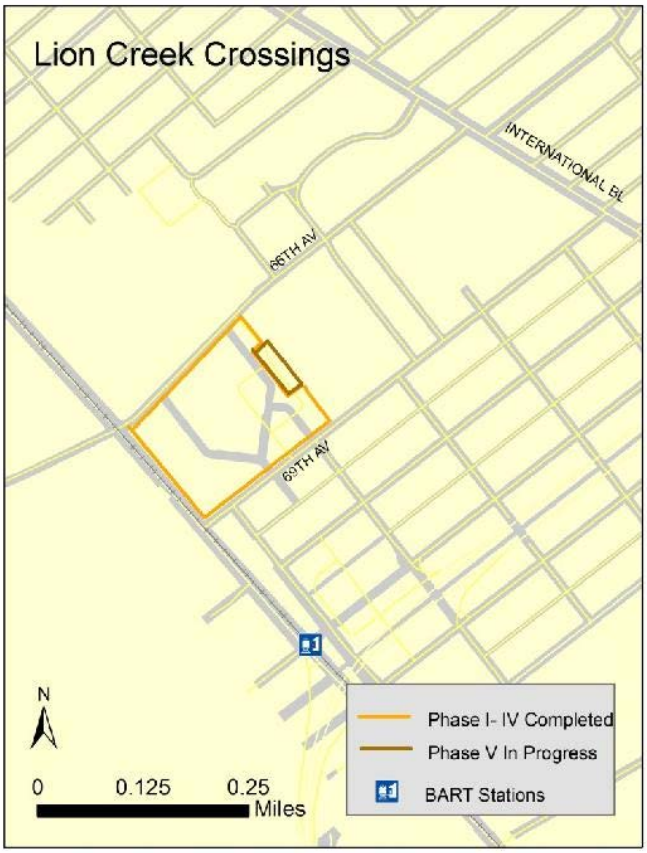

Figure 9: Map of Lion Creek Crossings

Lion Creek Crossings is within the Coliseum Redevelopment Area of Oakland (as is the Fruitvale Transit Village), which was established in 1995 and covers approximately 11 square miles. It is home to several major transit corridors, two BART Stations, two sports arenas, and the Oakland Airport. According to the City of Oakland's webpage, the main purpose of the Coliseum Redevelopment Plan is: "Abating physical and economic blight by redeveloping vacant and underutilized properties and replacing obsolete infrastructure." The Coliseum BART Station area is one of the six target areas of activity, because it still suffers from urban decline and a lack of resources. The area:

> …contains a number of land uses: regional commercial/retail, general industrial, business mix (including Oakland Airport Business Park), transportation (e.g., Coliseum BART station, Oakland International Airport, and Coliseum Amtrak station.), residential, urban open space (e.g., Martin Luther King, Jr. Regional Shoreline Park), and resource conservation area. While rich in use types, the area is woefully underutilized. The local population resides in predominantly low-income neighborhoods with high crime rates and poor educational and job opportunities. (Airport Area Business Association, p. 4)

From the 1970s to the 1990s, this area, as much of East Oakland, was plagued by drug and criminal activity; in fact, it was the center for major drug trafficking during the reign of heroin drug-lord Felix Mitchell, which resulted in many middle-income families leaving the neighborhood (DeFao, 2000). The HOPE VI grant awarded to Oakland Housing Authority (OHA) provided an opportunity for revitalizing the Coliseum BART area. Three different sites, formerly used for both industrial and commercial purposes, were available for redevelopment. The first site was a former acetylene gas plant that was converted to a public park in the mid-1980s. The second site was occupied by scrap metal recycling facilities and a mechanic shop, while the third site had numerous industrial uses

over time, including a recycling company and cherry-brining facility. A portion of the third site also included a City Park, lined flood control channel (Lion Creek), and the Coliseum Garden housing project owned by OHA.

The main contaminants discovered on these sites included waste calcium hydroxide sludge, diesel/motor oil range hydrocarbons, elevated arsenic and mercury, low levels of methane, and dieldrin (ENVIRON, 2004 and Lowney Associates, 2005). Phases I through VI were completed between 2004 and 2011 and planning for Phase V is underway which will include 128 senior housing units (OHA, 2011). Below is a photo showing an example of the former site conditions:

Figure 10: Former Recycling Facility, 2004 (copyright ENVIRON Phase 1 Appendix)

PARTNERSHIPS AND CREATIVE FUNDING STRATEGIES

I. Fruitvale Transit Village

With the longest running planning and development process out of all three case studies, Fruitvale arguable has the most complex set of partnerships and funding mechanisms. The major community partner and not-for-profit developer was the Unity Council, a community development corporation established in 1964 that has worked to support the Fruitvale community through affordable housing, local business development, and childcare (Policy Link, 2002). City agencies included BART and the City of Oakland and federal partners were the Federal Transit Administration, U.S. Department of Housing & Urban Development (HUD), and the U.S. EPA. Lastly, the National Transit Access Center, University of California at Berkeley contributed to the community design workshops.

Financing the project took numerous public and private funding sources partially due to the fact that the Unity Council did not have access to the same types of resources as a private developer. These funding sources included "a combination of grants, loans, and land and equity capital from seven different entities, including private banks, the City of Oakland, a federal housing program, and the Unity Council." (U.S. Department of Transportation, Federal Highway Administration [U.S. DOT FWHA], 2011). In 1992, the Unity Council was awarded an $185,500 Community Development Block Grant (CDBG) from the City of Oakland for conducting a participatory planning process with residents and stakeholders to establish a vision for the area. The U.S. Department of Transportation also awarded the project a $470,000 planning grant in 1993 primarily for economic, traffic, and engineering studies of the site (Bruner Foundation, 2005).

Funding challenges occurred when BART required the Unity Council raise $12.7 million to build a new parking facility to replace the 500 spaces lost due to the redevelopment. Fortunately, the Unity Council was able to obtain a "$7.65 million grant from the Federal Transit Administration, along with $4.1 million from the Alameda County Transportation Improvement Authority (ACTIA), and $975,000 from a commercial lender." (Kralovich 2012, p. 26).

Obtaining additional funding for brownfield site assessment and cleanup was also crucial prior to the construction of Fruitvale Transit Village. In 1997, the U.S. EPA awarded $100,000 to the City of Oakland as a pilot grant for site assessments and planning for remedial options. Again in 2003, the U.S. EPA awarded BART with $200,000 to clean up land contaminated by petroleum due to underground storage tanks at the 4-acre Fruitvale Transit Village site (U.S. EPA, 1997 and 2003). Furthermore, it was with the help of La Clinica de la Raza that Unity Council was able to obtain the public and private funding ($90 million) required to build the Village. This alone was a complex and creative process of combining 31 sources of funding (Orozco, et al, 2008).

The first of many partnerships to come occurred in 1993, when the Unity Council and the National Transit Access Center, University of California at Berkeley, joined together to lead a community design symposium. As the Fruitvale Transit Village gained momentum, the Unity Council, BART, and the City of Oakland created a Memorandum of Understanding which gave planning and development process oversight to the newly formed Fruitvale BART Transit Village Policy Committee. The Committee would consist of two Unity Council representatives, one BART representative, the Mayor of Oakland and the City Council Representative for Fruitvale (Bruner Foundation, 2005 and U.S. DOT FHWA, 2011). La Clinica de la Raza (the largest employer in Fruitvale at that time) was also involved in meetings with the Policy Committee (Orozco, et al, 2008).

The formation of this Committee was critical to the Unity Council's success in negotiating new territory during that time: inner-city infill development led by a non-profit. In 1996, the Unity Council decided to create a nonprofit subsidiary corporation called the Fruitvale Development Corporation (FDC) rather than hire an outside developer for the Village (Orozco, et al, 2008). In addition, they were able to convince BART to select the FDC for sole-source development rights rather than initiate a competitive bidding process, which was the normal protocol for BART (Kralovich, 2012).

Ultimately, the partnership the Unity Council formed with the city and transit agency was successful because both entities recognized the potential to improve economic and social conditions in Fruitvale District. The City of Oakland realized they could increase property tax revenues, revive economic development, and improve safety concerns in a declining neighborhood, and BART determined they could increase ridership (U.S. DOT FHWA, 2011).

II. Fox Courts and The Uptown Apartments

The major partnerships involved in the Fox Courts project were between the Coalition for Workforce Housing, the East Bay Community Foundation (EBCF), CEDA, and Forest City (the developers). The Coalition for Workforce Housing led the opposition to Mayor Brown's proposal for market-rate housing while EBCF worked with CEDA as a "middle man" between Forest City and the Coalition, to ensure affordable housing would be part of the future plans for development.

Just as the Fruitvale Transit Village pulled together a complicated set of financing tools, the Fox Courts and Uptown Apartments also utilized a number of different funding strategies that included support from the Oakland Redevelopment Agency (ORA),

CEDA, the City of Oakland, Low-Income Housing Tax Credits (LIHTC), U.S. EPA, Tax-Exempt Mortgage Revenue bonds, and Forest City equity (Andrews, 2013).

Both CEDA and the City provided funding for the land assembly and acquisition, which were the most costly piece of the project financing since prior land speculation had driven up the cost of the properties. These entities also funded a "zero-cost 66 year ground lease for the project site, gap financing, property tax reimbursement" in addition to brownfield assessment and the Fox Square Park (Andrews, 2013, p. 8). The Forest City developers contributed through a combination of $12 million in LIHTC and $160 million in tax-exempt multi-family mortgage revenue bonds, which helped promote the affordable housing component. The bonds required either 20% of the units to be affordable to households with incomes at or below 50% area median income or 40% of the units to be affordable to households with incomes at or below 60% of area median income (Andrews, 2013). In addition, money from the County, City, and State helped fund the Fox Courts development.

In 2003, the U.S. EPA awarded ORA with a $200,000 Brownfields Assessment grant in addition to a $200,000 Brownfields Cleanup grant to prepare the Fox Courts site for redevelopment (U.S. EPA, 2010). ORA would not have obtained the U.S. EPA grants had it not been for a $20,000 grant provided by the EBCF to the Center for Creative Land. The EBCF's exploratory grant was not earmarked for any specific project cost, which made it useful for addressing immediate issues like the brownfield remediation and a third-party market analysis study to demonstrate potential profit gains to community groups (Andrews, 2013).

It was EBCF that led seven developers through a tour of the Uptown site in 1998. EBCF advocated for "better land use as a means to disrupt cycles of poverty and encourage environmentally responsible community investments and developments."

(Andrews, 2013, p. 6) Forest City Developers was on the tour and ended up being the only developer with a serious interest in developing the complex site. By 1999, the City of Oakland and Forest City had developed a negotiating agreement for the site. After this process, EBCF offered to financially support the project and serve as an intermediary between the City and community groups to make certain all interested parties had a say in the planning process. Similar to the Fruitvale case study, this partnership led to a "Cooperation Agreement" in 2004 between the City and Coalition for Workforce Housing and several other agreements with Forest City. This was the first form of a Community Benefits Agreement enacted in the City of Oakland and it agreed to a 100% affordable housing development in the Uptown project that would be financed by the City (California Redevelopment Agency, n.d.). The agreement also stipulated that 25% of the units in the Uptown development would be affordable with the caveat that the Coalition would not interfere with the Uptown development progress (Andrews, 2013).

Additional agreements advanced by the EBCF and CEDA included a "Six Steps to a Greener Downtown" which resulted in the Uptown apartments becoming the first LEED Silver certified residential development in Oakland. Furthermore, in exchange for a 25,000 square foot park between The Uptown and Fox Courts funded by the City, Forest City agreed to maintenance and upkeep responsibilities (Andrews, 2013).

Finally, the ground lease agreement between Forest City and the City of Oakland was one of the most creative partnerships in terms of land ownership. Brownfield remediation became a very expensive issue when the toxic plume was discovered 12 feet below the soil; however, after discovering that the toxicity would disappear over time and not be harmful to future residents, the City decided to take ownership of the land and issue a ground lease to Forest City which avoided the costly process of remediation.

Forest City would then have the option to purchase the land after the 66-year term (Andrews, 2013).

III. Lion Creek Crossings

The Lion Creek Crossings redevelopment was forged through several formal partnerships, rather than developed through a grassroots organizing effort such as in the case of the Fruitvale and Fox Courts projects. The partners involved in the redevelopment included the OHA, City of Oakland, East Bay Asian Local Development Corporation (EBALDC), Related Companies of California (Related), several state housing agencies, BART, HUD, and the U.S. EPA. Notably, the non-profit developer, EBALDC, had over 30 years of experience building affordable housing for low-income residents in partnership with on-site social services in Oakland.

In 2000, the OHA received $34.5 million for a Hope VI grant from HUD for the revitalization of a public housing complex called Coliseum Gardens (OHA, 2010). Affordable housing was one of the main provisions in the revitalization of Coliseum Gardens since the main source of funding for the project was a HOPE VI grant. Additional grants for affordable housing included $10 million from the California Housing Finance Agency, $49.5 million from the State Housing Community Economic Development Funds, $3.5 million from CEDA, and state tax credits. In 2004, the U.S. EPA awarded the OHA with three cleanup grants totaling $600,000 for three sites of contaminated property (U.S. EPA-CBC, 2012). Similar to the Fox Courts project, in 2005, $28.5 million in mortgage revenue bonds was approved for Phase II of the development (OHA, 2010). Another $200,000 U.S. EPA cleanup grant was awarded to the OHA in 2009 for additional remediation of the Phase IV site.

After receiving the HOPE VI grant, the OHA solicited partners to help with the revitalization project through a competitive Request for Proposal process and chose EBALDC and Related as developer/partners (City of Oakland, 2004). A number of agreements were drawn up between 2001 and 2004 in order to establish funding sources and site specific planning for the redevelopment. For instance, OHA and the City of Oakland agreed to a Memorandum of Understanding in order for OHA to provide funding for planning within the Coliseum BART Station Area Plan Study. This process led to a new master site plan for the Coliseum Gardens with community input that restored Lion Creek and reconfigured the park so that it was in the middle of the development. Furthermore, in 2003, the Oakland City Council passed a resolution that formally agreed to the Coliseum BART Transit-Oriented Development Concept Plan. Lastly, a Master Development Agreement was signed in 2003 between all OHA, the City, EBALDC, and Related in order to establish pre-development requirements ranging from demolition to park planning with the community (City of Oakland, 2004).

PARTICIPATORY STRATEGIES:

I. Fruitvale Transit Village

The main force behind community participation was the well-organized and established community development organization in the Fruitvale area, the Unity Council. This organization was able to mobilize residents and business owners in organizing against BART's proposal to build a parking structure. They argued that the future plans for the transit stop should be shaped by a participatory planning process with the community's input (Orozco, et al, 2008). Jeff Pace noted that Unity Council truly spearheaded the outreach process without help from the City of Oakland or BART (Interview, February

22, 2013). The design symposium held in 1993 brought together 60 community leaders, including the Mayor Elihu Harris and BART Director Margaret Pryor, to brainstorm ideas for the Village with five architectural firms. After this kick-off event, a number of community meetings ensued to continue planning for the development.

In 1995, the Unity Council held several workshops in the spring and summer for the community in order to identify the needs of the community, set goals for the Village, and come to a mutual agreement on a site plan. Mr. Pace noted that the visioning charrettes, conducted in English and Spanish, led to a joint vision for the development with input from the residents and other agency partners (Interview, February 22, 2013). From these meetings, Squazzoni (2008), as quoted by the Orozco, et al, reports that community participants:

> identified crime, lack of retail business and community services, and the negative image of the area and the lack of connection between the station and the community as strategic issues to be dealt with and as problems to be solved. Other issues to be taken into account were job creation, quality of the environment, the availability of rental services in the community as well as affordable housing. (2008, p. 82)

Furthermore, Jeff Pace stated that reclaiming the brownfield for uses that would support the local economy was of great importance to the community (Interview, February 22, 2013). At the final workshop, the community was given the choice between two site plans for the future Village development (U.S. DOT FWHA, 2011). One major benefit of having the community take ownership of the site plan is it was easily passed by City Council without resident objections. Ultimately, it was the neighborhood that decided the development would be mixed use and mixed income, that it would include a pedestrian pathway from the BART station to 12th Street, and have office and retail on the upper floors. Although the community named affordable housing as a priority, they

decided against a 100% affordable housing development because the area was already suffering from poverty and residents did not wish to further concentrate poverty. Similarly, Unity Council did not view low-income housing as a first priority because median rent prices in the area were still affordable to low-income residents in 2000 (Kralovich, 2012).

It was quite remarkable the extent to which BART accommodated the community's demands to be involved and their willingness to give power to a community organization. This is largely due to the fact that the Unity Council had full support from the neighborhood and the expertise to obtain funding for the project (Orozco, et al, 2008).

II. Fox Courts and The Uptown Apartments

Due to an active and vocal group of housing advocates in Oakland, there was considerable outreach on the part of CEDA and EBCF in involving stakeholders during the planning process from housing advocates to environmentalists. Through the Cooperation Agreement, negotiations and communication between community groups and Forest City were also made more feasible. For instance, the EBCF was able to require Forest City to advertise community meetings to the diverse population in the area including Asian, Latino, and African Americans through different channels of communication. Furthermore, all "meeting documents were provided in multiple languages and translators were present at meetings." (Andrews, 2013, p. 6)

The formation of the Coalition for Workforce Housing also encouraged community participation by promoting meetings to its members, local residents, and business owners. The Coalition's visibility through media statements and gentrification tours during the process also gave them political clout and raised awareness to political leaders that downtown Oakland needed to be accessible to local low-income residents

and family households (Andrews, 2013). With the help of the EBCF, the process remained opened to all stakeholders by conducting meetings in safe spaces where people would feel comfortable speaking about their vision for the development.

Overall, community participation in the Uptown development was actively pursued in decisions surrounding project design review, brownfield cleanup, and affordable housing. The project design review consisted of two community meetings facilitated by the developer for community input on pedestrian-oriented designs. The brownfield cleanup funding provided by the U.S. EPA required a meeting to inform the community of contaminants detected at the site as well as the chosen remediation technique. A public hearing in which the Remedial Action Plan/Risk Management Plan was presented to and approved by the State of California's Regional Water Quality Control Board was also mandated (California Redevelopment Agency, n.d.). Lastly, the decision over the percent of affordable housing units in The Uptown development, in addition to the household income limits sparked much debate amongst affordable housing advocates and community members. Ultimately, it was this controversy that fueled more community involvement and led to the Cooperation Agreement to establish a Community Benefits Agreement (California Redevelopment Agency, n.d.).

III. Lion Creek Crossings

The foundation for the Lion Creek Crossings redevelopment was a master plan drafted by the community, and this initial public involvement came to influence many important aspects of the revitalization Department of Toxic Substances Control project. After a draft Removal Action Workplan was submitted to the Department of Toxic Substances Control (DTSC), a fact sheet was presented to the public for review and comments were encouraged during a 30-day window (the flyer was in English and

Spanish). Prior to making a final decision, DTSC wanted feedback on the type of clean-up desired by the community, which was an important step in making future and existing residents feel safe and satisfied with the redevelopment.

In the Voluntary Cleanup Agreement between DTSC and Related, there was a specific section that required a variety of public participation activities. For instance, DTSC asked for a report on the community profile, community concerns, and nearby sensitive receptors (homes, schools, day care facilities, churches, etc.) (CA EPA DTSC, 2005). According to Katharine Hilf, current Project Manager with DTSC (and also at the time of the redevelopment), "DTSC's public participation specialist worked with EBALDC and the City of Oakland to ensure that the community was informed and updated on the project. There were several public meetings set up to keep the community informed of the progress of the project at the various stages. Part of DTSC's cleanup also involved fact sheets, public notices, work notices and a thirty day public comment period before approval of the Removal Action Workplan and implementation at the three grant sites." (Hilf, personal communication, 2012). In addition to Hilf's assessment of public involvement, Ener Chiu, Senior Project Manager with EBALDC, also reflected on the level of local community participation: "We did a lot of charrettes and hosted numerous public meetings. For instance, in designing the park, our landscape architect hosted bus tours around the Bay Area to look at parks in other cities so that residents could get some perspective about what made parks successful in places beyond their neighborhood. We took a lot of their suggestions in giving direction to the designers who eventually planned out the park." (Chiu, personal communication, 2012) This public feedback on design strategies highlights the importance of meaningful public involvement with the existing community and the new residents of Lion Creek Crossings. According to EBALDC Executive Director, Jeremy Lin, "From the development partnership, to EBALDC's

continued collaboration with Havenscourt schools, and leadership from the residents, the transformation at Lion Creek Crossings demonstrates that working together leads to community development success – and the neighborhood is healthier as a result." (Related, 2012) Several instances throughout the brownfield redevelopment process demonstrated meaningful public engagement efforts including the Master Site Plan, public feedback on clean-up strategies, charrettes and public meetings held by EBALDC, and ongoing meetings that strive to best meet the community's needs.

FLEXIBILITY & PERSEVERANCE OF PARTNERS THROUGH EXTENDED DEVELOPMENT

I. Fruitvale Transit Village

There were a number of challenges encountered during a longer than anticipated planning and development process for the Fruitvale Transit Village. Between 1991 and the groundbreaking ceremony in 1999, there were hurdles involved with land assembly and how to provide one-for-one parking replacement in accordance with BART policy. According to Jeff Pace, COO of Unity Council, back in the early stages of the project, no one anticipated the Village taking 10 years to build. He credits Unity Council's ability to adjust to changing facts on the ground for enduring a lengthy development process. Mr. Pace also mentioned that the unwavering commitment of Unity Council is based on the understanding and belief that their work did not end when the project was finished being built. There was additional community development required that meant the Unity Council had to be in it for the long haul (Interview, February 22, 2013).

Despite a time consuming process, the partnership with BART and the City helped support the difficult process of land assembly. The first barrier was how to obtain single ownership over the multiple parcels needed for the Village with BART's policy of

maintaining a certain amount of acres surrounding each of its stations. It took about two years to develop a "land swap" idea in which BART agreed to provide the FDC with a 96-year lease of the Transit Village site in exchange for a site owned by the Unity Council behind the station. In addition, sites near the station owned by the City of Oakland were also given to BART (Orozco, et al, 2008).

Another piece of the land assembly process occurred when addressing the need to create a pedestrian friendly environment for the proposed development. A right-of-way was removed by the City to narrow East 12th Street to one lane and a transit oriented development zoning ordinance was passed in 1996 that impacted areas around all BART stations. This zoning ordinance limited additional parking, enabled higher density housing, and permitted a mix of uses (U.S. DOT FWHA, 2011).

The final major challenge was pulling enough funding together to cover the cost of a new structure parking facility for BART riders. As previously described, this process of obtaining funding through the FTA and local agencies took about two years (1999-2001); however, BART agreed to give the Unity Council development rights over Phase II of the Village which included surface parking lots between 35th and 37th Avenues. Early development rights of this land provided additional funding to the Unity Council to build the BART parking structure because they were able to generate revenue from paid parking on the surface lots before development of Phase II took place (Orozco, et al, 2008).

II. Fox Courts and The Uptown Apartments

The planning and development process of this project may not have taken as long as Fruitvale; however, considerable perseverance and flexibility was still required by all stakeholders. One of the greatest challenges of this development was that it went through

extended negotiations during the planning phase before a final proposal was agreed upon. Prior to the Cooperation Agreement, there was significant pushback from Mayor Brown and City Council to acknowledge the demands of the Coalition for Workforce Housing, despite a successful partnership between CEDA and the Coalition. This is largely the reason why it took six years to agree to a final proposal.

Between 1998 and 2004, Forest City Developers drew up a number of proposals for the City of Oakland, each time attempting to reconcile concerns presented by various stakeholder groups. Fortunately, Forest City had "deep pockets and patient capital" and an accommodating business model which is to "own and manage developed properties and, as a result, holds a greater stake in maintaining community and stakeholder relationships." (Andrews, 2013, p. 5)

The final proposal for the development was agreed upon in 2004. Still, it took an additional two years to acquire all the necessary parcels (44 in total) for the development. Five property owners refused to sell to CEDA and therefore, eminent domain was utilized to force these owners to move with only a few weeks to spare before groundbreaking. Overall, agreeing upon affordability levels and acquiring land resulted in a longer than anticipated pre-development process; however, the success of the project was due to the commitment of all parties involved to work with one another and agree to a shared vision for the development.

III. Lion Creek Crossings

Although the planning and development process of Lion Creek Crossings has taken over 10 years, the length of time is mostly due to the number of phases involved, in addition to the 2008 recession which altered the plans for Phases IV and V. According to Chiu, there was little opposition to affordable housing by the residents. Also, other

development types would not have been feasible in the area. Fewer complaints from residents may have also had to do with their involvement from the beginning during the master site plan process to design the development.

There were challenging economic constraints during the redevelopment process. After the 2008 economic recession, home buyers were experiencing tremendous difficulties obtaining loans. As a result, homeownership units that were to be sold at below fair market value in Phase IV were no longer feasible. In 2011, Related, EBALDC, and OHA were in deliberations whether to build more affordable rental housing in place of homes for sale. The latest proposed plans for Phase V are to build 128 senior housing units (rather than the original 28 condominiums) as well as divert Lion Creek to a new creek bed. In addition, plans for a grocery store made before 2008 had to be put on hold; however Chiu mentioned that a grocery store is expected to open next door to the site in the near future.

CURRENT AFFORDABILITY CONDITIONS

I. Fruitvale Transit Village

This redevelopment has transformed into a mixed-use center for retail, apartments, and offices thanks to the efforts of local residents. The site was originally proposed to serve as a BART parking lot, but the community proposed their idea of creating a mixed-use village and worked with BART to achieve this vision. Phase I of the Village was completed in 2004 and is now a pedestrian and bicycle friendly area with 47 mixed-income housing units (20% of rental units are affordable) for residents earning between 35 and 80% Area Median Income (AMI). In addition, there are 115,000 square feet of community services facilities (a De Colores Child Development Center, La

Clinica de la Raza, the Fruitvale Senior Center, Head Start, and the Cesar Chavez Library) and office space, and 40,000 square feet of retail (NHHS Rail Program, 2011). Furthermore, the Village is responsible for creating 500 jobs on-site (although 100 came from neighboring cities). The redevelopment has also generated approximately $500,000 in annual taxes and sales taxes (Jeff Pace, Interview, February 22, 2013). Below is a photo of the Phase I development:

Figure 11: Fruitvale Transit Village Square (copyright Erik Fredericks, 2006)

Phase II of the redevelopment plans for 275-units in three four-story, mixed income apartments wrapped around a five-story parking garage (ESA Associates, 2008).

Figure 12: Proposed Site Plan for Phase II of Fruitvale Transit Village (copyright, Bruner Foundation, 2005)

II. Fox Courts and The Uptown Apartments

The Uptown Apartments are comprised of three mid-rise buildings on 14 acres of land with a total of 665 rental units. These buildings have studios to three-bedroom options available. Out of those 665 units, 80 are designated as affordable housing in the Fox Courts, developed by the Resources for Community Development (RCD). The qualified income range is from 30-60% of AMI. By 2009, the development was completed (Sheldon, 2009). The 80 units also have studio to three-bedroom options and 10 units are designated for special needs residents. A number of on-site services are provided at the Fox Courts including "case management, information and referrals, after school youth programs, educational workshops, computer lab and classes and employment and jobs skills training." (Mackey, 2009) Below is a photo showing the Fox Courts:

Figure 13: Fox Courts Apartments (copyright Pyatok Architects)

III. Lion Creek Crossings

Each of the phases within Lion Creek Crossings incorporated different affordability levels and housing types which resulted in a mix of income levels, ranging from 20 to 60% AMI. Three hundred and sixty seven of the units are publicly assisted through LIHTC and units range from one to five bedrooms to accommodate multiple generation families (U.S. EPA-CBC, 2012). Phase I of the development occurred between December 2004 and May 2006 and included 115 apartments (16 that were designated disabled or disabled accessible), space for community organizations (Head Start and the YMCA), a 5.7 acre park, and restored creek. From May 2006 through August 2007, 146 additional units were built in accordance with Phase II. Phase III occurred between November 2006 and May 2008 which involved 106 additional units. Below market-rate housing was proposed for Phase IV; however, the economic downturn prevented this type

of development and instead 72 townhouses for families that ranged from one to three bedrooms were built by 2010. Phase V includes 128 units of senior housing and planning is underway in 2012. The project was able to provide 157 units of public housing (out of the original 178 units), 44 units with Section 8 project-based voucher assistance, and a total of 439 affordable rental units. Furthermore, the term for public housing is a minimum of 40 years. The remaining public housing units were placed in a separate development in Oakland (OHA, 2010). Below is a photo showing the development:

Figure 14: Looking Northeast over the creek at the Lion Creek Crossings Apartments, February 1, 2013

LESSONS LEARNED

Each of the three case study sites experienced multiple planning and development stages that have taken longer than anticipated. This is particularly challenging for economic forecasts of each project. The Fruitvale Transit Village started in the 1990s

when the economy was growing in the Bay Area. However, in the early 2000s, the area was hit by the dot-com bust which lowered rental prices and the amount of revenue projected for the Village. Similarly, the Lion Creek Crossing redevelopment had to alter plans for Phase IV which originally included below-market rate housing. After the 2008 recession and housing bubble collapse in the Bay Area, it was extremely challenging for low-income families to obtain loans; therefore, townhouses were built instead. Although the Fox Courts redevelopment did not encounter major economic issues that altered the project outcomes, the process leading up to the site plan was extensive due to prolonged negotiations with regards to housing affordability levels. This lengthy process required the developers to create multiple financial analysis reports between 1998 and 2004 to account for the fluctuating economy (Andrews, 2013).

In order to work through challenging economic circumstances, each redevelopment utilized creative financing and prior experience with affordable housing development to see the project through. Interestingly, Lion Creek Crossings and Fox Courts had both a public and private developer which may have reduced the length of time it took to complete each project. In contrast, the Fruitvale Transit Village only had a non-profit developer with less capital and experience to rely on.

A critical component of all three projects was strong leadership commitment to achieve the vision of each project. Both the Fruitvale and Lion Creek Crossings projects are located in the Coliseum Redevelopment Area of Oakland, which has been targeted for revitalization since 1995 after years of decline in East Oakland. Similarly, the Fox Courts area was targeted for redevelopment since the 1980s when ORA first began purchasing parcels. The foresight to accumulate land in downtown was critical in the transformation of an underutilized area. Although Mayor Brown opposed affordable housing in the Uptown Development, without his 10K Initiative pushing for more residents downtown,

this area could have become a new baseball stadium or all retail complex (Andrews, 2013).

Active participation by community members and advocacy groups was another key element to accomplishing goals, especially pertaining to affordable housing. The Fruitvale and Fox Courts projects had the strongest grassroots advocacy movement for the community to have a say in project outcomes. This was largely possible because of Unity Council's leveraging its position as the "voice" of the community and demanding a seat at the table with BART and the City of Oakland. This was formalized through a Memorandum of Understanding. Similarly, affordable housing advocates gained significant power by creating the Coalition for Workforce Housing and joining with the EBCF to raise awareness about the need for affordable housing in Oakland, especially in downtown. With the Cooperation Agreement, these groups achieved their goal of making affordable housing a requirement for the redevelopment. Without the leadership from an influential community development corporation and foundation it is less likely that the community would have played a part in design and development decisions.

Although Lion Creek Crossings did not have a partner community organization during the redevelopment process, it is possible that early neighborhood outreach and participation meant there was no need for a community organization to step in because EBALDC was already handling resident concerns properly. Furthermore, this was the only site that redeveloped a prior public housing project, and with HOPE VI funds, a mixed income development was required. The important outcome of this project was the fact that it did not displace any residents, even with the mixed-income stipulation. Residents had the choice to return to the Lion Creek Crossings site or another nearby public housing project or use a voucher to move elsewhere. This shows the commitment

of EBALDC and partners to creating an inclusionary development unlike many other HOPE VI projects around the country (Pitcoff, 1999).

Chapter 5: Conclusion and Recommendations

With Oakland's success in incorporating affordable housing in brownfield redevelopments, the City has taken positive steps towards addressing the issue of housing affordability. As cities across the nation experience growing gentrification pressures with more middle and upper income people returning to the urban core, it will be critical for Oakland to continue implementing inclusionary brownfield redevelopment projects and hopefully serve as a model for other cities to follow suit. The inclusionary model incorporates mixed-income housing with a sufficient quantity of long-term affordable housing based on income levels of the surrounding residents. This will be a challenge going forward because the Redevelopment Agency of California was dissolved in 2011, which eliminated CEDA due to a severe budget deficit in California. Previously, this agency served as a primary partner in brownfield redevelopment projects; however, with a budget gap of approximately $20.3 million in FY 2012-2013, significant challenges lay ahead (CEDA, n.d.). Fortunately, CEDA has undergone a reorganization that resulted in four new offices that now handle redevelopment responsibilities.

Current brownfield redevelopment projects underway include the second phase of Fruitvale Transit Village and the final phase of Lion Creek Crossings. Furthermore, the City of Oakland is conducting brownfield assessment grants in the Coliseum Area, at the Foothill-Seminary intersection, and in West Oakland. The end of Oakland's Redevelopment Agency means that future brownfield revitalization projects that include affordable housing will require more creative financing techniques, assembling land parcels, and obtaining brownfield grant funding. Going forward, projects will rely more on developers assembling land parcels which can be a long and expensive process. In light of these challenges, it will be critical for a variety of public and private entities to

work together to obtain funding from multiple sources, ranging from grants for non-profits to multi-family mortgage revenue bonds for private developers. Oakland should continue to clean up brownfield sites to levels that are safe for residential use (even if in the short term they are for commercial or industrial uses). By cleaning brownfields to the highest possible standard, there is less likelihood of toxins contaminating soil and groundwater. Furthermore, if a brownfield site is cleaned to residential standards, it has the flexibility to begin as a commercial development and 20 years down the road, convert to a mixed use residential development. Long term strategic planning for future brownfield uses is essential because housing could become more feasible as the economy changes (Kibel, 2003).

Lastly, two of the successful brownfield redevelopment projects discussed in this report (Fox Courts and Fruitvale Transit Village) included an agreement between community organizations and the City. In light of this fact, community benefit agreements should be considered a more viable option for future brownfield projects, particularly for ensuring affordable housing is incorporated. By providing a seat at the decision making table for residents, the community's needs are more easily met and there is greater consensus about the vision of the project.

Brownfield revitalization strategies will differ for each site depending on the community's needs and the resources available for cities and states. Nevertheless, there are valuable takeaways from the three Oakland case study sites for other neighborhoods and cities to adapt to their own brownfield sites. One of the necessary components for including affordable housing on brownfield redevelopments is establishing long-term affordability. Often this is required for projects that utilize funding from HUD; however, regardless of the funding requirements, this should be a priority in order to combat rising land values which are likely to occur after any form of neighborhood revitalization. One

way to increase the likelihood that affordable housing will be included in a brownfield redevelopment is for housing group advocates, foundations, and the public to collaborate and be vocal with the city and other agencies about the need for subsidized housing. When possible, these groups should form a community benefits agreement or other formal document with the city and developer outlining the expectations and requirements for the project. It is especially beneficial if an influential and well-established community organization acts as a partner in the revitalization process because they tend to have the trust and support of the community and be more in tune with their needs.

Similar to the recommendation for the City of Oakland, it is worthwhile for more cities to clean up brownfields to residential standards because it benefits both the environment and the health of surrounding communities. It also makes land use opportunities more flexible in the long-run. Although this may involve an initial financial burden, as demonstrated in the three case studies, small amounts of funding can be leveraged in order to win much larger grants for brownfield assessment and clean up. Additional funding strategies for brownfield redevelopment that will hopefully continue to be funded by the federal government are the mortgage revenue bonds. Since brownfield redevelopments can span for a decade or more, developers must exhibit a strong commitment to managing properties properly and fostering trustworthy relationships between the community and other stakeholders.

Overall, a commitment to social equity is required for brownfield redevelopments when cities choose to re-invest in formerly underutilized and contaminated areas. Too often equity is overshadowed by economic growth and environmental issues, particularly with urban revitalization efforts. By incorporating affordable housing in brownfield redevelopments, cities send a strong message of inclusivity and social equity to all residents, regardless of income. Agyeman's theory of "just sustainability" demonstrates

the importance of integrating race, class, and justice with environmental issues for future sustainable developments. He urges environmentalists and social justice advocates to strengthen their respective sustainability and environmental justice movements by joining forces and establishing shared goals for the city. Similarly, Fainstein (2010) calls for equity, diversity, and democracy to achieve a "just city". By including affordable housing in all brownfield mixed-use redevelopments, cities can further social justice goals alongside economic prosperity goals. This is a necessary nonreformist reform tactic in order to prevent segregating our cities by the "haves" and "have nots". Ultimately, the strategy of inclusionary brownfield redevelopment with affordable housing lays the foundation for transforming cities into places that provide opportunity for all.

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