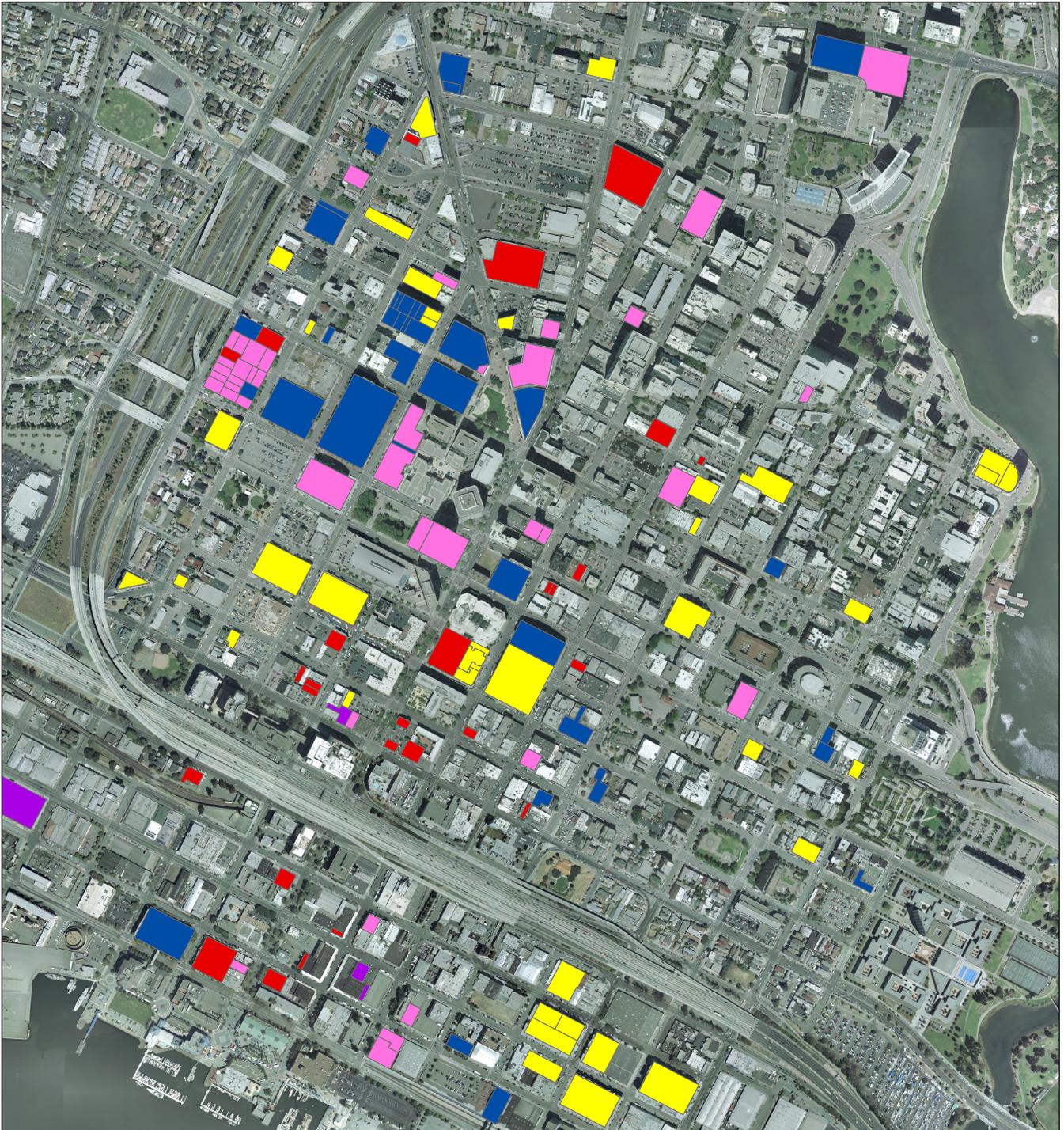


Do Central Business District Redevelopment Investments Have a Positive Influence on Surrounding Neighborhoods?

Amy M. Fauria
July 2008



Do Central Business District
Redevelopment Investments Have a
Positive Influence on Surrounding Neighborhoods?

A Planning Report
Presented to
The Faculty of the Department of
Urban and Regional Planning

San José State University

In partial fulfillment
of the requirements for the
degree Master of Urban Planning

by
Amy M. Fauria
July 2008

© 2008
Amy M. Fauria
ALL RIGHTS RESERVED

Table of Contents

List of Figures	v
List of Tables	vi
Acknowledgements	vii
Chapter 1: Introduction	1
Background	
Research Question	
Relevance	
Methods	
Report Structure	
Chapter 2: History of the Central District	11
Chapter Overview	
The Central District through the 1940's	
Early Renewal Efforts in the Central District: The 1950's and 60's	
Chapter 3: Redevelopment Under the 1969 Plan	17
Chapter Overview	
The Central District Urban Renewal Plan of 1969	
Redevelopment: 1970 through 1989	
Redevelopment: 1990 through 2006	
Development of the Activity Areas	
City Center	
Chinatown	
Victorian Row / Old Oakland	
Uptown Retail Center	
The Central District at the End of 2006	
Chapter 4: Existing Research on Property Values and Redevelopment	35
Chapter Overview	
Effect of Access to Amenities on Property Values	
Public Intervention and the Finding of Blight	
Effect of Redevelopment on Property Values	
Conclusions	

Chapter 5: Empirical Analysis of Property Value Trends	45
Chapter Overview	
Testable Hypothesis	
Choosing a Property Value Analysis Method	
Summary of Data	
Hedonic Regression Model Specification	
Regression Results	
Models 1.1 and 2.1: Properties within 1-mile of redevelopment activities	
Models 1.2 and 2.2: Properties between 1 and 1.5-miles of redevelopment activities	
Models 1.3 and 2.3: Properties between 1.5 and 2-miles of redevelopment activities	
Conclusions	
Chapter 6: Conclusions	63
Redevelopment and Spill-over Effects	
Study Findings	
Study Limitations	
Policy Implications	
Potential for Future Studies	
Bibliography	69
Appendix	75
A.1. Constant spending factors for Oakland Redevelopment Agency fiscal years	
A.2. City of Oakland Redevelopment Area nominal spending by project area, July 1989 through July 2007	
A.3. Supplemental notes and source information to figures 3.2 and 3.3	
A.4. Constant spending factors for single family home sales during study period	
A.5. Regression results for Model 1, 1992 through 2000	
A.6. Regression results for Model 2, 2001 through 2006	

List of Figures

1.1.	Relationship between San Francisco Bay Area’s three largest cities	2
1.2.	Redevelopment Project Areas in the City of Oakland, 1990 and 2006	5
2.1.	Oakland Central District and its neighborhoods in 2006	14
3.1.	Oakland Central District Redevelopment Project and Activity Areas, 1969 and 1989	19
3.2.	Cumulative parcel-level redevelopment (by primary development function) in the Central District, 1970 through 1989	20
3.3.	Cumulative parcel-level redevelopment (by primary development function) in the Central District, 1990 through 2006	23
3.4.	Redevelopment Agency Vision for the City Center, 1973	25
3.5a.	City Center site map, 2007	26
3.5b.	City Square Plaza	26
3.5c.	Preservation Park	26
3.5d.	Rendering: future CityWalk condos	26
3.6a.	Chinatown Activity Area vision, 1973 – looking up Broadway	27
3.6b.	Chinatown Activity Area vision, 1973 – looking west from Webster	27
3.7	Chinatown Activity Area, 2007	28
3.8a.	Commercial services in the Old Oakland Activity Area, 2007	29
3.8b.	Renovated historic commercial building on block adjacent to Old Oakland	29
3.9a.	Uptown Oakland, in construction in 2006	31
3.9b.	Paramount Theatre, built 1931, restored 1973	31
3.9c.	Sears department store, built 1929, restored 1996	31
3.9d.	Rotunda building interior, built 1912, restored 2001	31
3.9e.	Fox Theatre, built 1928, restoration in progress in 2006	31
5.1.	Half-mile proximity boundaries from Central District redevelopment activities, 1992-2000 and 2001-2006	51

5.2a.	Location of BART stations and popular neighborhood commercial corridors in and around the study area	54
5.2b.	Distribution of commercial and office services in and around the study area	54
5.3a.	Proportion of households living below the poverty level in and around the study area, by 2000 census tract	55
5.3b.	Distribution of industrial operations and location of heavy rail right-of-way in and around the study area	55

List of Tables

1.1.	City of Oakland Redevelopment Agency spending by project area, July 1989 through July 2007	7
3.1.	Distribution of redeveloped parcels by primary function	22
5.1.	Available dataset of single-family homes sold between 1990 and 2006 within two-miles of the Central District Redevelopment Project Area boundary	49
5.2.	Final sample-set for study period 1, 1992 through 2000	53
5.3.	Final sample-set for study period 2, 2001 through 2006	53
5.4.	Variables included in other hedonic models for single-family homes	57
5.5.	Description of independent variables included in the final models	58
5.6.	Regression results for study variables measuring the impact of proximity to Central District redevelopment activities	60

Acknowledgements

I would like to express my sincere gratitude to Dr. Shishir Mathur, Assistant Professor at San José State University. Dr. Mathur was my faculty advisor on this project and provided me with invaluable support and feedback from the beginning to the end. This project would not have been possible at the depth and quality that was achieved without Dr. Mathur's help.

I would also like to thank CD-DATA for allowing me to use the Alameda County Assessor's data that enabled this analysis.

Chapter 1

Introduction

Background

Oakland, California, along with many other large, aging cities in the United States has been struggling to find a successful recipe to improve both its image and the quality of life for residents. Oakland is the third largest city in the Bay Area with an estimated population of almost 400,000 in 2006.¹ The city serves as the transportation and industrial hub of the nine-county San Francisco Bay Area, a role it has played throughout the twentieth century.² This function was initially encouraged by the terminus of the transcontinental railroad in Oakland's Central Business District, or CBD, when the railroad was completed in 1869; the role was further spurred by Oakland's need to find its own identity in the shadow of San Francisco.³ Oakland's bay-front location has also proven key to its blue-collar, industrial economy by supporting the development and continual growth of a world-class shipping port. In 2006, the Port of Oakland was the fourth largest cargo container port in the U.S.,⁴ enabling both regional and international importing and exporting, as well as local manufacturing.

Despite the importance of Oakland within the region, it has taken a backseat to San Francisco and San José⁵ and has not been a true destination of visitors or new residents to the Bay Area for decades. San Francisco is still easily the headliner of the area, maintaining its position as the regional financial center and a popular tourist destination. San José, on the other hand, grew in regional importance from the 1950's through 1990's; developing around a high-tech economy and astronomical suburban development, it has now become widely known as the "Capitol of Silicon Valley." Figure 1.1 illustrates the regional relationship between San Francisco, San José, and Oakland.

¹ United States Census Bureau, *American FactFinder: 2006 American Community Survey Data Profile Highlights*, <http://factfinder.census.gov/home/saff/main.html?_lang=en> [September 2, 2007].

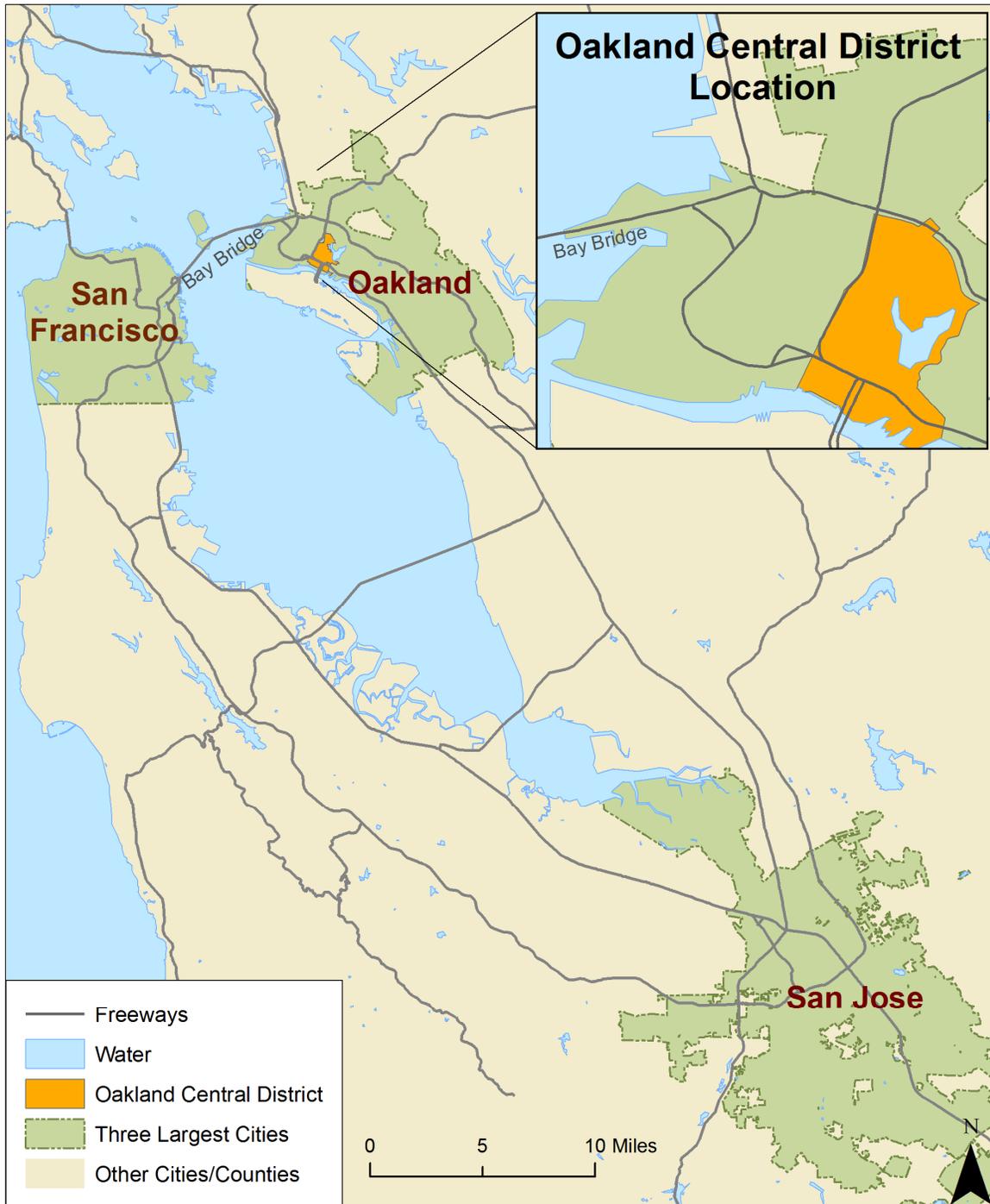
² Marilyn S. Johnson, *The Second Gold Rush: Oakland and the East Bay in World War II* (Berkeley, CA: University of California Press, 1993), 13.

³ Beth Bagwell, *Oakland: The Story of a City* (Novato, CA: Presidio Press, 1982), 57.

⁴ George Raine, "A Sea Change in Shipping: 50 Years Ago Container Ships Altered the World," *San Francisco Chronicle*, February 5, 2006, <<http://www.mindfully.org/Industry/2006/Container-ShipsMcLean5feb06.htm>> [May 12, 2007].

⁵ U.S. Census, *American FactFinder*. San Francisco 2006 population estimated at 744,041; San José 2006 population estimated at 916,220.

Figure 1.1. Relationship among San Francisco Bay Area's three largest cities



Sources: Map developed by report author using data acquired and adapted from the City of Oakland, *Community and Economic Development Agency, Central District Redevelopment Project Area Map*, <<http://www.business2oakland.com/main/centraldistrict.htm#OfficeCommercialMap>> [October 26, 2007]; Metropolitan Transportation Center, *Maps and Data*, <http://www.mtc.ca.gov/maps_and_data/GIS/data.htm> [October 26, 2007].

In the first half of the twentieth century, Oakland had flourished and was proudly known as the “Detroit of the West” due to its strong, industrial economy. After hitting a peak population of 384,575 in 1950 however, residents began to leave the city for the suburbs.⁶ Oakland then spent the latter half of the twentieth century developing a reputation for being run-down, crime-ridden, and dangerous. Keeping a parallel role with Detroit, Oakland was ranked eighth on the 2006 most dangerous U.S. cities list by Morgan Quitno Press, while Detroit held the number two spot.⁷ Unfortunately, old industrial cities like Oakland and Detroit have found that they do not garner support from the international appeal that has reinvigorated cities such as San Francisco, New York City, and Chicago in recent years.

In efforts to further economic growth, improve public safety, and become an attractive destination for visitors and new residents, Oakland has chosen to take extensive advantage of California’s redevelopment program laws. These laws enable public agencies to focus attention and investments within designated areas of a jurisdiction where there is a finding of blighted conditions that negatively impacts public health, safety, and welfare.⁸ While Oakland had ten redevelopment areas delineated as of 2006, a review of the City’s Redevelopment Agency budgets shows that the Central District Redevelopment Project Area (focused around the CBD) received the lion’s share of investment. This targeted redevelopment strategy implies that the City recognizes that availability of office jobs and retail services which a CBD traditionally provides is key to an economically viable city, but begs the question of whether the focused efforts have actually improved the quality of life in Oakland.

Research Question

Observation of Oakland’s Central District Redevelopment Project Area, or Central District, leaves little question that the area within the project boundaries has been positively impacted by the redevelopment activities in the last several years. With respect to the parcel-level redevelopment in the Central District however, this study set out to explore the following questions:

1. Did the redevelopment investments in the Central District from 1990 through the end of 2006 positively impact the neighborhoods that surround the area, measured by an increase in the housing prices of single-family residences?
2. If so, did the rate of price appreciation decrease as the distance to the Central District increased?

⁶ Johnson, *Second Gold Rush*, 18, 35.

⁷ Morgan Quitno Press, *13th Annual America’s Safest (and Most Dangerous) Cities*, November 2006, <<http://www.morganquitno.com/cit07pop.htm>> [September 28, 2007]. The Morgan Quitno report ranks cities based on FBI crime statistics.

⁸ California redevelopment laws will be discussed in more detail later in this chapter, as well as in chapters 3 and 4.

This examination of the impact of redevelopment on surrounding neighborhoods, often referred to as a spill-over effect, should be a key consideration of public agencies choosing to adopt redevelopment policies. As redevelopment focuses public energy and investments within a specified physical boundary, the areas outside of that boundary will likely receive less attention from the public agency and may then run the risk of becoming blighted as well. At the least, the areas near a redevelopment project area should not be negatively impacted by redevelopment, while the ideal situation is that redevelopment has a broader positive impact, thus “spilling-over” into the surrounding neighborhoods.

Relevance

The delineation of local public redevelopment project areas was passed into state law by the California Community Development Act of 1945 which enables any city or county in the state to establish a redevelopment agency to encourage and support reinvestment in blighted communities.⁹ The law notes that “the benefits which will result from ... redevelopment of blighted areas will accrue to all the inhabitants and property owners of the communities in which they exist,”¹⁰ construing an intention for affected residents to experience a general improvement in their quality of life as a result of the act of public intervention.

The redevelopment law was amended in 1952 to incorporate tax increment financing, or TIF.¹¹ Under the current law, the jurisdiction’s redevelopment agency is allowed to capture and reinvest the majority of the increment in the property tax revenues emanating from the redevelopment area. The logic behind this practice is that the increase in property taxes would not have occurred but for the work done by the redevelopment agency in the redevelopment area. In summary, TIF enables the reinvestment of property tax revenues within a designated redevelopment district for revenue generated above the property tax base at the time the district was designated.¹²

Without TIF laws, the growth in property tax revenues that usually occur with capital improvements and new developments would be distributed among all public districts that generally share property tax revenues, including the state, county, and special districts, as well as the city at large. This loss of tax revenues by other public agencies has made TIF a controversial policy. Because of the favorable tax treatment within the city, California cities have made considerable use of TIF districts however. In 2005, 80 percent of the cities and 45 percent of the counties in California had redevelopment agencies with

⁹ Michael Dardia, *Subsidizing Redevelopment in California* (San Francisco: Public Policy Institute of California, 1998), 2, <<http://www.ppic.org/main/publication.asp?i=70>> [September 25, 2007].

¹⁰ McDonough Holland & Allen PC, Attorneys at Law, *2008 Community Redevelopment Law of the State of California: Health & Safety Code Sections 33000, et seq.* (January 2008), 9, §33035 (e), <<http://www.calredevelop.org/AM/Template.cfm?Section=Legislation&CONTENTID=1749&TEMPLATE=/CM/ContentDisplay.cfm>> [May 1, 2008].

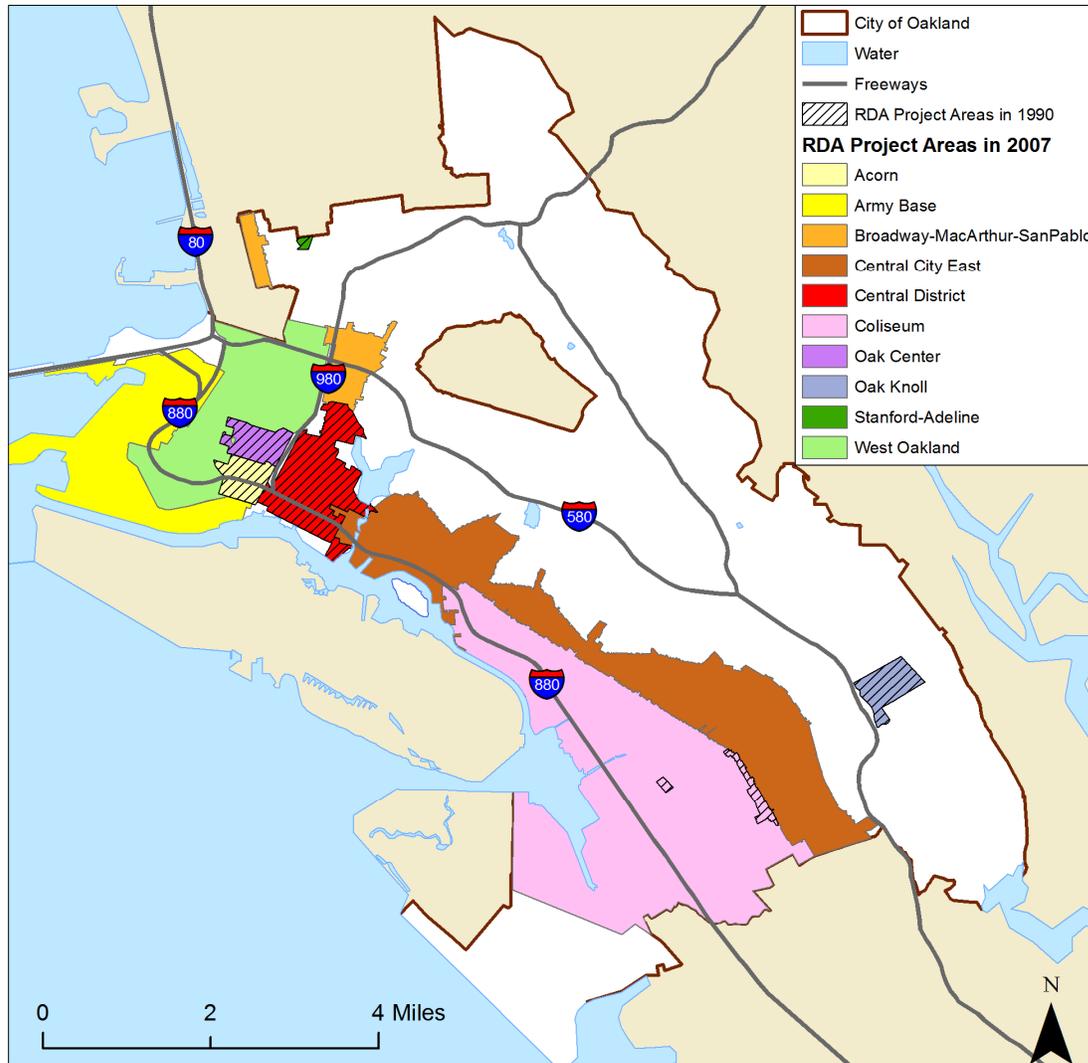
¹¹ Dardia, *Subsidizing Redevelopment*, 4.

¹² Rachel Weber and Laura Goddeeris, *Tax Increment Financing: Process and Planning Issues* (Cambridge, MA: Lincoln Institute of Land Policy, 2007), 1.

nearly 800 active redevelopment project areas. Overall, TIF revenues generated approximately \$3 billion in funding for redevelopment activities in 2005.¹³

As noted, the City of Oakland had ten redevelopment areas designated in 2006. Figure 1.2 illustrates the locations of Oakland’s redevelopment areas in 1990 and 2006, the first and last years of the study period. As can be seen in the figure, there was a substantial increase in the portion of the city under redevelopment during the study period.

Figure 1.2. Redevelopment Project Areas in the City of Oakland, 1990 and 2006



Sources: Map developed by report author using data acquired and adapted from the Community and Economic Development Agency of the City of Oakland, *Map of Redevelopment Areas*, <http://www.business2oakland.com/main/redevelopment.htm#Section_1> [October 26, 2007]; Metropolitan Transportation Center, *Maps and Data*, <http://www.mtc.ca.gov/maps_and_data/GIS/data.htm> [October 26, 2007]; Redevelopment Agency of the City of Oakland, *Elmhurst Redevelopment Plan* (April 10, 1973), Exhibit 1; Redevelopment Agency of the City of Oakland, *The 77th Avenue Industrial Redevelopment Project* (August 1, 1978), Exhibit B.

¹³ California Redevelopment Association, *Redevelopment – An Essential Tool in Returning California to Economic Prosperity*, August 8, 2006, <<http://www.calredevelop.org/AM/Template.cfm?Section=Home&Template=/CM/HTMLDisplay.cfm&ContentID=1752>> [September 25, 2007].

Although there were ten redevelopment project areas established by the end of the study period, only six of these were reported to have on-going, public-driven physical development activity throughout the period. Table 1.1 summarizes the level of investment activity in the respective redevelopment areas from the 1989-90 fiscal year through the 2006-07 fiscal year.

As can be seen in the table, despite the designation of multiple project areas within the City of Oakland, extensive efforts were made toward the redevelopment of the Central District while the other areas received relatively minimal investments. In fact the only area that received comparable public investment on a per-acre basis is the Acorn Redevelopment Project Area, or Acorn, which focused on the substantial rehabilitation of the Acorn public housing projects and the addition of new affordable housing units to the site. While the Acorn project did receive comparable per-acre investment during the study period, the actual expenditures during this period were miniscule compared to what was invested in the Central District.

Based on the aforementioned observations, Oakland's redevelopment strategy can be described as targeted toward the Central District. This targeted strategy is comparable to a plan that Richmond, Virginia, adopted in 1998 called Neighborhoods in Bloom (NiB).¹⁴ The Richmond administration determined that, rather than spreading redevelopment investment throughout the city in small portions, devoting a higher level of investment in fewer neighborhoods would create a "tipping point" that would induce private redevelopment investment in these same neighborhoods. "The explicit goal was to achieve a critical mass that stimulated self-sustaining private market activity."¹⁵ To implement this strategy, Richmond identified the most blighted public housing projects in the city and then concentrated investments from public and non-profit funds on those specific projects while also prioritizing other capital improvement projects in those neighborhoods. The empirical study performed on the results in the relevant Richmond neighborhoods found that "the average sales price [of homes] in the target areas increased 10.85 [percent] per year faster than prices of comparable homes in the city overall" after this concentrated redevelopment took place. The NiB study was not able to determine whether adjacent communities experienced positive spill-over effects from the targeted strategy, however.¹⁶ A study of Chicago from 1993 to 1999 did find spill-over effects associated with proximity to TIF districts and that the effect (positive or negative) was related to the primary function of the TIF district. In that case however, Chicago implemented a more traditional, distributed redevelopment strategy with seventy-nine TIF districts established during the study period.¹⁷

¹⁴ George Galster, Peter Tatian, and John Accordino, "Targeting Investments for Neighborhood Revitalization," *Journal of the American Planning Association* 72, no. 4 (Autumn 2006): 459.

¹⁵ *Ibid.*, 458.

¹⁶ *Ibid.*, 463, 465.

¹⁷ Rachel Weber, Saurav Dev Bhatta, and David Merriman, "Spillovers from Tax Increment Financing Districts: Implications from Housing Price Appreciation," *Regional Science and Urban Economics* 37 (2007): 266-7.

Table 1.1. City of Oakland Redevelopment Agency spending by project area, July 1989 through July 2007

Total Expenditures/Appropriations per 2-Year Budget Periods ^a Fiscal Year July to July, Adjusted to Constant 1990 Dollars (in Thousands) ^b												
Redevelopment Project Area	Area (acres) ^c	Adopted	1989-91 ^d	1991-93 ^e	1993-95	1995-97	1997-99	1999-2001	2001-03 ^f	2003-05	2005-07	Avg 2-yr exp/acre
Acorn ^g	25	Nov-1961	–	364	1,574	4,360	2,749	2,126	1,011	794	786	68.8
Broadway/MacArthur/San Pablo	676	Jul-2000						0	143	466	1,141	0.6
Central City East	3,339	Jul-2003								0	4,060	0.6
Central District	827	Jun-1969	–	96,796	78,021	91,786	67,636	58,478	51,133	42,809	47,436	80.7
Coliseum	6,764	Jul-1995				1,552	2,148	8,457	15,308	16,489	8,489	1.3
Oakland Army Base	1,200	Jul-2000						0	0	383	1,493	0.4
West Oakland	1,546	Nov-2003								0	567	0.2
Project Areas with no Redevelopment Agency Investment in New Capital Projects												
Elmhurst	79	1973	–	0	0	Incorporated into Coliseum Project Area						
77th Avenue	10	1978	–	0	0	Incorporated into Coliseum Project Area						
Oak Center	30	Nov-1965	–	444	494	336	140	703	1,031	1,075	589	
Stanford/Adeline	4-blks	Apr-1973	–	0	0	0	0	0	79	69	70	
Oak Knoll	183	Jul-1988	Project on hold - property must be transferred from U.S. Navy									

Sources: Data adapted from the City of Oakland Redevelopment Agency Budgets, FY 1991-92 through 2005-07; Bureau of Labor Statistics, *Consumer Price Index – All Urban Consumers (Current Series)*, U.S. Department of Labor, <<http://data.bls.gov/PDQ/outside.jsp?survey=cu>> [March 13, 2008].

^a Table is organized into 2-year budget cycles based on Oakland Redevelopment Agency practice at the time of this report.

^b See Appendices A.1 and A.2 for tables of the constant dollar adjustment factors and nominal spending by the Oakland Redevelopment Agency, respectively.

^c Oakland Redevelopment Agency, *Adopted Budget: FY 2005-07*, prepared by the Office of the City Administrator, Budget Office (2005), A-3, <<http://www.oaklandnet.com/budgetoffice/ORA.htm>> [October 12, 2007]; Oakland Redevelopment Agency, *Annual Financial Report, Year Ended June 30, 1990*, prepared by the Office of Finance (1990), 7.

^d 1989-91 expenditures excluded because data could not be obtained for the 1990-91 fiscal year.

^e Expenditure included for 1992-93 is a projection; this fiscal year data was collected from the *1993-94 Proposed Annual Budget*.

^f Expenditures included for all years after 2001 are projections; actual expenditures were not reported by project area starting in 2001.

^g Oakland Redevelopment Agency, *Adopted Budget: FY 2003-05*, prepared by the Office of the City Manager, Budget Office (October 2003), C-40, <<http://www.oaklandnet.com/budgetoffice/ORA.htm>> [October 12, 2007]. The Acorn Redevelopment Project Area was reported to have completed physical development during the 2001-03 budget cycle.

The primary purpose for this study is to explicitly examine the spill-over effects associated with the utilization of a targeted redevelopment strategy on a mixed-use CBD. This study builds on the findings that a targeted redevelopment strategy is very effective within the redevelopment neighborhood, as well as the findings that positive spill-over effects are associated with distributed, mixed-use redevelopment.¹⁸ Since a targeted investment strategy does not distribute city resources evenly throughout the jurisdiction however, it is important to determine if this strategy has a positive impact beyond the boundaries of the redevelopment area.

A second reason for the current study is that, despite the extensive use of TIF-enabled redevelopment throughout California, a review of extant literature on the effects of these investments on private residential property values (namely single-family residences) suggests that California has not been the market under study for any published empirical study. Although California was the first state to utilize TIF, instituting the policy under the 1952 legislation, many other states have since adopted similar TIF policies.¹⁹ In fact, a literature search identified studies focusing on the cities of Chicago, New York City, and Richmond, Virginia, as well as the state of Indiana, but not one study on a western U.S. metropolitan area.²⁰

Ultimately, an empirical study on the potential impacts of redevelopment on residential quality of life in California will be a useful tool to evaluate the effectiveness of a widely used state policy. This report can be of use to policy makers, urban planners, non-profit organizations, residents, and developers who are participating in redevelopment planning for medium-to-large cities with extensive blight.

While policy makers and planners represent the best interests of the city under redevelopment, residents and non-profits often provide a check-and-balance role with their knowledge of daily life in the city and community. Additionally, developers will ultimately implement many projects within the redevelopment areas while taking a significant financial risk on behalf of their investors. It is also in the developer's best interest to understand the results of redevelopment on the larger community in order to better communicate risk and reward factors to their investors and lenders. In the end, all of these interested parties must be aware of the potential positive and negative impacts of their plans.

¹⁸ Galster, Tatian, and Accordino, "Targeting Investments;" Weber, Bhatta, and Merriman, "Spillovers from Tax."

¹⁹ Paul F. Byrne, "Determinants of Property Value Growth for Tax Increment Financing Districts," *Economic Development Quarterly* 20, no. 4 (November 2006): 317.

²⁰ Byrne, "Determinants of Property Value;" Weber, Bhatta, and Merriman, "Spillovers from Tax;" Ingrid Gould Ellen et al., "Building Homes, Reviving Neighborhoods: Spillovers from Subsidized Construction of Owner-Occupied Housing in New York City," *Journal of Housing Research* 12, no. 2 (2001); Galster, Tatian, and Accordino, "Targeting Investments;" Joyce Y. Man and Mark S. Rosentraub, "Tax Increment Financing: Municipal Adoption and Effects on Property Value Growth," *Public Finance Review* 26, no. 6 (November 1998).

Methods

The current study performed two analyses. The first was an examination of the cumulative redevelopment of the Oakland Central District from 1990 through 2006, identifying the type of development that occurred at the parcel level. The second was a regression analysis on changes in housing prices during this same period in the neighborhoods surrounding the Central District.

The cumulative redevelopment analysis was performed to identify the potential for a change in the available amenities within the Central District, as a popular theory suggests that the accessibility of natural, historical, and modern amenities is the defining factor in neighborhood desirability.²¹ While the Oakland Central District may have long suffered from extensive blight that has affected the availability of modern amenities, it is a rich area in both natural and local historical amenities. First, the Central District is adjacent to the bay and a natural lake and estuary system; additionally, it is the location of early city development and has retained many historical structures. If amenities are, in fact, a key factor in urban desirability, extensive redevelopment activity that results in the addition of modern amenities such as restaurants, retail services, or entertainment (and perhaps restoration of historical amenities, as well) should increase the desirability of the area. Additional evidence that the accessibility of modern amenities would positively impact neighborhood desirability was drawn from a study that found access to urban rail transit stations to be positively capitalized into housing values in Alameda County (where Oakland is located).²²

The housing price analysis then provided a measure of whether the changes in the Central District had affected areas beyond the immediate redevelopment project area boundaries, with the full study period distilled into shorter periods with similar development trends. The hedonic method was chosen for this study to enable the explicit examination of the effect of proximity to redevelopment activities.²³ Per the classic work by Rosen, “hedonic prices are ... the implicit prices of attributes and are revealed ... from observed prices of differentiated products and the specific amounts of characteristics associated with them.”²⁴ In the case of the current study, proximity to the Central District was one of the attributes in the model, enabling this attribute to be measured independent of all other attributes.

²¹ Jan K. Brueckner, Jacques-François Thisse, and Yves Zenou, “Why is Central Paris Rich and Downtown Detroit Poor? An Amenity-Based Theory,” *European Economic Review* 43 (1999): 94.

²² John Landis, Subhrajit Guhathakurta, and Ming Zhang, *Capitalization of Transportation Investments into Single-Family Home Prices: A Comparative Analysis of Five California Rail Transit Systems* (Berkeley, CA: The University of California Transportation Center, 1994: No. 246).

²³ The hedonic method will be discussed in more detail in chapter 5 of this report.

²⁴ Sherwin Rosen, “Hedonic Prices and Implicit Markets: Product Differentiation in Pure Competition,” *Journal of Political Economy* 82 (1974): 34.

Report Structure

The remainder of this report is organized into four sections that describe the current study and the findings, followed by a summary of the conclusions.

The next two sections will provide an overview of the history of the Oakland Central District and present the findings on parcel-level cumulative redevelopment from 1990 to 2006. The following section will review relevant literature on the relationship between amenities and property values, effects of redevelopment, and TIF. The next section will describe the residential property value analysis performed for this study and present the results. Finally, the concluding section of this report will summarize the findings of the study, discuss the study limitations, and present policy implications of the findings.

Chapter 2

History of the Central District

Chapter Overview

This chapter reviews the history of the Oakland Central District to provide a context for understanding the more recent redevelopment activities examined in chapter 3. The history of the area can be broken into two eras: a long period of growth and demand-driven activity into the 1940's followed by a period of rapid decline and market abandonment, leading to the adoption of a redevelopment plan in 1969. This chapter will first discuss the market expansion in the Central District, followed by the trends that led to deterioration, and finally the early strategies of public redevelopment intervention.

The Central District through the 1940's

The Central District was the site of the first planned town settlement in Oakland, being mapped and parceled off starting in 1850.²⁵ An elaborate system of steam trains and electric streetcars ran throughout the East Bay by the 1890's until 1958 and downtown Oakland was the ultimate destination of all lines.²⁶ "Prior to the construction of the Bay Bridge in 1936, the East Bay had developed relatively autonomously, looking more toward Oakland than toward San Francisco. Up until the postwar [World War II] era, in fact, Oakland remained the industrial, business, and financial center of the East Bay."²⁷

Oakland, and hence the Central District's prominence and economy, benefitted from three key periods of regional growth and change: the 1906 San Francisco earthquake, World War I, and World War II. Because the East Bay suffered from relatively minimal damage from the 1906 earthquake (when compared to San Francisco), normal daily activities resumed more quickly in Oakland and many San Franciscans displaced by the earthquake became permanent settlers on the east side of the bay.²⁸ Oakland's population grew from roughly 67,000 in 1900 to 150,000 in 1910 and also saw the permanent relocation of many San Francisco businesses to Oakland.²⁹ The relocation of the ship-building industry after the earthquake was extremely influential in Oakland's industrial history, resulting in port development on the Oakland waterfront and serving as the catalyst for East Bay growth in both World War I and World War II.³⁰ Since naval force

²⁵ Bagwell, *Oakland*, 27-8.

²⁶ Ibid., 165-6; Modern Transit Society, *Traffic Engineers vs. Transit Patrons*, <<http://moderntransit.org/ctc/ctc03.html>> [December 8, 2007]; Johnson, *Second Gold Rush*, 25.

²⁷ Johnson, *Second Gold Rush*, 25.

²⁸ Ibid., 18.

²⁹ Ibid., 15.

³⁰ Ibid., 18.

played a key role in both wars, the ship-building industry was able to provide high-paying employment opportunities that attracted mass in-migration to the East Bay.³¹ This resulted in growth in Oakland during World War I that brought the city population to roughly 216,000 by 1920.³² Oakland continued to grow steadily after that and then experienced another surge when the U.S. ship-building industry began massive manufacturing efforts prior to entering World War II. Due to the role of the East Bay in the war effort, Oakland's population reached roughly 302,000 by 1940 and exceeded 345,000 residents in 1944.³³

Throughout this time the Central District was host to the “major department stores, theaters, and cultural events [that] provided amusements not available in the smaller East Bay towns.... Young single workers and multiple-worker families ... often accrued considerable savings and spent their precious off-hours shopping and taking in commercial amusements downtown.... Boosted by shipyard dollars, retail businesses flourished.”³⁴ Unfortunately for Oakland however, the influx of new residents resulted in substantial overcrowding in many of the working class neighborhoods, a strain on and subsequent decline in the upkeep of public infrastructure and provision of services, as well as early suburbanization and red-lining in the East Bay that only proliferated when the war ended.³⁵ As was happening in central cities throughout the country following World War II, Oakland's racial minority residents were abandoned in a deteriorating and economically floundering city by their white counterparts who took advantage of federally guaranteed home loans and quickly moved out to the newly developing suburbs.³⁶

While the Oakland CBD was already struggling in the 1950's due to the outflow of residents and the redistribution of industry, retail, and services to the suburbs, local businesses made decisions that ultimately intensified the problems. Many retail stores moved just north of the existing CBD to escape increasing blight; while this move may have made sense at a surface-level, the effect of physical clustering that creates the agglomeration economy for retail shopping was ultimately lost.³⁷ Additionally, the City decided to permit Kaiser Industries, a major Oakland-based company, to develop a new headquarters office building several blocks from the existing CBD. This decision paved the way for long-term decentralization of office development, creating the “bi-nodal office-financial center”³⁸ that exists in the Central District today.

³¹ Ibid., 19.

³² Ibid., 15.

³³ Ibid., 15, 35.

³⁴ Ibid., 25, 145.

³⁵ Ibid.

³⁶ J. Richard Aronson, *Management Policies in Local Government Finance*, ed. Eli Schwartz (Washington, DC: International City/County Management Association, 2004).

³⁷ Carole Joy Abrew, “Patterns and Process of Change in Oakland, California” (master's thesis, California State University, San Francisco, 1973), 17-20.

³⁸ Ibid., 28.

Early Renewal Efforts in the Central District: The 1950's and 60's

Experiencing rapid decline in regional popularity through the 1950's and 1960's, Oakland was again trying to find an identity; this time the new, suburban, post-war Bay Area was the challenge rather than San Francisco, however. Figure 2.1 provides a map of the Central District in 2006;³⁹ today's Central District neighborhoods were highly influenced by decisions made during urban renewal efforts.

Federally supported urban renewal policies were implemented as an approach to maintain commercial and business activities in the Central District during the 1950's and 1960's. Urban renewal allowed for slum clearance to remove properties that were deemed sub-standard and blighted so that new developments could be implemented that would be perceived as safer and more desirable. The policies were used extensively during the 1950's and 1960's in the older half of the Central District (south of 14th Street).⁴⁰ Many of the vacated parcels were used to build new Alameda County agency offices and other county services, creating the Civic Center neighborhood. Significant additions during this period were the Oakland Museum of California, the Bay Area Rapid Transit (BART) Headquarters, and Laney College. Laney, a junior college developed through the Peralta College Urban Renewal Project, began construction in 1967. This project redeveloped a 75-acre area of industrial, commercial and residential properties on the eastern border of the Central District. Together, these new resources were accessible to the entire Bay Area through the new Lake Merritt BART station and were expected to strengthen the entire Central District through the new employment, educational, and cultural opportunities.⁴¹

Another strategy that Oakland embraced to stem the decay of the Central District (if not the City as a whole) was to support the new California highway legislation and available funding for the development of the Nimitz Freeway (Interstate-880) in the 1950's.⁴² As can be seen in figure 2.1, the Nimitz is routed through the southern section of the Central District. The BART system was also being planned in the 1950's; when the BART preliminary studies were completed in 1956 Oakland had successfully secured three BART stations in the Central District.⁴³ Finally, the City was lobbying for a freeway

³⁹ While there are no technical district or neighborhood boundaries in the City of Oakland, there are generalized districts and neighborhoods that are referred to by the City and by residents. Figure 2.1 presents neighborhood boundaries as a supplement in explaining the overall context for changes in different areas of the Central District. These boundaries were identified for the current study based on various sources that have performed urban planning functions for the City of Oakland and are cited by figure 2.1.

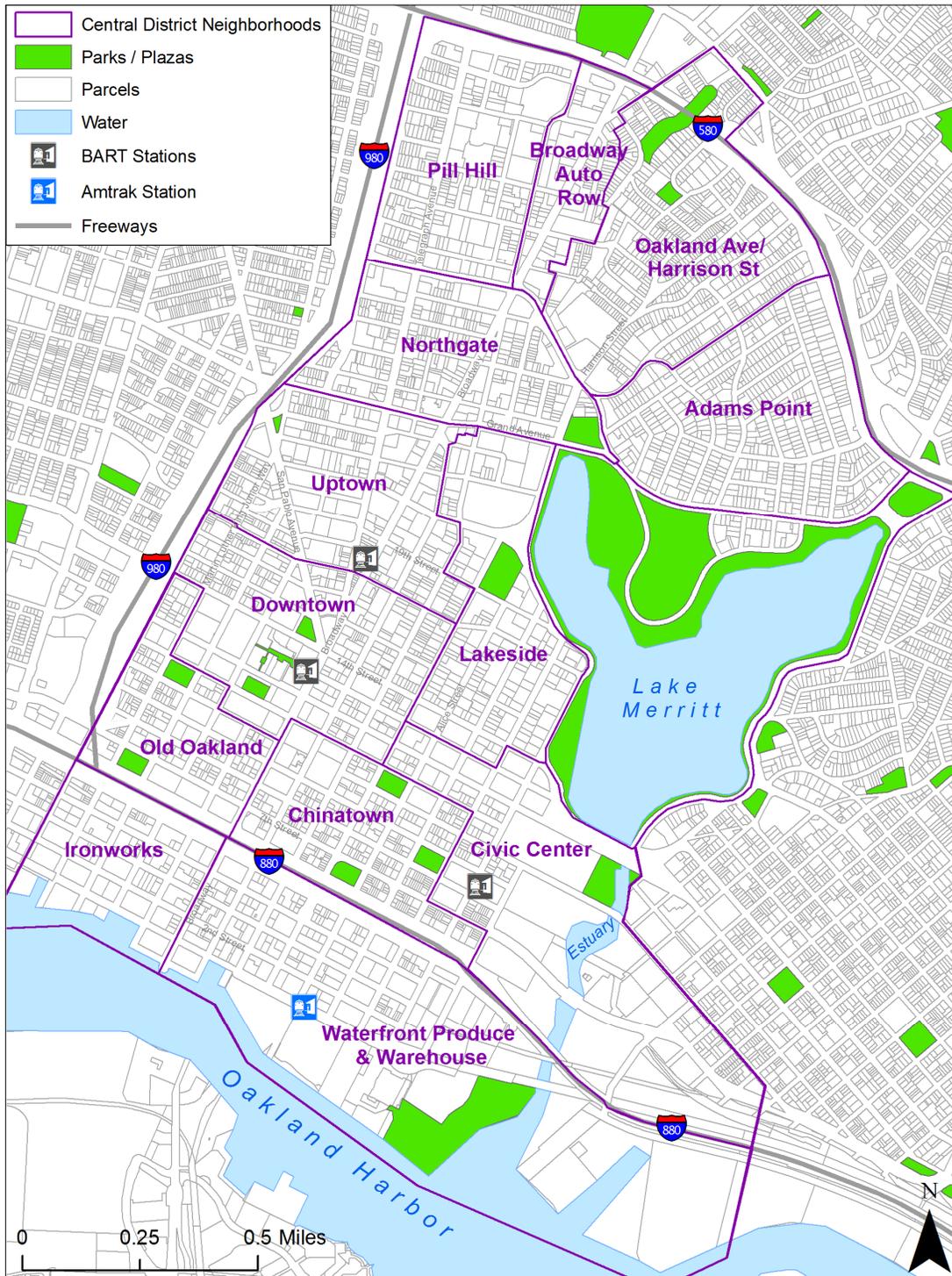
⁴⁰ Abrew, "Patterns and Process," 59.

⁴¹ Redevelopment Agency of the City of Oakland, *Peralta College: An "Open Door" Downtown Campus through Urban Renewal* (Oakland, CA: May 1967).

⁴² California Department of Transportation, *California Highway and Interstate Historic Photos: Construction, 880 (Eastshore Freeway), Market to Tenth St. in Oakland, 5/23/55*, <<http://www.dot.ca.gov/interstate/photos.htm>> [March 13, 2008].

⁴³ David W. Jones Jr., *California's Freeway Era in Historical Perspective* (Berkeley, CA: Institute of Transportation Studies, University of California, Berkeley, 1989), 275.

Figure 2.1. Oakland Central District and its neighborhoods in 2006



Sources: Map developed by report author using data acquired and adapted from the City of Oakland Community and Economic Development Agency, *10K Housing Projects* (August 2007), <<http://www.business2oakland.com/main/10kdowntownhousinginitiative.htm>> [October 26, 2007]; County of Alameda, *County Geospatial Data Files*, <<http://www.acgov.org/gis.htm>> [October 26, 2007]; Oakland Museum of California, *Neighborhood Search Map*, prepared for the City of Oakland by Fern Tiger Associates (1982), <http://collections.museumca.org/search_map.jsp> [October 26, 2007]; Rand McNally, *Local Map: Oakland, Berkeley, Richmond* (2007).

span that would provide direct access to the Central District from the west; this proposed Grove-Shafter Freeway (Interstate-980) was noted frequently in planning documents from the 1960's when eminent domain was being used in the early stages of parcel acquisition. The project was not completed until the 1980's however (due to citizen opposition).⁴⁴

Despite the urban renewal efforts, private interest in the Central District did not rebound. The retail trade suffered from the regional demographic changes that came with suburbanization, as well as directly from the slum clearance policies which decreased the immediate population in the Central District and removed older buildings that housed small retail businesses. In 1948 the Central District had more than 1,000 retail businesses and had the highest concentration of department stores in the East Bay.⁴⁵ "From 1948 to 1962, the Central [District] Retail Area's share of combined total sales in Alameda and Contra Costa counties went down from 18.5 to 9.2 percent and its share of department store sales dropped from 43.5 to 20.6 percent" while the regional population continued to grow.⁴⁶ By 1967 the total number of retail businesses in the Central District had been reduced to nearly 600, and the number of department stores had dropped from a peak of five down to three; by 1971 there were only two department stores still open in the Central District.⁴⁷

Although the urban renewal policies were meant to improve the Central District and make it more accessible through an updated transportation network, the area continued to suffer as new developments were implemented. The removal of physical structures that housed many residents and small businesses decreased the immediate population at the same time that new, man-made barriers were created around the district. The initial work on the Grove-Shafter freeway put a boundary on the western border of the Central District, isolating it from the predominantly low-income, black community in West Oakland. The Civic Center developments and Laney College effectively bounded the eastern side of the Central District, creating a separation from the deteriorating working-class neighborhoods in East Oakland. These efforts were expected to help the Central District but ultimately cut the area off from the community, reduced the number of retail businesses, and provided more white-collar opportunities in a historically blue-collar town. As none of these actions resuscitated the deteriorating area, the Oakland Redevelopment Agency approved a new urban renewal plan that designated the majority of the Central District as a redevelopment project area in 1969. The next chapter describes the redevelopment activities that were implemented in the Central District from 1970 through 2006.

⁴⁴ Preservation Park History, <<http://www.preservationpark.com/index.html>> [November 27, 2007].

⁴⁵ Abrew, "Patterns and Process," 59, 63.

⁴⁶ Oakland City Planning Department, *Retail Trade in the Oakland Central District: Analysis and Projections, 1962 to 1980*, prepared by Larry Smith and Company, Real Estate Consultants, July 1965, 9.

⁴⁷ Abrew, "Patterns and Process," 59, 68.

Chapter 3

Redevelopment under the 1969 Plan

Chapter Overview

This chapter examines the parcel-level cumulative redevelopment of the Oakland Central District under the redevelopment project area plan in effect in 2006. The first two sections briefly describe the current Central District redevelopment plan, followed by an overview of redevelopment activities through 1989. The remainder of the chapter is devoted to discussing the redevelopment activities that took place during the study period, 1990 through 2006, including the results of redevelopment agency-driven projects in four designated *activity areas*. The chapter concludes with a summary of the present state of the Central District.

The Central District Urban Renewal Plan of 1969

The City of Oakland approved the *Central District Urban Renewal Plan* in 1969 and the Plan was most recently updated in 2006. The key objective of the Plan has remained the same since 1969, which is “to eliminate urban blight within the Project Area through implementation of the concepts described in the Plan.”⁴⁸ Specific objectives in the 1969 Plan were:

- a) A strengthening of the Project Area’s existing role as an important office center for administrative, financial, business service and governmental activity.
- b) Establishment of the Project Area as an important cultural entertainment center.
- c) Re-establishment of the residential areas for all economic levels within specific portions of the Project Area.
- d) Provisions of employment and other economic benefits to disadvantaged persons living within or near the Project Area.
- e) Restoration of historically significant structures within the Project Area.
- f) Improved environmental design within the Project Area, including creation of a definite sense of place, clear gateways, emphatic focal points and physical design which expresses and respects the special nature of each sub-area.⁴⁹

The original objectives remain in the most recently updated Plan and the following objectives are also included:

⁴⁸ Oakland Redevelopment Agency, *Central District Urban Renewal Plan*, Adopted June 12, 1969, as amended up to June 20, 2006, 5, <<http://www.business2oakland.com/main/documents/CentralDistrictUrbanRenewalPlan6-20-06.pdf>> [26 July 2007].

⁴⁹ Redevelopment Agency of the City of Oakland, *Central District Urban Renewal Plan* (May 27, 1969, adopted June 12, 1969), 5.

- Revitalization and strengthening of the Oakland Central District's historical role as the major regional retail center for the Metropolitan Oakland Area.
- Provision of adequate infrastructure such as public parking, sidewalks, and traffic control.
- Utilization of key transit nodes to support transit-oriented development.⁵⁰

The 1969 Plan designated the majority of today's Central District as a Redevelopment Project Area; the initial Plan delineated 800 acres as the Project Area and identified three activity areas – City Center, Chinatown, and the San Pablo Gateway. An activity area was defined by the Redevelopment Agency as “an area in which the City Council has authorized the carrying out of specific redevelopment actions pursuant to California Community Redevelopment Law and an Activity Supplement to this Plan.”⁵¹

Redevelopment: 1970 through 1989

During the first twenty years after the adoption of the Central District Redevelopment Project Area, the following changes were incorporated into the Plan: 1) the size of the City Center Activity Area had increased by 1973, 2) the San Pablo Gateway Activity Area was eliminated by 1973, 3) the Victorian Row/Old Oakland Activity Area was added in 1975, and 4) the district area was increased to include much of the Civic Center neighborhood in 1984. Figure 3.1 illustrates the Central District Redevelopment Project Area and designated activity areas within the larger Oakland Central District upon adoption in 1969 and twenty years later, in 1989.

While Redevelopment Agency specific plans were focused on the activity areas, many parcels were redeveloped throughout the Central District during the first twenty-year period. In fact, 54.3 acres (of 461.5 total parcel-acres in the District) distributed over one hundred forty-four parcels are estimated to have been redeveloped during this period, as illustrated in figure 3.2. As can be seen in the figure, development activity outside of the designated activity areas was especially concentrated in the Uptown/Lakeside-border and greater-Chinatown neighborhoods (that are shown in figure 2.1).

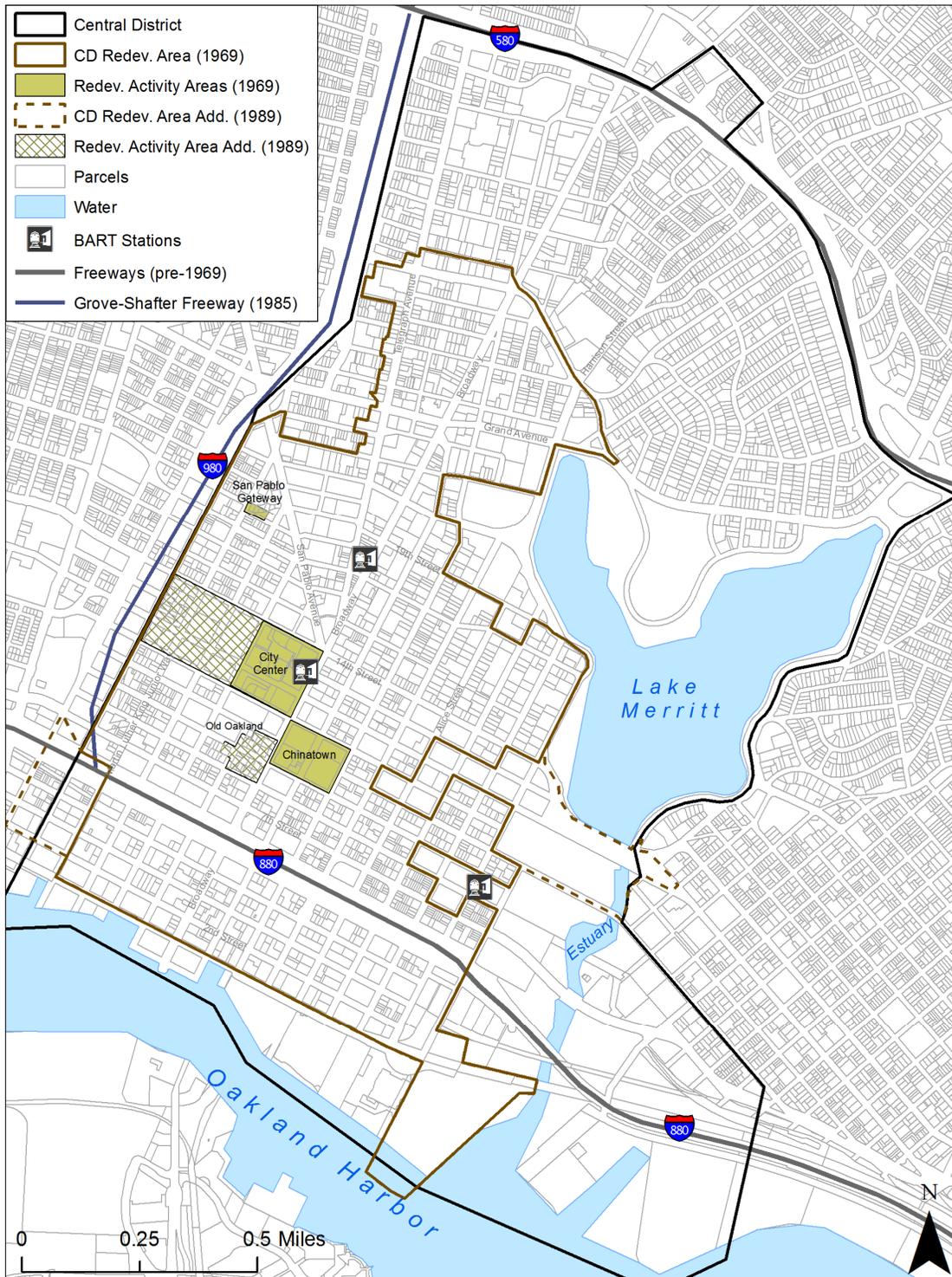
Aside from the willingness of the Oakland Redevelopment Agency to acquire the necessary land to enable large-parcel and block-level redevelopment, the speculative atmosphere of real estate investing during the 1980's supported the large-scale development⁵² that took place in the Oakland Central District. In fact, approximately twice as many parcels were developed in the 1980's than in the 1970's. Ultimately however, after twenty years of planning and on-going construction activity, the City Center and Chinatown Activity Areas were not even half complete, and the Old Oakland Activity Area had

⁵⁰ Oakland Redevelopment Agency, *Central District Plan* (2006), 5.

⁵¹ Redevelopment Agency of the City of Oakland, *Central District Urban Renewal Plan* (amended December 16, 1975), 5.

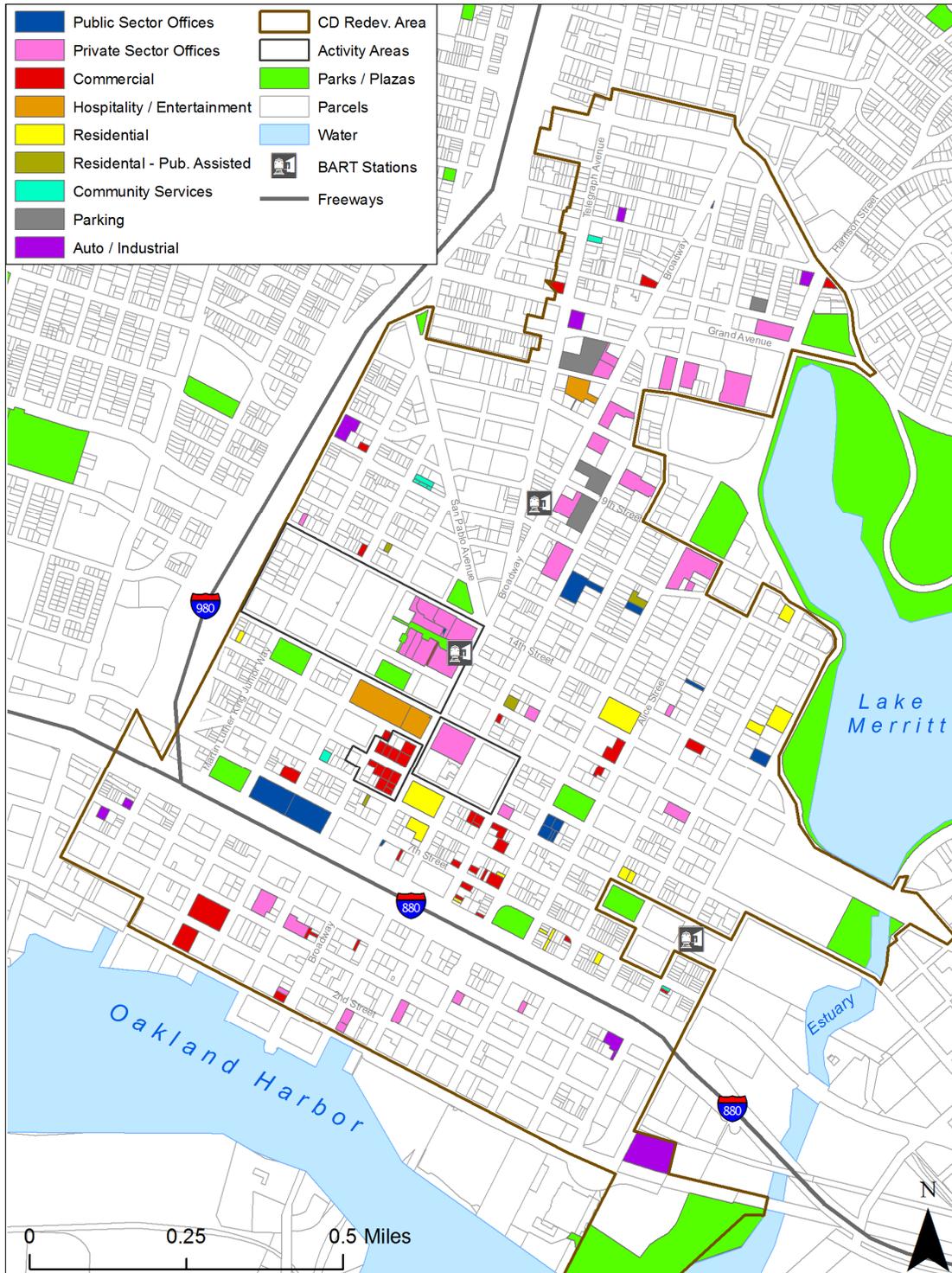
⁵² Martin E. Lowy, *High Rollers: Inside the Savings and Loan Debacle* (NY: Praeger Publishers, 1991), 242.

Figure 3.1. Oakland Central District Redevelopment Project and Activity Areas, 1969 and 1989



Sources: Map developed by report author using data acquired and adapted from the County of Alameda, *County Geospatial Data Files*, <<http://www.acgov.org/gis.htm>> [October 26, 2007]; Oakland Redevelopment Agency, *Central District Urban Renewal Plan* (amended March 27, 1990); Redevelopment Agency of the City of Oakland, *Central District Urban Renewal Plan* (May 27, 1969, adopted June 12, 1969).

Figure 3.2. Cumulative parcel-level redevelopment (by primary development function) in the Central District, 1970 through 1989



Sources: Map developed by report author using data acquired and adapted from the County of Alameda, *County Geospatial Data Files*, <<http://www.acgov.org/gis.htm>> [October 26, 2007]; Oakland Redevelopment Agency, *Central District Urban Renewal Plan* (amended March 27, 1990); Rand McNally, *Local Map: Oakland, Berkeley, Richmond* (2007). Parcel development dates acquired from variety of sources – see Appendix A.3.

completed façade and many interior renovations but was struggling to secure retail tenants by 1989.⁵³

From figure 3.2 it is noticeable that, apart from the Old Oakland Activity Area and greater-Chinatown, the majority of new development tended toward public and private-sector offices as a primary use. By 1989 the cumulative redevelopment in the Central District had created a supportive environment for day-time activity but the district had lost much of its traditional appeal as a well-rounded area. Finally, with the exception of the Lakeside neighborhood, much of the housing stock within the Central District Redevelopment Project Area was older and in deteriorating condition, which did not support a complimentary mix of district residents.⁵⁴ Despite the redevelopment efforts, the Central District had not been revived to its former self and had yet to bring in a development that would attract people to the district outside of work-hours.

Redevelopment: 1990 through 2006

Central District redevelopment activities have continued through the present, struggling through minimal private development in the 1990's followed by extensive private development in the first seven years of the twenty-first century. From 1990 until the end of 2006, 72.0 acres distributed over one hundred sixty-four parcels were estimated to have been redeveloped, with 23.7 acres over forty-seven more parcels under construction. The three activity areas that had been designated prior to 1990 – City Center, Chinatown, and Old Oakland – had finally neared completion by the end of 2006, as well.

Aside from projects in the primary blocks of City Center and Old Oakland which were well underway before 1990, redevelopment during this period was heavily influenced by two distinctive eras in the real estate market. The first was driven by the need to redevelop properties damaged by the 1989 Loma Prieta earthquake⁵⁵ at the same time that the private development market was reeling from the fall-out of the Savings and Loan and banking scandals of the late 1980's. The tightened lending market significantly decreased the number of new, privately funded development projects in the Central District through the 1990's and required that public agencies again become significant developers in order to continue to improve the area. The second era involved a rebounding real estate market that enabled a strategic City policy shift toward adding new housing units to the Central District, a plan termed the *10K Housing Initiative*. This strategy was announced in 1999 as a goal to bring 10,000 new residents to the Central District in mostly market-rate housing and was greeted with speculative interest by

⁵³ Bill O'Brien, "Old Oakland Languishes: Retailers Remain Unimpressed with Victorian Row Development," *East Bay Express*, May 6, 1988.

⁵⁴ This determination is based on the author's observations during periodic visits to the Oakland Central District throughout the 1990's, as well as the research performed specifically for this study on the development patterns, year of development for residential structures, and relevant Central District neighborhoods.

⁵⁵ University-Oakland Metropolitan Forum, *Plan for Oakland's Downtown Redevelopment Area*, (May 1993), Working Paper 028, A-2.

private developers finally in a position to take risks in the California housing market again.⁵⁶

Figure 3.3 illustrates the locations and primary uses of the parcels that were redeveloped during this period, as well as the location of a new redevelopment activity area, the Uptown Retail Center and Rehabilitation Area, that was designated in the late 1990's. Table 3.1 provides further details on the parcel-level redevelopment that occurred during this period. A year-by-year analysis of development trends identified three distinctive periods – 1990 through 1991, 1992 through 2000, and 2001 through 2006 – where there was a significant change in the number and types of development projects completed in the Central District.

Table 3.1. Distribution of redeveloped parcels by primary function

Primary Use of Development	Number of Developments: New and Substantially Renovated Buildings		
	1990-91	1992-00	2001-06
Office			
Public Sector	2	9	2
Private Sector	6	4	14
Residential			
Market Rate / Senior Housing	1	8	20
Publicly Assisted / Affordable Rentals	1	9	1
Commercial	3	11	8
Hospitality / Entertainment / Community	3	7	4
Industrial / Auto / Parking	2	5	2
Total Developments	18	53	51
Total Parcels Redeveloped	36	68	60
Redeveloped Parcel-Acreage	11.4	34.6	26.0
Capital Investments by ORA (nominal \$, millions)	– ^a	163.9 ^b	64.3

Sources: New Development footprints and parcel development dates acquired from various sources – see Appendix A.3; capital investment data adapted from the City of Oakland Redevelopment Agency Budgets, FY 1991-92 through 2005-07.

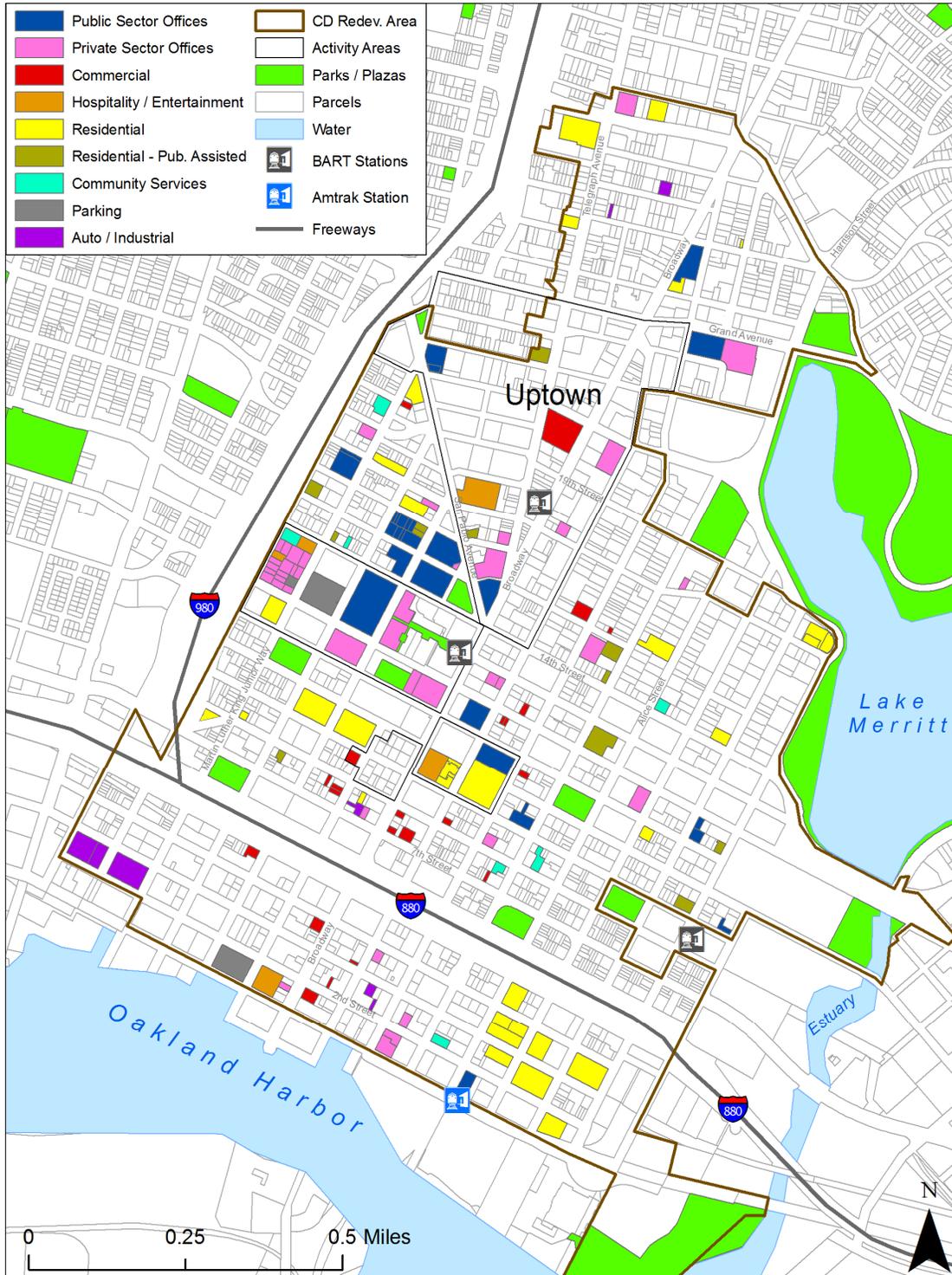
^a 1990-91 capital investments by ORA excluded because data could not be obtained for the 1990-91 fiscal year.

^b 1992-00 and 2001-06 capital investments by ORA reported here in nominal, rather than constant dollars. These values were estimated by redistributing the reported fiscal year investments over calendar years, as well as ensuring that "carryover" expenditures were moved from each two-year budget period to the next; nominal reporting was implemented to avoid misrepresenting the investments over time.

As can be derived from table 3.1, private development activity slowed significantly after 1991, as projects that had started during the 1980's real estate boom were completed. With the private real estate market suffering during the 1990's, the Redevelopment Agency invested approximately \$163.9 million for capital projects in the Central District over a nine-year period, an average of \$18.2 million per year. As redevelopment

⁵⁶ Stuart A. Gabriel, Joe P. Matthey, and William L. Wascher, "House Price Differentials and Dynamics: Evidence from the Los Angeles and San Francisco Metropolitan Areas," *Federal Reserve Bank of San Francisco Economic Review* 1 (1999): 3. The California housing market had suffered from price declines from 1990 through 1995; by 1999 the prices had returned to the 1990 peaks.

Figure 3.3. Cumulative parcel-level redevelopment (by primary development function) in the Central District, 1990 through 2006



Sources: Map developed by report author using data acquired and adapted from the County of Alameda, *County Geospatial Data Files*, <<http://www.acgov.org/gis.htm>> [October 26, 2007]; Oakland Redevelopment Agency, *Central District Urban Renewal Plan* (amended June 20, 2006); Rand McNally, *Local Map: Oakland, Berkeley, Richmond* (2007). Parcel development dates acquired from variety of sources – see Appendix A.3.

activities were reliant on public sector-driven projects, the primary functions of projects were weighted toward the addition or renovation of public-sector offices and affordable housing units, as well as public parking garages. When private development began to rebound, Redevelopment Agency investments in capital projects decreased substantially, with the Agency only spending \$10.7 million per year on average (which would be further reduced if considered in constant-dollars). The shift to private market-led development focused redevelopment activities toward the addition or renovation of private-sector offices and market-rate housing.

While table 3.1 indicates that only 13 percent of total parcel redevelopment was for primary commercial use, figure 3.3 further implies that few commercial amenities were improved through redevelopment. It is worthwhile at this point to highlight that many developments throughout the Central District include ground-floor commercial space even though the primary use of the building is something other than commercial. This pattern is inherent in the historic structure of the Central District.

Although most of the public and private sector office developments deviated from mixed-use through the 1990's, projects in the activity areas have always included a plan for a commercial-retail component. Additionally, ground-floor commercial-retail space was preserved through the renovation of historic buildings in the district, a goal within the Redevelopment Plan. Finally, most of the new housing developments built through the 10K Initiative include a ground-floor commercial-retail component.

Development of the Activity Areas

As previously mentioned, modern amenities are believed to be critical in attracting people to an area. An amenity that is generally linked to the perceived attractiveness of a downtown area is the availability of commercial-retail services. As these services were diminished through slum clearance and attrition during the 1950's and 1960's, an important aspect of the analysis of Central District redevelopment is the extent to which these services were replenished over time.

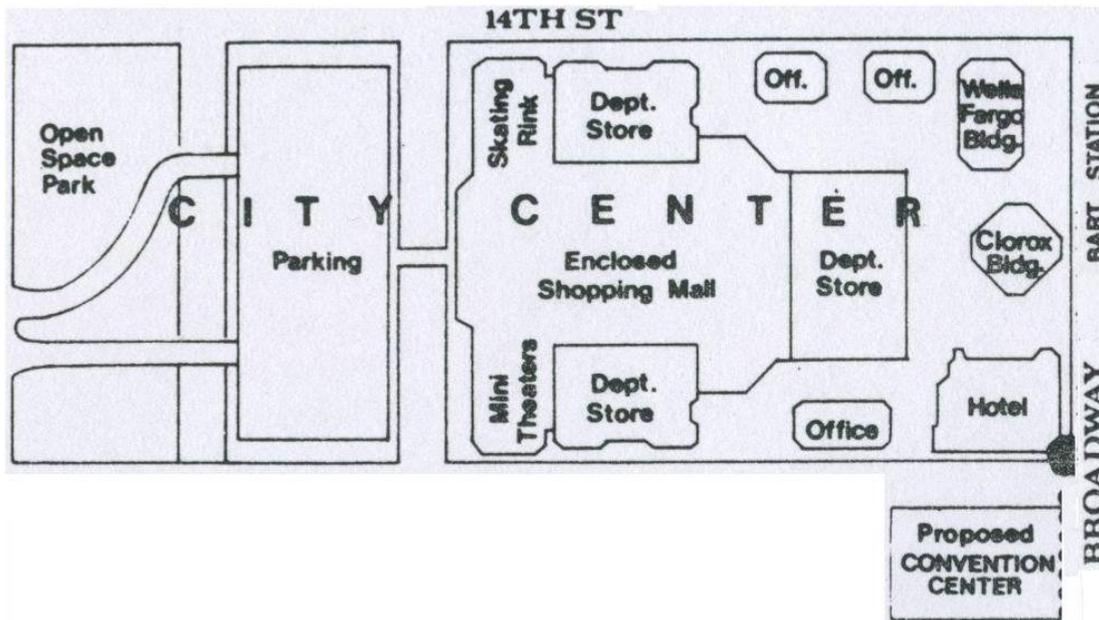
A review of the Redevelopment Agency plans for the designated activity areas shows that the Agency intended for commercial-retail services to be a considerable component of the redevelopment of these areas. With this in mind, further examination of the resultant activity area projects is a useful supplement to the picture provided by the cumulative parcel-level redevelopment study. The next several pages provide an overview of each of the Central District activity areas: City Center, Chinatown, Victorian Row / Old Oakland, and the Uptown Retail Center.



City Center

The early vision for the City Center is represented in figure 3.4, which called for a cluster of office buildings, a hotel, and a convention center to accompany a full shopping mall, movie theater, ice skating rink, and public park. As can be imagined, the Redevelopment Agency's vision was of a development that would attract visitors from morning to night, seven days a week.

Figure 3.4. Redevelopment Agency Vision for the City Center, 1973



Source: Adapted from Redevelopment Agency of the City of Oakland, *Invitation for Proposals: Neighborhood Development Program, Oakland Chinatown Redevelopment Project* (February 1974), Exhibit B.

The City Center that had been developed by 2007 is shown in figures 3.5a through 3.5d. As can be seen in the figures, the final project primarily functions as an office complex (indicated by blue text) although it does include retail and housing components. Ultimately, City Center has no department stores or the other envisioned entertainment amenities. At the time of this report, the stores and restaurants cater to a daytime workforce, generally closing around seven PM on the weekdays although limited weekend hours have been phased in as the 10K Initiative developments have increased the immediate residential population. Also, Preservation Park was not ultimately developed as an open space park; it is a collection of significantly renovated historic homes which now provide office space targeted to non-profit organizations. The park includes some landscaped open space and is pleasant to look at and stroll through but is not a destination that would draw visitors to the general City Center area for recreation.

Figure 3.5a. City Center site map, 2007

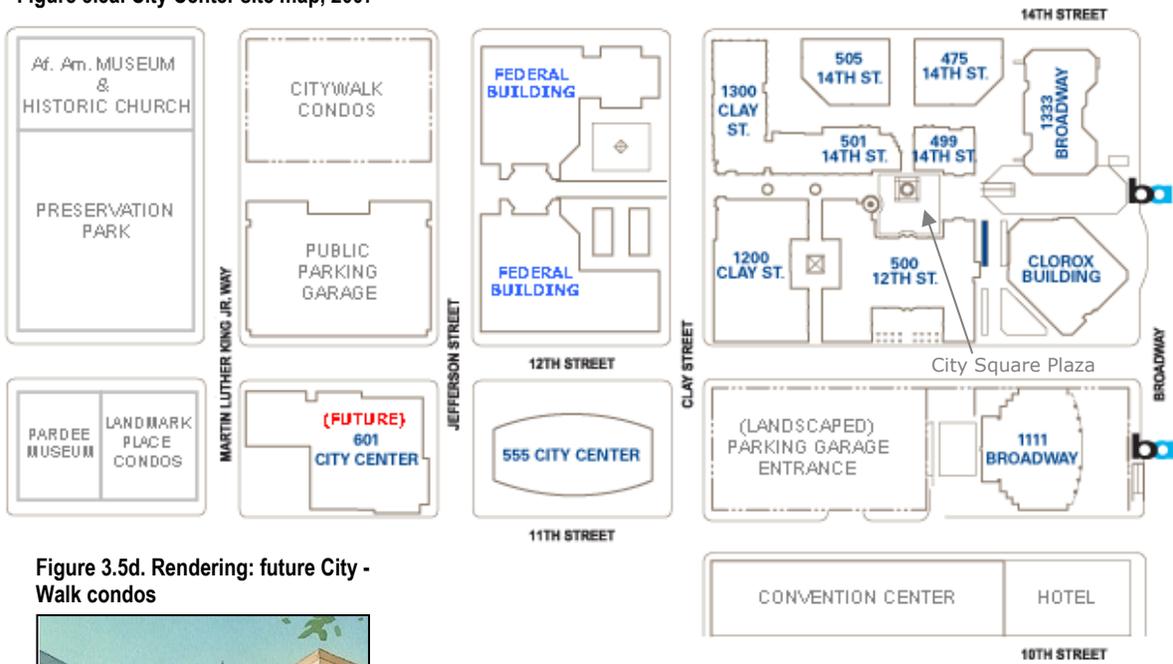


Figure 3.5d. Rendering: future City - Walk condos



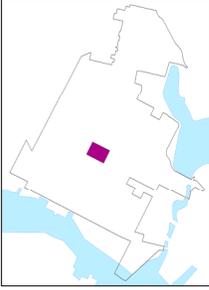
Figure 3.5c. Preservation Park



Figure 3.5b. City Square Plaza



Sources (clockwise from top): Graphic adapted from Oakland City Center, <<http://www.oaklandcitycenter.com>> [December 8, 2007]; Oakland City Center, <<http://www.oaklandcitycenter.com>> [December 8, 2007]; Preservation Park History, <<http://www.preservationpark.com/index.html>> [November 27, 2007]; Olson Company, *Oakland City Walk*, <<http://www.olsonhomes.com/find/community/overview.aspx?codeTitle=Citywalk>> [March 8, 2008].



Chinatown

Oakland has had a relatively large Chinese population since its early years. A review of Redevelopment Agency documents regarding the Central District has shown that this segment of the City's population has remained united and opinionated about how Chinatown would redevelop, and played a key role in the vision for the Chinatown Activity Area. Not dissimilar to City Center, the original vision for the Chinatown Activity Area described a mix of uses with offices, plenty of commercial-retail space, a hotel, a theater, and a public park. For Chinatown, the vision also included a substantial housing component with condominiums and rental apartments, as well as areas allotted for community space and a cultural center. Since the Chinatown Activity Area only encompassed four city blocks, the concept could only be implemented by building up; high-rise towers were envisioned on every block except where the public park was planned, and an Asian-oriented architectural quality was desired in all new development.⁵⁷ Figures 3.6a and 3.6b illustrate the desired development in the Chinatown Activity Area, as envisioned in 1973.

Figure 3.6a. Chinatown Activity Area vision, 1973 – looking up Broadway

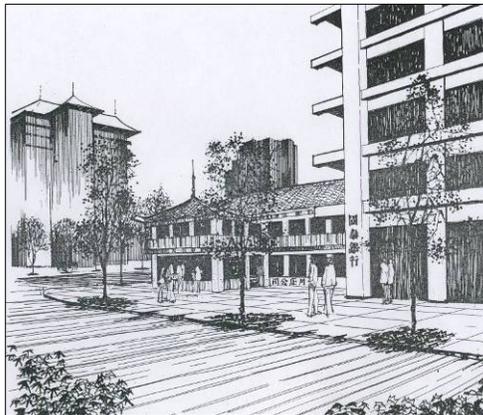


Figure 3.6b. Chinatown Activity Area vision, 1973 – looking west from Webster



Source: Redevelopment Agency of the City of Oakland, *Invitation for Proposals: Neighborhood Development Program, Oakland Chinatown Redevelopment Project* (February 1974), Exhibits F₂ and F₁.

The Chinatown Activity Area that had been developed by 2006 is illustrated in figure 3.7. The four-block activity area has some resemblance to the original vision; the developments include offices, commercial-retail space, a hotel, housing, and a public library branch. Ultimately, the envisioned building intensity was not realized however and, as with the City Center, not nearly as much commercial-retail space was incorporated nor was a public park included. Additionally, the development time for the four-block area was long and did not benefit specifically from the 1980's real estate boom, with the Trans Pacific Center being the only project completed during that decade. The development that came closest to realizing the original vision for the area is the Pacific Renaissance

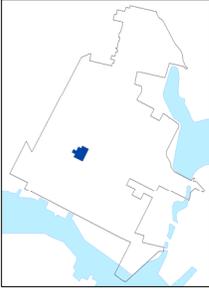
⁵⁷ Redevelopment Agency, *Invitation for Proposals*.

Plaza. This project includes housing, underground parking, a significant amount of ground-floor retail, a commercial plaza, and a public library branch that are all oriented toward serving the Chinese community. Chinatown, in general, is one of the few areas in the Central District where the streets and pedestrian activity are alive all days and hours of the week.

Figure 3.7. Chinatown Activity Area, 2007



Source: Photos by report author, 2008.



Victorian Row / Old Oakland

“The primary purpose of the Victorian Row/Old Oakland Project [was] to return [a] series of historically significant late 19th century structures to viable economic use while maintaining their architectural character and the integrity of their grouping.”⁵⁸ A second important point was that the project was seen as a key ingredient in the overall plan for downtown revitalization.⁵⁹ While the concept was initially proposed as a five-block activity area in 1967, the proposal was considered too extensive and the focus was pared down to a two-block area. The blocks that were adopted in 1975 were considered to be “the finest complete composition of Victorian architecture on the West Coast” by the Oakland Planning Commission.⁶⁰ The project was envisioned to provide ground-floor commercial-retail services with office space on the upper floors.

In 2007 the Old Oakland Activity Area, which had been completed as planned, had low vacancy rates on ground-floor storefronts and most of the upper office space was occupied as well. The shops and restaurants are largely occupied by local businesses although national franchises are also represented. This activity area has also stimulated private investment in restoring historic buildings on the surrounding blocks, however there are still many surface parking lots in the general area as extremely blighted buildings have been demolished and the parcels have yet to be redeveloped. The area now draws patrons seven days a week and into the evenings. Figures 3.8a and 3.8b provide an illustration of the Old Oakland area.

Figure 3.8a. Commercial services in the Old Oakland Activity Area, 2007



Figure 3.8b. Renovated historic commercial building on block adjacent to the Old Oakland Activity Area

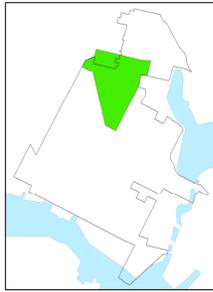


Source (from left): Photo by report author, 2007; East Bay Asian Local Development Corporation, *Swan's Marketplace*, <<http://www.ebaldc.org/pg/18/properties/commercial-properties/rf/11/Swans-Marketplace>> [March 9, 2008].

⁵⁸ Redevelopment Agency of the City of Oakland, *Victorian Row/Old Oakland: Environmental Impact Report (Draft)* (October 31, 1975), 201.

⁵⁹ Redevelopment Agency, *Central District Plan* (1975), 39.

⁶⁰ Redevelopment Agency, *Victorian Row*, 203.



Uptown Retail Center

While the Redevelopment Agency encouraged extensive retail developments in the downtown area, the final City Center, Chinatown, and Old Oakland activity areas never quite delivered on that dream. In the late 1980's, before the Uptown Activity Area was delineated, a shopping mall was being planned by a private development group. This project once again envisioned national department stores to anchor a modern mall; Nordstrom and JC Penney had committed and Macy's and Emporium were in discussions in 1989 but the project had fallen through by the early 1990's.⁶¹ The development was planned on a number of contiguous vacant or under-utilized parcels in the neighborhood that then continued to sit idle, being used for downtown parking.

The Redevelopment Agency, armed with the 10K Initiative guidelines, was again negotiating with a new developer in 2002 to finally build on these sites. The project was envisioned as a mixed-use, residential and retail development with roughly 800 housing units and 55,000 square feet of commercial space.⁶² As with previous redevelopment projects, the development that finally broke ground on the Uptown parcels in 2004 whittled down the envisioned commercial-retail component, ultimately including slightly less than 15,000 square feet of retail space to compliment 900 new housing units and a new public park.⁶³ Despite the minimal retail services, the project is likely to prove complimentary to the overall desirability of the Central District. Not only does the project improve a series of long-vacant city blocks, it also generates a substantial, immediate population to patronize the services provided by a number of significant historic preservation projects in the Uptown neighborhood that were undertaken during the study period.

None of the new buildings in the Uptown Activity Area had been completed by the end of 2006, however the construction activity may have influenced the rejuvenation of ground-floor retail businesses in some of the older buildings in the activity area. In 2007 many of these businesses targeted shoppers with more eclectic tastes; the businesses included restaurants, small retailers, an independent bookstore, and art galleries. Figures 3.9a through 3.9e provide an illustration of some of the major redevelopment projects in the Uptown Activity Area (many of which are still in construction in the first half of 2008).

⁶¹ Oakland Redevelopment Agency, *Adopted 1991-92 Annual Budget*, prepared by the Agency Administrator's Budget Office (1991), 27.

⁶² Alex Greenwood and Patrick Lane, "Oakland's 10K Race for Downtown Housing," *Planning*, August 2002, 17.

⁶³ Community and Economic Development Agency of the City of Oakland, *Downtown Oakland: 10K Housing Activity* (August 2007).

Figure 3.9a. Uptown Oakland, in construction in 2006



Figure 3.9b. Paramount Theatre, built 1931, restored 1973



Figure 3.9e. Fox Theatre, built 1928, restoration in progress in 2006



Figure 3.9c. Sears department store, built 1929, restored 1996*



Figure 3.9d. Rotunda building interior, built 1912, restored 2001

Sources (clockwise from top left): ForestCity, *Projects and Properties, Residential: Uptown Oakland*, <<http://www.forestcity.net/PROPERTIES/uptown-oakland.asp>> [March 16, 2008]; Wikipedia, *Image: Oakland Paramount Theatre Exterior, 1975.jpg*, <http://en.wikipedia.org/wiki/Image:Oakland_Paramount_Theatre_exterior_%2C_1975.jpg> [March 16, 2008]; Photo by report author, 2008; Cohn Frankel Photography blog, *The Rotunda Building, Oakland CA*, <<http://cohnfrankelphotography.blogspot.com/2007/07/rotunda-oakland-ca-and-gurdwara-sahib.html>> [March 23, 2008]; Friends of the Oakland Fox, *Photo Gallery*, <<http://www.foxoakland.org/index.php?page=photo-gallery>> [March 16, 2008].

Note: Sears was the only department store operating in the Central District in 2006; Sears purchased and renovated the historic "Emporium" building shown as figure 3.9c.

The Central District at the End of 2006

The Oakland Central District of 2007 is still not comparable to the lively picture painted by stories of the area before the 1950's, however it is substantially more attractive than it was in 1989. The shift in the redevelopment strategy that came with the 10K Initiative has likely been one of the key catalysts in improving the outside perception of the area.

Within two years of approving the 10K Initiative the City found that:

Condominium prices rose from \$207 per square foot (the 1999 citywide average) to about \$325 per square foot for downtown lofts in 2001.... The downtown population increased by about 1,790 residents. Over the same two-year period, crime dropped by 42[%], and retailers such as Men's Wearhouse and the Gap moved into downtown.⁶⁴

A notable sub-strategy within the 10K Initiative was to disperse projects throughout the Central District, largely in the Redevelopment Project Area, by targeting vacant or under-utilized parcels.⁶⁵ This plan enhanced the distribution of redevelopment activities through the entire Central District Project Area.

Overall, an estimated thirty-two percent of the Central District parcel-area has been redeveloped under the 1969 redevelopment plan, with nearly twenty-one percent completed or in progress during the study period. As can be inferred from figures 2.1, 3.2, and 3.3 in conjunction with the discussion on the Redevelopment Agency activity areas, the Chinatown, Old Oakland, and the Waterfront Produce and Warehouse neighborhoods have redeveloped to the point that retail amenities have the patronage that encourages operation in the evening and weekend hours. The Downtown and Uptown neighborhoods also appear to be slowly moving in the same direction. Fewer changes have occurred in the Ironworks, Civic Center, Lakeside, and Northgate neighborhoods, however. In these remaining neighborhoods, field observations conducted from September 2007 through January 2008 found the following:

- Outside of the two blocks nearest Broadway, the Ironworks neighborhood largely serves an industrial function today with few amenities that would attract people to the Central District.
- The Civic Center continues to be an employment-focused neighborhood, again with few new amenities that attract people outside of working hours.
- The Northgate neighborhood has seen a few improvements through redevelopment projects but has yet to reach a point of cumulative redevelopment that may increase attractiveness. As with the Ironworks and Civic Center neighborhoods, Northgate provides limited attraction after working hours.

⁶⁴ Greenwood and Lane, "10K Race," 14.

⁶⁵ Ibid., 16.

- Finally, the Lakeside neighborhood benefits from proximity to a natural amenity (i.e., Lake Merritt) and a commercial-retail corridor along the eastern portion of Grand Avenue that is outside of the Project Area. Additionally, this neighborhood enjoyed a traditional mix of employment opportunities with newer, mostly market-rate housing prior to the study period. Few commercial amenities were added during the last seventeen years that would further increase the attractiveness of the neighborhood, however.

Analysis of the seventeen year period, 1990 through 2006, indicated that there were three distinctive sub-periods where the types and market-drivers of completed redevelopment projects changed from private to public, and then back to private again. These periods were identified as 1990 through 1991, 1992 through 2000, and 2001 through 2006. The change in development patterns from 2001 through 2006, when compared to the previous period, has made observable progress in shifting the overall Central District from a “business district” to a more well-rounded area that provides employment opportunities, access to natural amenities, a substantial number of renovated historic amenities, and an increased number of modern amenities. These changes have been implemented by redistributing the mixture of residents of varied income levels while also returning to development projects that include space for ground-floor commercial-retail services. The next chapter will review other studies that have explored the relationship between neighborhood desirability, access to amenities, and the effects of redevelopment activities.

Chapter 4

Existing Research on Property Values and Redevelopment

Chapter Overview

Redevelopment and TIF policies were conceived in California in the 1940's to revitalize areas that were blighting from the private market disinvestment that accompanied the suburbanization of the United States.⁶⁶ These policies focused public energy and investments on specified areas with the assumption that private investment would not return without this level of public intervention. As the utilization of these policies has grown, a valid question is whether those investments are actually achieving the original intent of redevelopment: to revitalize an area in order to improve the quality of life for residents in and around the deteriorating area. While there is no exact measurement for change in quality of life, the change in property values is often used as an implicit measure for quality of life as it represents the desirability of an area.

There are three key issues that relate to where and how redevelopment and TIF policies should be utilized. The first is the effect that proximity to amenities and disamenities has on neighborhood desirability and property values. The second is how redevelopment and TIF actions should be related to the finding of blight. Last is the issue of the type of jurisdiction-level redevelopment strategy that will have the maximum positive impact. This chapter discusses the research that has been done on these three issues.

Effect of Access to Amenities on Property Values

The physical amenities of a specific residential property (e.g., lot size, structure size, and number of bedrooms and bathrooms) logically impact the value of the property because there is a clear cost of building materials, land, and labor. Because it is also logical to assume that the quality of a neighborhood and access to amenities plays a key role in residential property values, many studies have been done to measure the value of presumed amenities and disamenities to consumers. Examples of neighborhood amenities that impact property values are: access to high-quality public schools, proximity to high-quality transit, low neighborhood crime rates, and distance from environmental contamination. Brueckner, Thisse, and Zenou theorized that Paris remains a desirable city for residents in socio-economic classes with choices, unlike many U.S. urban centers, because of the availability of attractive amenities. Their study described three categories of amenities – natural, historical, and modern – and theorizes that the lack of these amenities

⁶⁶ Dardia, *Subsidizing Redevelopment*, 2.

in many larger U.S. cities is what deters residents who have options from living in these cities.⁶⁷

Of the neighborhood amenities previously mentioned, access to high quality schools may have the greatest positive impact on housing values. Two recent studies have examined this theory in different regions; Brasington explored the effects in Ohio suburbs while Chin and Foong studied Singapore, an urban center.⁶⁸ Brasington found school quality to positively impact housing prices and that a “house price is more responsive to changes in school quality than to change in any other community variable.”⁶⁹ Chin and Foong also found that “accessibility to prestigious schools is a significant determinant of [residential] property values, which is an indication that, holding all else equal, individuals are willing to pay more for a property that is more accessible to a prestigious school.”⁷⁰ Different from Brasington however, Chin and Foong found that a neighborhood’s reputation had a stronger influence on price than school quality.⁷¹ An interesting twist on the impact of local school quality on urban residential property values is the consumer audience that the real estate industry targets for a given area or neighborhood. In the City of San Francisco, as an example, the U.S. census found that the median household income had increased by roughly 22 percent from 1990 to 2000, the city population remained relatively constant, and the number of children in the city decreased; most notably, the number of young children (under age 5) dropped 15 percent during the ten-year period.⁷² Overall, marketing in the real estate industry of the large San Francisco Bay Area urban centers appears targeted at child-less young professionals and empty-nesters. While U.S. urban centers have a reputation for poor school quality, residential property values in the more urbanized counties of the San Francisco Bay Area have held their value better than the most suburbanized counties during the housing market downturn of 2006-7.⁷³ While the education level of residents (and implicitly the quality of local schools) impacts all residents, the impact of local school quality on residential property values may be lessened in areas that attract residents with no immediate plans for having children.

Proximity to high quality transit is another amenity that is presumed to positively impact residential property values in urban areas. While transit quality likely does not affect

⁶⁷ Brueckner, Thisse, and Zenou, “Why is Central Paris Rich,” 94.

⁶⁸ David M. Brasington, “The Demand for Local Public Goods: The Case of Public School Quality,” *Public Finance Review* 30 (2002): 163-187; Hoong Chor Chin and Kok Wai Foong, “Influence of School Accessibility on Housing Values,” *Journal of Urban Planning and Development* 132, no. 3 (2006): 120-129.

⁶⁹ Brasington, “Demand for Local Public Goods,” 183.

⁷⁰ Chin and Foong, “Influence of School Accessibility,” 127.

⁷¹ *Ibid.*, 128.

⁷² Lisel Blash et al., *Getting Behind the Headlines: Families Leaving San Francisco* (San Francisco: San Francisco State University Public Research Institute, September 2005), 1-3, <http://www.dcyf.org/downloads/Final%20White%20Paper10_21_05.pdf> [November 11, 2007].

⁷³ DQNews.com, Real Estate News & Custom Data, *Bay Area Home Sales Remain at Two-Decade Low*, March 13, 2008, <<http://www.dqnews.com/News/California/Bay-Area/RRBay080313.aspx>> [March 23, 2008].

residential property desirability everywhere, researchers tend to believe that it is desirable for a consumer shopping for a home in an urban environment because transit enables mobility where the use of a private auto may be inconvenient. Since rail transit operates on a fixed route (while bus routes can change) and often keeps a schedule that is not impacted by auto congestion, research has often assumed that access to a rail station is an amenity that will be positively capitalized into residential property values. Two such studies – Landis, Guhathakurta, and Zhang; and Cervero and Duncan – have focused on this impact in California and have found mixed results.⁷⁴ Landis, Guhathakurta, and Zhang found that proximity to a BART station had a positive influence on the price of single family homes in 1990 in both Alameda and Contra Costa counties in the San Francisco Bay Area, as well as for the San Diego Trolley in the City of San Diego. On the other hand, the same study found that proximity to stations for the Caltrain commuter rail line in San Mateo County and the Valley Transit Authority (VTA) lightrail in Santa Clara County had negative impacts on the price of single family homes in 1990. Cervero and Duncan further explored the perceived value of proximity to rail transit in Santa Clara County in 1999, specifically looking at Caltrain and the VTA lightrail stations. Cervero and Duncan found that land values within one-quarter mile of a lightrail station “commanded a value premium of around \$9 per square foot ... [equating to] an overall land-value premium associated with proximity to rail of 45 percent” if the land was zoned for multi-unit developments of at least five units.⁷⁵ Cervero and Duncan also found a positive impact on residential land in close proximity to Caltrain stations in 1999, regardless of whether the land was zoned for single-family or multi-unit developments. One possible explanation for the difference in findings is the technique used to measure property value; Landis, Guhathakurta, and Zhang performed their analysis on actual sale prices of single-family homes, while Cervero and Duncan performed their analysis on the price of land (minus improvements). Another possible explanation for the difference is that the attitude of Santa Clara County residents changed from 1990 to 1999 and the residents did value transit more by the second study. Yet one other possible explanation is that land speculation by developers in 1999 impacted the residential property prices. Ultimately, both studies did find evidence to support the belief that urban consumers value access to rail transit.

Just as the desirable amenities such as school quality and transit access are expected to be positively capitalized into residential property values, disamenities are expected to be negatively capitalized. One disamenity that is often cited for lowering property values is lack of public safety, specifically crime. Hellman and Naroff provided early work in quantifying these impacts in Boston, and Tita, Petras, and Greenbaum have explored the

⁷⁴ Landis, Guhathakurta, and Zhang, *Capitalization of Transportation Investments*; Robert Cervero and Michael Duncan, “Benefits of Proximity to Rail on Housing Markets: Experiences in Santa Clara County,” *Journal of Public Transportation* 5, no. 1 (2002): 1-18.

⁷⁵ Cervero and Duncan, “Proximity to Rail,” 12.

impacts more recently by type of crime at the census tract level in Columbus, Ohio.⁷⁶ Hellman and Naroff estimated that each 1 percent reduction in crime in Boston would result in an increase of \$2.3 million in total residential property value in that city from 1972 to 1974. Tita, Petras, and Greenbaum's study results found a negligible average impact of crime on housing values across the City of Columbus from 1995 to 1998 but that, if crime was categorized by type, violent crimes had a negative impact on housing prices. Additionally, Tita, Petras, and Greenbaum believed that the property crimes were less likely to be reported in lower income communities, which impacts the reliability of crime data for evaluating the impacts of property crimes on property values. Generally, the studies agree that crime does negatively impact residential property values.

Proximity to environmental contamination has also been highlighted by many public health and environmental science professionals as a disamenity that should negatively impact residential property values. The belief is that a general public that is educated on the negative health effects of living in close proximity to environmental contamination will value living further from that contamination. Studies on property values with respect to proximity to environmental contamination have had mixed findings, however. Bui and Mayer examined the effect that Toxic Release Inventory (TRI) public reporting had on residential property values in Massachusetts between 1987 and 1990. They found that "the introduction of TRI reporting [in 1987] had virtually no effect on housing prices and ... subsequent reductions in aggregate reported emissions between 1987 and 1990 [also had] no significant effect on house prices."⁷⁷ A study by Gayer and Viscusi found that newspaper coverage on Environmental Protection Agency (EPA) Superfund sites in the Grand Rapids, Michigan area from 1988 to 1993 actually had a positive impact on nearby housing prices. Gayer and Viscusi believed that "publicity could have either led people to lower their perceptions of the risks from the sites, or it could have led them to increase their expectations that remediation of the sites was imminent."⁷⁸ Finally, Kiel and Williams examined seventy-four Superfund sites in thirteen counties and found mixed results, with some sites having the expected negative impact on prices while others had no impact or even a positive impact in some cases.⁷⁹ The variation in the results between these three studies may be explained by Kiel and Williams finding that "larger sites in areas with fewer blue-collar workers are more likely to have the expected negative impact on local house prices."⁸⁰

⁷⁶ Daryl A. Hellman and Joel L. Naroff, "The Impact of Crime on Urban Residential Property Values," *Urban Studies* 16, no. 1 (February 1979): 105-112; George E. Tita, Tricia L. Petras, and Robert T. Greenbaum, "Crime and Residential Choice: A Neighborhood Level Analysis of the Impact of Crime on Housing Prices," *Journal of Quantitative Criminology* 22, no. 4 (December 2006): 299-317.

⁷⁷ Linda Bui and Christopher Mayer, "Regulation and Capitalization of Environmental Amenities: Evidence from the Toxic Release Inventory in Massachusetts," *The Review of Economics and Statistics* 85, no. 3 (August 2003): 695.

⁷⁸ Ted Gayer and W. Kip Viscusi, "Housing Price Responses to Newspaper Publicity of Hazardous Waste Sites," *Resource and Energy Economics* 24 (2002): 46.

⁷⁹ Katherine A. Kiel and Michael Williams, "The Impact of Superfund Sites on Local Property Values: Are all Sites the Same?" *Journal of Urban Economics* 61 (2007): 171.

⁸⁰ *Ibid.*, 171.

While crime and environmental contamination are both disamenities with varying impacts on housing prices, Carroll and Eger have found that the establishment of redevelopment districts and the investments that come with TIF policies can counter the negative effects.⁸¹ In their study of Milwaukee, Wisconsin, Carroll and Eger found that low levels of redevelopment TIF investments could increase property values, but not enough to bring affected property values up to the average; more focused, extensive redevelopment efforts could overcome the negative effects of brownfields and crime however.⁸²

Public Intervention and the Finding of Blight

After determining what residents value, the next question a local government should ask when considering the creation of a redevelopment district is whether government-driven development is necessary. As previously discussed, redevelopment was originally conceived in California with the legislative spirit of encouraging and enabling investments in blighted communities in order to improve the quality of life for residents. A blighted area was legally defined by a “serious physical and economic burden on the community which cannot reasonably be expected to be reversed or alleviated by private enterprise or governmental action, or both, without redevelopment.”⁸³ TIF was then added to the California redevelopment laws in 1952 to spur redevelopment activities by providing tax incentives.⁸⁴

Over the years since California created TIF, most other states in the U.S. have also adopted TIF policies.⁸⁵ While the finding of blight is often included as a legal requirement for implementing a TIF district, some states do not make this a requirement. Two studies on different states that do not require blight to designate a TIF district explored whether the original spirit of the TIF legislation impacted where TIF districts were designated in these states. The study by Man and Rosentraub focused on Indiana, a state that changed its TIF legislation in the mid-1980s to remove the requirement of blight. From the time the legislation changed through 1990, twenty-three cities in Indiana designated thirty-eight TIF districts.⁸⁶ The study of Indiana found that “high poverty level, unemployment rate, and vacancy rate of a city do not affect the likelihood of adopting a TIF program,” or in other words, Indiana cities often use TIF for economic development rather than redevelopment of blighted neighborhoods.⁸⁷ The study by Byrne focused on Illinois, which adopted TIF legislation in 1977. Illinois TIF districts do not require the finding of blight either, although many local policy makers feel that the requirement for

⁸¹ Deborah Carroll and Robert Eger III, “Brownfields, Crime, and Tax Increment Financing,” *The American Review of Public Administration* 36, no. 4 (December 2006): 455-477.

⁸² Carroll and Eger, “Brownfields,” 472.

⁸³ Dardia, *Subsidizing Redevelopment*, viii.

⁸⁴ *Ibid.*, 4.

⁸⁵ Byrne, “Determinants of Property Value,” 317.

⁸⁶ Man and Rosentraub, “Tax Increment Financing,” 532.

⁸⁷ *Ibid.*, 538.

blight was the spirit of the legislation.⁸⁸ A study of sixty-seven cities in Illinois with eighty-nine TIF districts from 1990 to 1993 found that, although not all TIF districts are in blighted areas, TIF districts are generally located in blighted areas where vacancy rates are higher and incomes are lower than in the municipality overall.⁸⁹

California continues to require the finding of blight to designate a redevelopment project area through a TIF district. As previously mentioned, in California in 2005 roughly \$3 billion of public tax monies were dedicated to redevelopment project areas through TIF.⁹⁰ Considering the degree of public investments made specifically in redevelopment areas, as well as the widespread adoption of TIF legislation, it is not surprising that there is a policy debate about whether the redevelopment laws, and specifically TIF, are used appropriately and are actually improving the quality of life for affected residents.⁹¹

Effect of Redevelopment on Property Values

When the finding of blight is a requirement for implementing government-driven redevelopment, extensive blight likely results in difficulty creating a fair and effective redevelopment strategy that will positively impact many residents. The strategy that seems to be most common is to distribute redevelopment investments as equitably as possible over the blighted areas. This approach can be seen in the studies by Byrne, Ellen et al., and Weber, Bhatta, and Merriman.⁹² Since public funding is not infinite, distributed redevelopment often results in small-scale investments sprinkled throughout the redevelopment areas. The effectiveness of this strategy has been questioned by some redevelopment agencies and an alternative targeted investment strategy can be observed in a study by Galster, Tatian, and Accordino.⁹³

The study by Ellen et al. is a good example to delve into and examine the results of distributed redevelopment. This study focused on the private development of affordable, for-sale housing in New York City from 1980 to 1999 and the effects those projects had on the property values of nearby homes. These projects were constructed on in-fill sites located in very blighted neighborhoods; the sites were owned by the City and either donated or sold for a nominal fee to one of two non-profit organizations – the Nehemiah Program or the New York City Housing Partnership – to construct housing. Through these programs, “2,938 Nehemiah units were built across 25 census tracts ...; Partnership units were more dispersed – 12,590 units were built across 179 tracts.”⁹⁴ Aside from the land provisions, the City did not commit to further redevelopment efforts or investments in public infrastructure in these neighborhoods. The study found that, before the new

⁸⁸ Byrne, “Determinants of Property Value,” 318.

⁸⁹ *Ibid.*, 320, 323.

⁹⁰ California Redevelopment Association, *Redevelopment – An Essential Tool*.

⁹¹ Dardia, *Subsidizing Redevelopment*, iii.

⁹² Byrne, “Determinants of Property Value;” Ellen et al., “Building Homes;” Weber, Bhatta, and Merriman, “Spillovers from Tax.”

⁹³ Galster, Tatian, and Accordino, “Targeting Investments.”

⁹⁴ Ellen et al., “Building Homes,” 197.

developments, homes within 500 feet of the project sites sold, on average, for 8.8 percent less than comparable homes within the same zip code; after the projects were completed the price difference immediately decreased to just 1.6 percent. The study also found increased house price appreciation of homes within 1,000 feet within two years and 2,000 feet within three years of the completion of the new developments, but the analysis estimated “that the effect on properties within 500 and 1,000 feet of the project declines over time.”⁹⁵

In contrast to the distributed development strategy, the study by Galster, Tatian, and Accordino of a targeted investment strategy in Richmond, Virginia, examined the City redevelopment program termed Neighborhoods in Bloom (NiB). The NiB program was launched in 1998 and focused public and non-profit redevelopment investments on a limited number of blocks in seven of forty-nine neighborhoods originally considered for investments. “The explicit goal was to achieve a critical mass that stimulated self-sustaining private market activity.”⁹⁶ Galster, Tatian, and Accordino estimated that the \$21.33 million of public and non-profit investments in NiB areas from 1998 to 2004 “increased the aggregate value of single-family homes in NiB target areas by \$44.98 million more than if they had increased at the same rate as the rest of Richmond.”⁹⁷ Additionally, by the 2002-03 city fiscal year home prices in the NiB areas was on par with the citywide average for comparable homes.⁹⁸

When comparing the results of Ellen et al. and Galster, Tatian, and Accordino, the targeted strategy positively impacted a specific neighborhood to a greater extent than the distributed investment strategy. On the other hand, more neighborhoods, and likely more residents, experienced some improvement in quality of life from the distributed strategy than from the targeted strategy.⁹⁹ When evaluating redevelopment efforts such as the aforementioned however, the question is often raised of whether positive changes would have occurred without redevelopment intervention.

The studies by Man and Rosentraub and Galster, Tatian, and Accordino both found that the impacts on residential property values would not have happened without redevelopment intervention.¹⁰⁰ Man and Rosentraub found that “TIF programs raise property values in a community beyond the level that would have been expected had the TIF district not been created.” Their study determined that the cities experienced a permanent increase in “the median owner-occupied housing value by 11.4 [percent] ... relative to what it would have been without the program” for properties within the TIF district, as

⁹⁵ Ibid., 203-4.

⁹⁶ Galster, Tatian, and Accordino, “Targeting Investments,” 458.

⁹⁷ Ibid., 464.

⁹⁸ Ibid., 463.

⁹⁹ Ellen et al., “Building Homes;” Galster, Tatian, and Accordino, “Targeting Investments.”

¹⁰⁰ Man and Rosentraub, “Tax Increment Financing;” Galster, Tatian, and Accordino, “Targeting Investments.”

well as in the surrounding communities from 1980 to 1990.¹⁰¹ Similarly, the study on Richmond found that housing prices in the NiB areas “increased 10.85 [percent] per year faster than prices of comparable homes in the city overall ... and reached the citywide average for comparable homes in 2002-03.” On the other hand, control neighborhoods in Richmond where housing values were 22.5 percent lower than the equivalent homes in the City (excluding NiB homes) prior to the implementation of the NiB program, showed “no statistically significant differences between home prices in these control areas and the rest of the non-NiB areas of the city” after NiB investments began.¹⁰² As these control neighborhoods were representative of the NiB areas, it is highly likely that NiB areas would not have experienced a relative property value gain without the redevelopment investments.

After redevelopment has occurred and the results can be evaluated, interested parties such as researchers, public officials, planners, developers, and residents want to understand what types of development (e.g., industrial, commercial, residential, mixed-use) are the most successful. This question raises yet one more interesting debate: how to define “successful” redevelopment. If success is measured by the largest tax increment generated within the project area, Byrne found that industrial TIF districts experienced the highest median annualized property value growth at 31.6 [percent], followed by mall TIF districts with 25.6 [percent] median growth, and CBD TIF districts with 15.9 [percent] median growth. Mixed-use TIF districts had the lowest median property value growth ... with only 10.4 [percent] annualized growth.”¹⁰³ Alternatively, if success is measured by improvements in quality of life for affected residents, Weber, Bhatta, and Merriman found that “proximity to commercial and industrial TIF districts reduces predicted [residential property] appreciation [and] final sales prices increase with distance from these two kinds of TIF districts.” On the other hand, being closer to a mixed-use TIF district was likely to result in higher price appreciation.¹⁰⁴

Conclusions

All of the studies reviewed here used changes in residential property values to measure the importance of a neighborhood characteristic or specific changes in neighborhood characteristics over time. As mentioned, the housing market is studied because it provides an implicit measure for neighborhood desirability and residential quality of life. The neighborhood characteristics that are considered amenities and disamenities have also been researched extensively; the examples described here – school quality, transit access, crime, and environmental contamination – are just a representation of the many variables that affect neighborhood desirability.

¹⁰¹ Man and Rosentraub, “Tax Increment Financing,” 524, 541.

¹⁰² Galster, Tatian, and Accordino, “Targeting Investments,” 463-4.

¹⁰³ Byrne, “Determinants of Property Value,” 324.

¹⁰⁴ Weber, Bhatta, and Merriman, “Spillovers from Tax,” 276, 278.

Additionally, the substantial investments made on redevelopment activities have prompted research on where and how government-driven redevelopment should be implemented. Quantified results from a variety of redevelopment strategies have been shown, as has two perspectives on measuring success: increased property values within the redevelopment district versus increased property values for the broader area affected by redevelopment. Galster, Tatian, and Accordino found that there was a tipping point in redevelopment of blighted public housing and infrastructure that resulted in increased private investment and extensive quality of life improvement for the larger neighborhood;¹⁰⁵ this result is well aligned with the original spirit of redevelopment.

A next step in redevelopment research is to determine if there is a similar tipping point in the redevelopment of a blighted, urban, mixed-use CBD that will improve the quality of life for residents most affected by living both in and near the area. The next chapter of this report will describe the results of such an analysis on the Oakland Central District, building from the studies reviewed here and the cumulative redevelopment research described in chapter 3.

¹⁰⁵ Galster, Tatian, and Accordino, “Targeting Investments.”

Chapter 5

Empirical Analysis of Property Value Trends

Chapter Overview

To this point, this report has focused on examining how the Oakland Central District has changed over time, with an emphasis on the results of redevelopment during the period from 1990 through 2006. This chapter will discuss whether those redevelopment efforts have positively impacted the desirability of the neighborhoods that surround the Central District, measured through the change in housing prices. The chapter begins with the study hypothesis and then discusses the two property value analysis methods considered for this study. The remainder of the chapter describes the dataset, model specification, and regression results from the analysis performed.

Testable Hypothesis

For the current study, the hypothesis is that the Central District redevelopment has had a more significant impact on the housing prices in surrounding neighborhoods, when compared to neighborhoods farther from the Central District. This expectation was drawn from the findings on the spillover effects of redeveloped areas and properties in several studies discussed in the literature review.¹⁰⁶

As chapter 3 of this study found that there were clearly substantial improvements made through redevelopment in the Oakland Central District, housing prices in and around the area are expected to generally increase over time.

Choosing a Property Value Analysis Method

There are two popular research methods used to perform property value analyses: hedonic regression and repeat-sales regression. Both of these methods were developed in order to create an apples-to-apples comparison using available data on individual property sales to describe changes in the larger real estate market. Neither technique is perfect, hence a debate ensues over which technique can produce more reliable results.

As described by Rosen in a primary work on the hedonic method, “hedonic prices are defined as the implicit prices of attributes and are revealed to economic agents from observed prices of differentiated products and the specific amounts of characteristics associated with them.”¹⁰⁷ When coupled with regression analysis, “the implicit prices of the components of the bundle of housing service rendered by housing units of varying

¹⁰⁶ Ellen et al., “Building Homes;” Man and Rosentraub, “Tax Increment Financing;” Weber, Bhatta, and Merriman, “Spillovers from Tax.”

¹⁰⁷ Rosen, “Hedonic Prices and Implicit Markets,” 34.

types, sizes, qualities and locations can be estimated by regressing the observed sales prices of housing against these contributing factors.”¹⁰⁸ The hedonic methodology is criticized however, because it is difficult to correctly implement and is reliant on the researcher’s assumptions about the functional form of the hedonic equation, as well as the relevant attributes of the sample of houses. The result is inconsistency in the estimates of the implied attribute prices.¹⁰⁹

In contrast, the repeat-sales methodology analyzes properties that sold more than once without a substantial change to the characteristics of the property during the study period in order to control for hedonic attributes.¹¹⁰ Despite the relative simplicity of correctly implementing the repeat-sales technique, a study by Meese and Wallace on the reliability of the results found that repeat-sales “indices suffer from sample selection bias and non-constancy of implicit housing characteristic prices, and they are quite sensitive to small sample problems.”¹¹¹ In their study, Meese and Wallace examined a sample of 51,014 total sales, of which 6,747 were repeat sales, in two different cities over a nineteen year period. The study found that “repeat-sales homes that did not change attributes [were] slightly smaller, and [were] in worse condition, than the average for single-sale homes. The repeat-sales homes that did have attribute changes ... tend to be slightly larger and in worse condition, than the average for single-sale homes.”¹¹²

The literature review conducted as part of this study examined sixteen research studies that performed property value analyses to measure the influence that a particular policy or externality had on an area. Of these studies, eleven implemented a hedonic analysis, three implemented a repeat-sales analysis, one implemented an adjusted interrupted time series analysis, and one implemented a modified Muth model. The studies reviewed, and their respective analysis techniques, were:

- Brasington – Hedonic¹¹³
- Bui and Mayer – Repeat-sales¹¹⁴
- Byrne – Hedonic¹¹⁵
- Carroll and Eger – Hedonic¹¹⁶
- Cervero and Duncan – Hedonic¹¹⁷

¹⁰⁸ Shishir Mathur, Paul Waddell, and Hilda Blanco, “The Effect of Impact Fees on the Price of New Single-Family Housing,” *Urban Studies* 41, no. 7 (June 2004): 1306.

¹⁰⁹ Richard A. Meese and Nancy E. Wallace, “The Construction of Residential Housing Price Indices: A Comparison of Repeat-Sales, Hedonic-Regression, and Hybrid Approaches,” *Journal of Real Estate Finance and Economics* 14 (1997): 52.

¹¹⁰ *Ibid.*, 52.

¹¹¹ *Ibid.*, 64.

¹¹² *Ibid.*, 54-5.

¹¹³ Brasington, “Demand for Local Public Goods.”

¹¹⁴ Bui and Mayer, “Capitalization of Environmental Amenities.”

¹¹⁵ Byrne, “Determinants of Property Value.”

¹¹⁶ Carroll and Eger, “Brownfields.”

¹¹⁷ Cervero and Duncan, “Proximity to Rail.”

- Chin and Foong – Hedonic¹¹⁸
- Ellen et al. – Hedonic¹¹⁹
- Galster, Tatian, and Accordino – Adjusted interrupted time series¹²⁰
- Gayer and Viscusi – Repeat-sales¹²¹
- Hellman and Naroff – Modified Muth model¹²²
- Kiel and Williams – Hedonic¹²³
- Landis, Guhathakurta, and Zhang – Hedonic¹²⁴
- Man and Rosentraub – Hedonic¹²⁵
- Mathur, Waddell, and Blanco – Hedonic¹²⁶
- Tita, Petras, and Greenbaum – Hedonic¹²⁷
- Weber, Bhatta, and Merriman – Repeat-sales¹²⁸

Of the studies listed, Weber, Bhatta, and Merriman and Ellen et al. stand out as valuable to compare with consideration to the findings of Meese and Wallace in identifying the most appropriate method to utilize for the current study.¹²⁹

Weber, Bhatta, and Merriman used the repeat-sales technique to examine the spillover effects of redevelopment on the property values of single-family residences in Chicago, a city of nearly 3 million people in the year 2000.¹³⁰ This method resulted in 5,852 properties that sold more than once in Chicago between 1993 and 1999. Of these properties, only 990 were sold through real estate agents using the Multiple Listing Service (MLS) and could be verified to not have had major physical changes between sales. Additionally there were several redevelopment areas with few or no repeat-sales in close proximity. The size and location of the sample data forced the researchers to draw conclusions by creating a model to predict the effect of moving properties closer / further from redevelopment boundaries.¹³¹

Ellen et al., on the other hand, used the hedonic technique to examine a spillover effect of redeveloping blighted parcels in New York City. The sample for that study included 234,591 residential home sales in the 34 communities under study from 1980 to 1999. Of

¹¹⁸ Chin and Foong, “Influence of School Accessibility.”

¹¹⁹ Ellen et al., “Building Homes.”

¹²⁰ Galster, Tatian, and Accordino, “Targeting Investments.”

¹²¹ Gayer and Viscusi, “Publicity of Hazardous Waste Sites.”

¹²² Hellman and Naroff, “Impact of Crime.”

¹²³ Kiel and Williams, “Impact of Superfund Sites.”

¹²⁴ Landis, Guhathakurta, and Zhang, *Capitalization of Transportation Investments*.

¹²⁵ Man and Rosentraub, “Tax Increment Financing.”

¹²⁶ Mathur, Waddell, and Blanco, “Impact Fees.”

¹²⁷ Tita, Petras, and Greenbaum, “Crime and Residential Choice.”

¹²⁸ Weber, Bhatta, and Merriman, “Spillovers from Tax.”

¹²⁹ Weber, Bhatta, and Merriman, “Spillovers from Tax;” Ellen et al., “Building Homes;” Meese and Wallace, “Residential Housing Price Indices.”

¹³⁰ Weber, Bhatta, and Merriman, “Spillovers from Tax;” U.S. Census, *American FactFinder*. Chicago 2000 population reported as 2,896,016; population density of 12,749 people / sq.mi.

¹³¹ Weber, Bhatta, and Merriman, “Spillovers from Tax,” 265-7.

all properties in the dataset, 25.4 percent of those (approximately 59,586) were within the 2,000 foot ring around each development included in the study. In comparison to Chicago, New York City had roughly 8 million people in the year 2000.¹³²

Because the size of the cities under study and the number of years analyzed by the studies are different, the Weber, Bhatta, and Merriman and Ellen et al. studies cannot be directly compared.¹³³ What is obvious when considering the impact of the analysis methods chosen in these two studies, as well as taking into account the findings by Meese and Wallace,¹³⁴ is that Weber, Bhatta, and Merriman suffered from a relatively small sample size while Ellen et al. had a fairly large sample size. Additionally, the larger datasets available with hedonic analyses are more likely to avoid the sample selection bias mentioned by Meese and Wallace. Lastly, determining if the attributes of a repeat-sale property have changed is critical to the analysis but is difficult to confirm.

After weighing the pros and cons of the hedonic and repeat-sales methods, this study utilized the hedonic methodology. The key reasons for this decision were: 1) the study area was relatively small, thus resulting in a very small sample size, and 2) the resulting sample-set was expected to have a high likelihood of producing biased results if repeat-sales regression was used. As the neighborhoods around the Central District are older and many suffer from varying levels of blight, renovations are common when property changes hands and difficulty capturing these changes was anticipated. Additionally, the speculative nature of the urban real estate market during the study period may have introduced further bias into the results, as older single-family properties near the Central District may be located on parcels that are zoned for higher density development; in this case, the change in price between sales may not have been representative of changes in neighborhood desirability.

Summary of Data

To measure the influence of redevelopment of the Central District on surrounding neighborhoods, this study analyzed single-family homes sold from 1990 through 2006 that were located near the Central District Redevelopment Project Area boundary. The relevant property data was provided by CD-DATA; the CD-DATA dataset included all available Alameda County Property Tax Assessor data at the parcel-level that had been recorded through mid-year 2007. The dataset also included a GIS shapefile at the parcel-level which enabled spatial analysis on the properties of interest. ArcGIS software was used to create a dataset of the single-family homes that were located within two-miles of the Central District and had sold during the study period. The two-mile proximity region was chosen to capture the area in which residents would likely be impacted by the redevelopment-related changes in amenities that were occurring in the Central District.

¹³² Ellen et al., "Building Homes," 195-6; U.S. Census, *American FactFinder*. New York City 2000 population reported as 8,008,278; population density of 26,401 people / sq.mi.

¹³³ Weber, Bhatta, and Merriman, "Spillovers from Tax;" Ellen et al., "Building Homes."

¹³⁴ Meese and Wallace, "Residential Housing Price Indices."

GIS was then used to append the median income, owner occupancy rates, and racial make-up at the 2000 census block group level to the identified properties. The census data and necessary GIS files were obtained from the Census Bureau website.

The initial selection process identified 11,535 single-family homes that were sold during the period, however many of the properties identified had missing or questionably accurate characteristics. Further data filtering was used to identify a suitable dataset for this analysis; first, properties with “0” recorded in the bedroom, bathroom, building size, lot size, or sale price were removed. Additionally, the properties with more than six bedrooms or more than five bathrooms, as well as with building sizes or lot sizes in the top and bottom one-percent were removed from the dataset to reduce the effect of outliers and data entry errors in the property characteristics fields.¹³⁵ Finally, the sale prices of the homes in the dataset were adjusted to 2006-constant-dollars using the Non-Housing Consumer Price Index for the San Francisco-Oakland-San Jose, CA region from the U.S. Department of Labor, Bureau of Labor Statistics. The final dataset included the 9,198 single-family homes summarized by table 5.1.

Table 5.1. Available dataset of single-family homes sold between 1990 and 2006 within two-miles of the Central District Redevelopment Project Area boundary

City	Total Samples	Building size (square feet)		Lot size (square feet)		Sale price (2006 dollars*)	
		Mean		Mean		Mean	
		Min	Max	Min	Max	Min	Max
Alameda	1840	1,601	4,649			\$454,280	
		663	3,895	1,749	11,925	\$14,412	\$1,574,606
Emeryville	52	1,163	3,831			\$275,215	
		659	2,147	1,750	7,600	\$70,387	\$670,000
Oakland	6273	1,466	4,298			\$383,069	
		649	3,849	1,680	12,390	\$2,133	\$2,554,409
Piedmont	1033	2,099	5,664			\$836,682	
		681	3,901	2,000	12,375	\$50,877	\$3,125,326
Overall	9198	1,562	4,519			\$447,649	
		649	3,901	1,680	12,390	\$2,133	\$3,125,326

Sources: Data adapted from the Alameda County Property Tax Assessor dataset provided by CD-DATA.

Note: See Appendix A.4 for a table of the constant dollar adjustment factors.

Table 5.1 highlights that, while properties at the high-end of the market may have been comparable in Oakland and Piedmont, the average property in Piedmont was larger and substantially more expensive than the average property in Oakland. Additionally, when comparing properties in Oakland and Alameda, the average properties were more comparable but Alameda homes were slightly larger and sold at a price-premium. From

¹³⁵ Sale price was not filtered for the initial dataset reported in table 5.1. A different process was used for filtering on the sale price variable; this will be explained in greater detail later in this chapter.

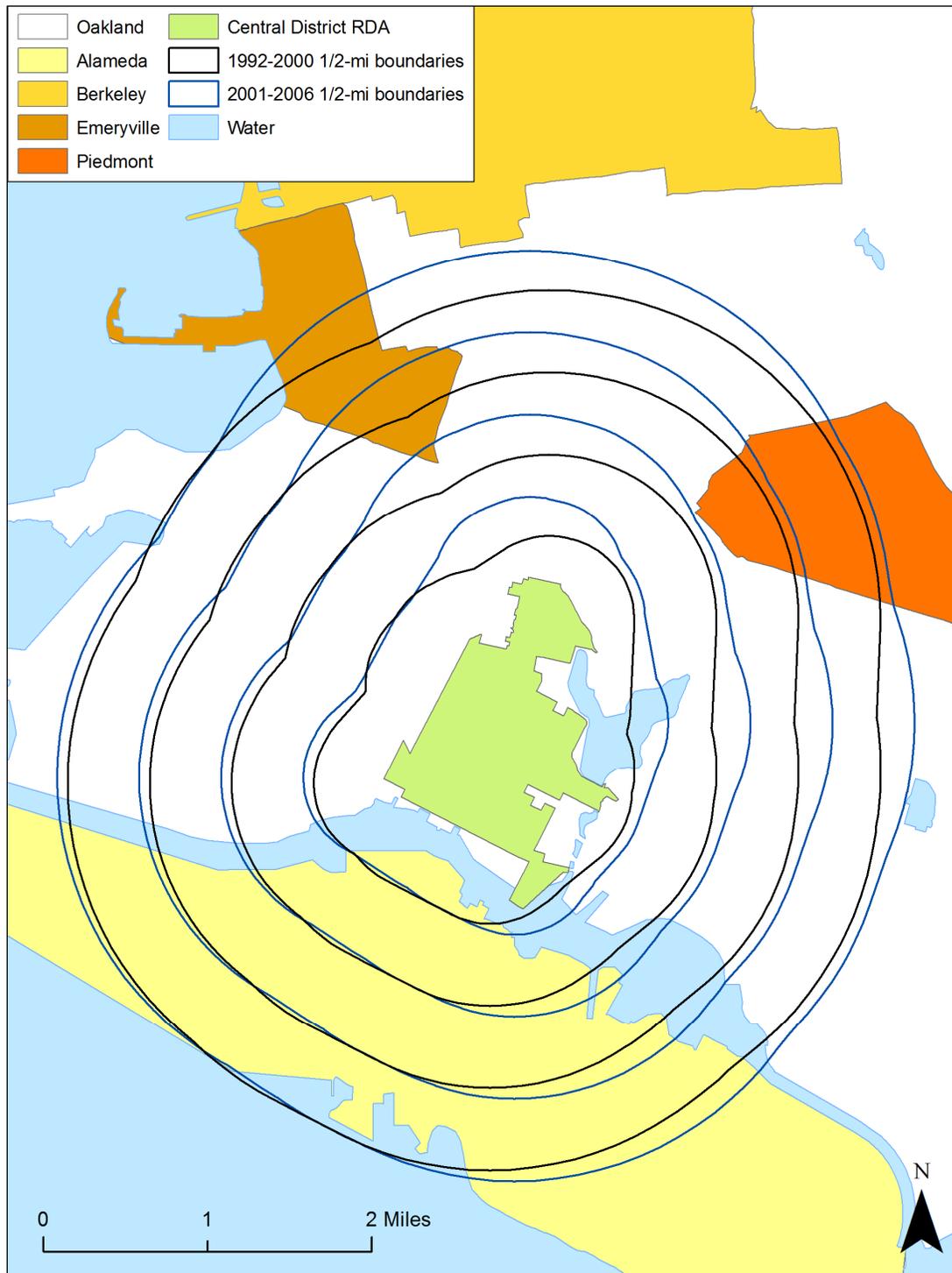
the differences shown in this comparison, Oakland, Alameda, and Piedmont can be assumed to have a different level of desirability which should be accounted for in the hedonic regression model.

In order to make a relative measurement of the impact of redevelopment on the surrounding neighborhoods, the analysis of single-family home sales was divided into the three periods identified through the cumulative redevelopment analysis discussed in chapter 3 of this report. The respective periods were: 1990 through 1991, 1992 through 2000, and 2001 through 2006. Additionally, while the redevelopment district boundary did not change during the study period, the locations of parcel-level redevelopment activity did vary and justified that a different boundary be identified for each period.

After the dataset from table 5.1 was divided into the three study periods and distance to redevelopment activity was measured, there were only 467 samples in the 1990 through 1991 period, with only forty-four of those within one mile of the redevelopment activity. The 1990 through 1991 sample size and locational distribution was deemed too small to produce unbiased results so the remainder of this study will focus on the latter two periods, 1992 through 2000, and 2001 through 2006, hereafter referred to as period 1 and period 2. The regions of single-family home sales by half-mile increments from redevelopment activities for periods 1 and 2 are illustrated in figure 5.1. Half-mile incremental regions were chosen to enable the identification of a point at which spill-over effects may change, while simultaneously having enough samples for an unbiased analysis. As can be seen in the figure, the widespread redevelopment activities throughout both periods resulted in a very similar area distribution for the single-family home analysis.

As table 5.1 indicated, there was wide variation in the sale price of the sample even after removing samples with the top and bottom one percent of lot and building sizes and adjusting all prices to 2006-constant-dollar terms. A filter was initially considered to remove the top and bottom one percent of samples based on the sale price; this method assumed that samples in those ranges were largely affected by outliers or data entry errors. After the dataset was sorted by half-mile proximity areas and separated into the two study periods, the range of sale prices still indicated that the lower prices were unlikely to be representative of market-rate sales during the respective periods. In addition, the higher sale prices were well over \$1 million (in all but one instance), while the means were in the range of \$200,000 to \$600,000, depending on period and location. Ultimately, to ensure that the study was reflective of average, free-market transactions during the study period, the final sample-set excluded sales that were more than one standard deviation from the mean sale price in each study-period – proximity-region model. In all cases, the mean sale price stayed relatively consistent within each model regardless of which filtering process was used, indicating that the sample-set had not been skewed toward the upper or lower end of the market by excluding samples with a sale price more than one standard deviation from the mean.

Figure 5.1. Half-mile proximity boundaries from Central District redevelopment activities, 1992-2000 and 2001-2006



Sources: Map developed by report author using data adapted from the Metropolitan Transportation Center, *Maps and Data*, <http://www.mtc.ca.gov/maps_and_data/GIS/data.htm> [October 26, 2007]; Oakland Redevelopment Agency, *Central District Urban Renewal Plan* (amended June 20, 2006); Rand McNally, *Local Map: Oakland, Berkeley, Richmond* (2007)

Lastly, due to a few clusters of new single-family subdivisions in the latter years of the study period, homes that were built after 1997 were excluded from the period 1 sample-set, and homes that were built after 2000 were excluded from the period 2 sample-set to ensure that the desire to live in the general area was measured over the desire for a newly built home. The majority of these homes were located in Alameda.

Tables 5.2 and 5.3 describe the final sample-sets for study periods 1 and 2, respectively. As can be seen in the tables, the final sample-sets divided the data into three proximity regions rather than four. This was done because the number of samples within one half-mile of redevelopment activities was too small to ensure an unbiased analysis in both periods; the two closest half-mile regions were merged into a single region that included all samples within one-mile of redevelopment activities.

Finally, there are a variety of urban amenities and disamenities in and around the study area, including neighborhood commercial and office corridors, bus and rail transit, busy streets and freeways, as well as freight and elevated rail tracks and industrial operations. The locations of the commercial, office, and industrial parcels were extracted from the original CD-DATA dataset using ArcGIS software. GIS data identifying the locations of city boundaries, freeways, rail right-of-way, major streets, commuter rail stations, and bus stops was obtained from the Metropolitan Transportation Commission. The locations of neighborhood-level parks and the class of the major streets (i.e., arterial versus collector) were merged into the GIS datasets described here based on a 2007 Rand McNally map of the area. Finally, the key neighborhood commercial corridors were identified through observations of the study area.

Figures 5.2 and 5.3 illustrate the distribution of these amenities and disamenities in and around the study area. Figure 5.2a shows the accessibility of BART stations to residents in the study area. This figure also highlights the location of specific commercial corridors outside of the Central District that may impact neighborhood desirability. Figure 5.2b shows the distribution of the commercial and office services in and around the study area. These figures illustrate the extent to which the study area is urbanized; although the Central District has a focused offering of urban services and employment, the surrounding neighborhoods are not without neighborhood-level services.

Figure 5.3a shows the income distribution at the 2000 census tract level in the study area. As can be seen in the figure, there are several areas of relatively extreme poverty in the western and northwestern sections of the study area, as well as moderate levels of poverty in the southwestern section; in contrast, the northeastern and southern sections have very low poverty. In many cases, the freeways separate the affluent from the poor in the study area. Figure 5.3b shows the distribution of industrial operations and rail right-of-way in the study area. A visual comparison of figures 5.3a and 5.3b shows that the industrial operations, as well as the rail line, tend to be more concentrated in lower income neighborhoods.

Overall, figures 5.2 and 5.3 illustrate that the study area has both a wide range and a broad distribution of amenities and disamenities. The hedonic model for this study has included variables to account for the impacts of proximity to the Central District as well as the influence of the neighborhood-level amenities and disamenities shown in the figures.

Table 5.2. Final sample-set for study period 1, 1992 through 2000

	Distance to redevelopment activities					
	< 1 ^a mile		1 - 1.5 miles		1.5 – 2 miles	
Total Samples	302 ^b		924 ^c		1,294 ^d	
Mean Building Size (square feet)	1,454		1,477		1,572	
Min / Max	683	3,739	651	3,827	663	3,893
Mean Lot Size (square feet)	4,021		4,468		4,659	
Min / Max	1,700	8,840	1,717	12,120	1,697	12,031
Mean Sale Price (2006 dollars ^e)	\$195,550		\$278,720		\$338,633	
Min / Max	\$90,088	\$330,800	\$130,714	\$474,868	\$138,820	\$636,003

Sources: Data adapted from the Alameda County Property Tax Assessor dataset provided by CD-DATA.

^a 47 samples within one-half-mile of redevelopment activity.

^b All samples in Oakland.

^c 215 samples in Alameda, 627 in Oakland, and 82 in Piedmont.

^d 382 samples in Alameda, 15 in Emeryville, 742 in Oakland, and 155 in Piedmont.

^e See Appendix A.4 for a table of the constant dollar adjustment factors.

Table 5.3. Final sample-set for study period 2, 2001 through 2006

	Distance to redevelopment activities					
	< 1 ^a mile		1 - 1.5 miles		1.5 – 2 miles	
Total Samples	490 ^b		962 ^c		1,181 ^d	
Mean Building Size (square feet)	1,393		1,382		1,457	
Min / Max	677	3,827	660	3,333	653	3,581
Mean Lot Size (square feet)	3,842		4,154		4,452	
Min / Max	1,720	9,375	1,681	12,181	1,700	11,657
Mean Sale Price (2006 dollars ^e)	\$443,767		\$546,439		\$595,211	
Min / Max	\$258,938	\$648,946	\$308,865	\$824,660	\$290,037	\$1,000,000

Sources: Data adapted from the Alameda County Property Tax Assessor dataset provided by CD-DATA.

^a 123 samples within one-half-mile of redevelopment activity.

^b 21 samples in Alameda, 281 in Oakland.

^c 255 samples in Alameda, 12 in Emeryville, 634 in Oakland, and 61 in Piedmont.

^d 229 samples in Alameda, 5 in Emeryville, 864 in Oakland, and 83 in Piedmont.

^e See Appendix A.4 for a table of the constant dollar adjustment factors.

Figure 5.2a. Location of BART stations and popular neighborhood commercial corridors in and around the study area

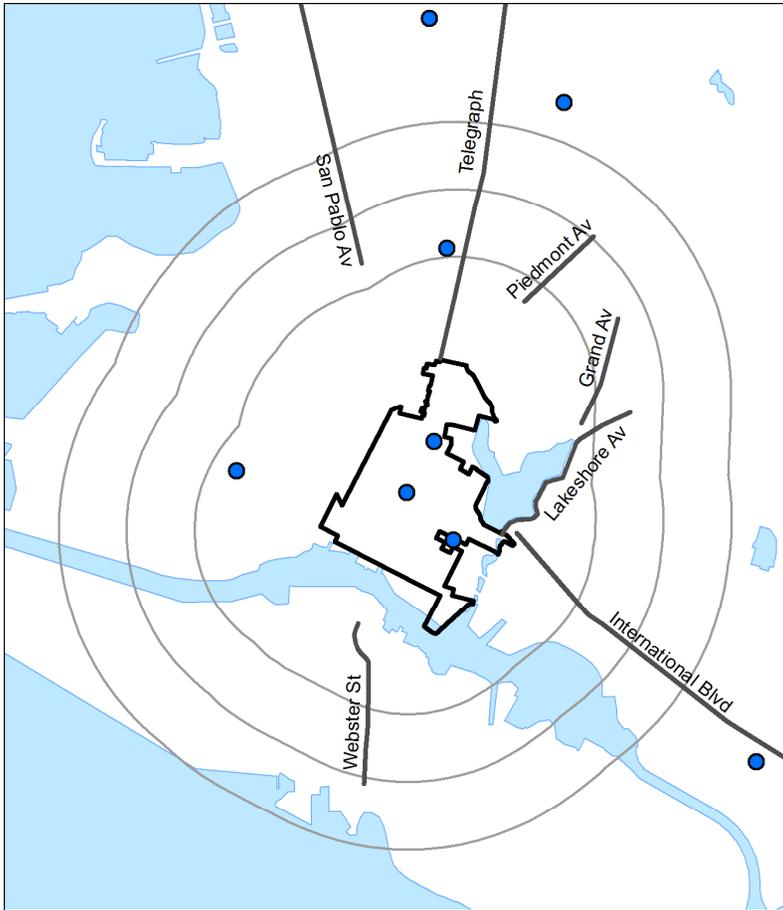
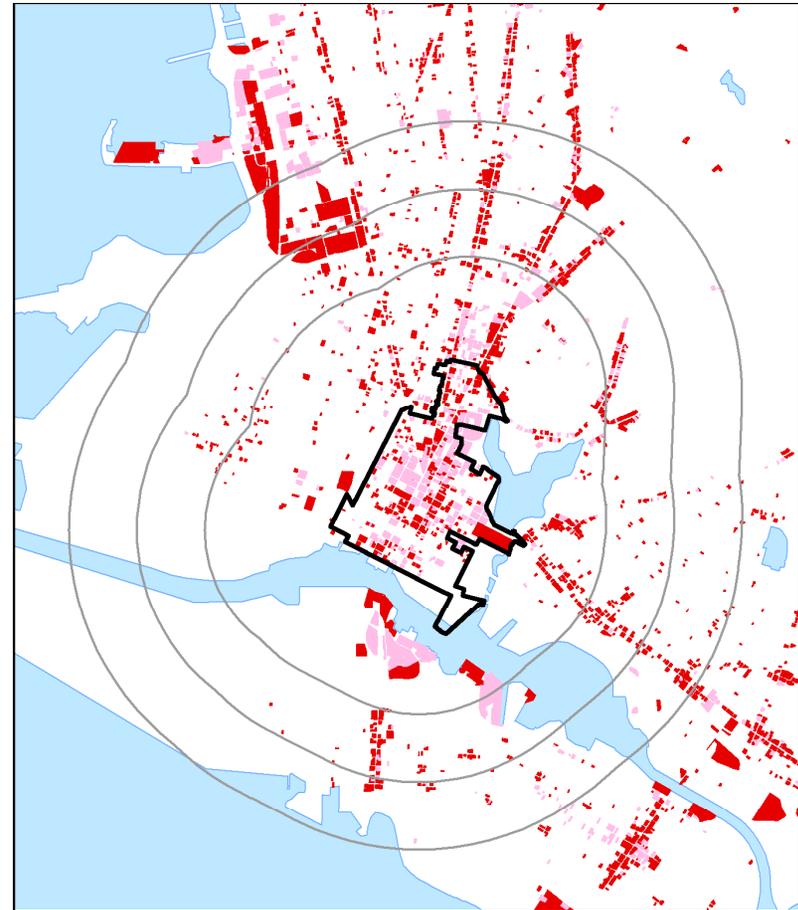


Figure 5.2b. Distribution of commercial and office services in and around the study area



Sources: Maps developed by report author using data adapted from the CD-DATA dataset; Metropolitan Transportation Center, *Maps and Data*, <http://www.mtc.ca.gov/maps_and_data/GIS/data.htm> [October 26, 2007]; Oakland Redevelopment Agency, *Central District Urban Renewal Plan* (Amended June 20, 2006); Rand McNally, *Local Map: Oakland, Berkeley, Richmond* (2007).

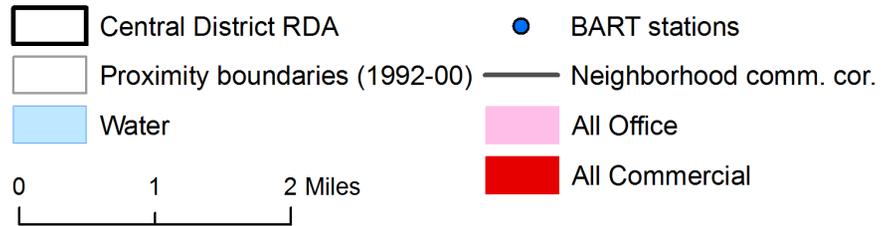
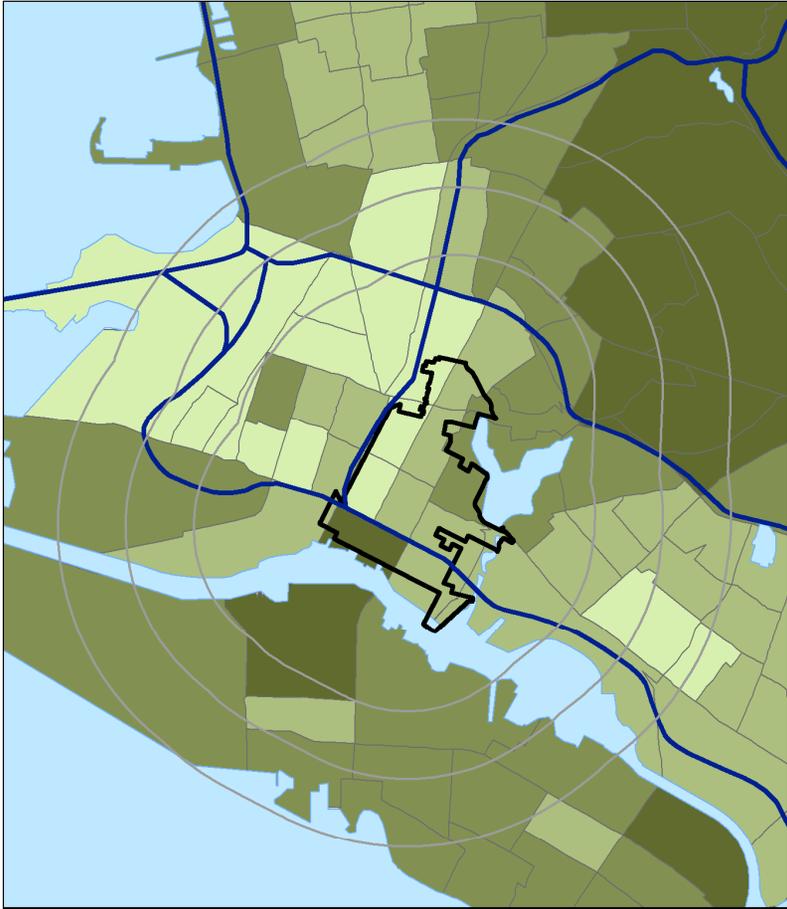
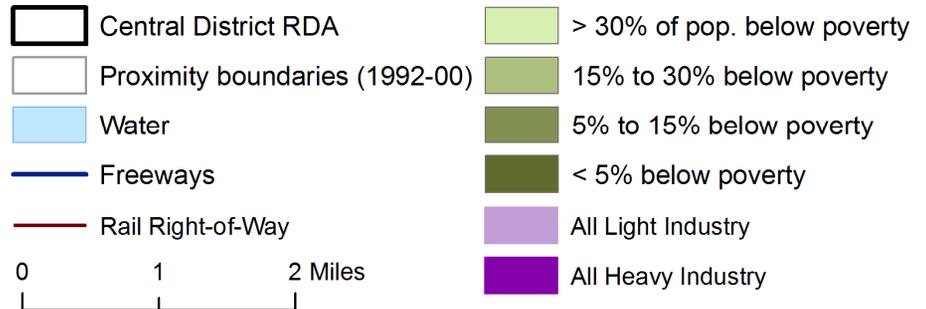
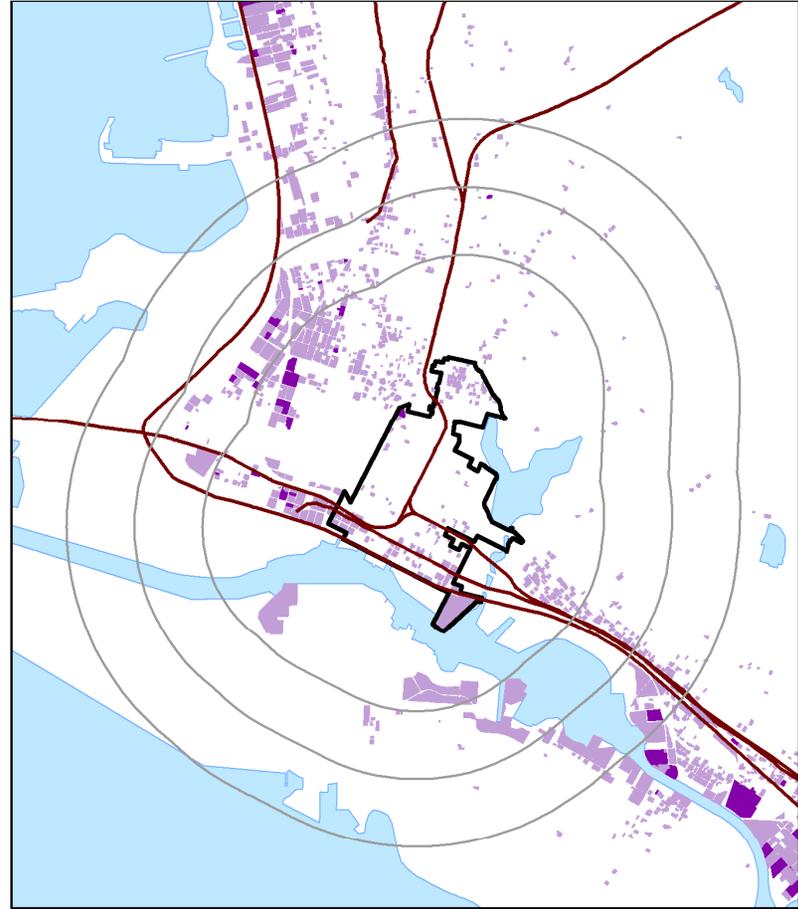


Figure 5.3a. Proportion of households living below the poverty level in and around the study area, by 2000 census tract



Sources: Maps developed by report author using data adapted from the CD-DATA dataset; Census 2000, Sample File 3; Metropolitan Transportation Center, *Maps and Data*, <http://www.mtc.ca.gov/maps_and_data/GIS/data.htm> [October 26, 2007]; Oakland Redevelopment Agency, *Central District Urban Renewal Plan* (amended June 20, 2006); Rand McNally, *Local Map: Oakland, Berkeley, Richmond* (2007).

Figure 5.3b. Distribution of industrial operations and location of heavy rail right-of-way in and around the study area



Hedonic Regression Model Specification

As previously discussed, hedonic regression models are used in housing price analyses to parse out the effect of a specific attribute's impact on housing prices. The general form that hedonic models take is:

$$P_i = f(S_i, L_i, N_i, T) \quad (1)$$

where P_i is the sale price of the i^{th} house in the sample; S_i are structural attributes of the i^{th} house; L_i are locational attributes of the i^{th} house; N_i are neighborhood, jurisdictional, or regional attributes impacting the i^{th} house; and T is a vector of time dummies that often include the year and season of the sale. Many models use a semi-log or double-log specification to explain the percentage change in sale price by either one unit or one percentage point change in each dependent variable in the model, respectively. To define the most appropriate model for this study, the hedonic models from three of the studies discussed previously in this report were examined further. Table 5.4 reviews the variables included in the hedonic models used by Landis, Guhathakurta, and Zhang; Kiel and Williams; and Mathur, Waddell, and Blanco.¹³⁶ These three studies were chosen specifically because the models focused on single-family residences.

After review of the hedonic models described in table 5.4, a semi-log specification was chosen for the current study. Table 5.5 describes the variables included for this study, which takes the form defined by equation (1). The model for this study has utilized the most appropriate concepts from the three models examined in table 5.4, considering the data that was available. The dependent variable for this study is the log of the sale price.

As shown in table 5.5, the model for this study included one primary variable for each period of the study; these primary variables, $\ln\text{DisCD}_{9200}$ and $\ln\text{DisCD}_{0106}$, explain the impact of proximity to the Central District redevelopment activities on housing prices. These variables were measured as the log of the distance from each single-family home in the sample to the closest point of redevelopment activity during the respective study periods. By defining the variable as the log of the distance, the coefficients for these variables in the estimated equations represent the percentage change in housing prices with each one percentage point change in distance. In this case, a negative sign on the coefficient indicates that the price of the house decreases the farther the home is from redevelopment activities.

The structural variables included in the model explain the effect of the size of the house and the lot, as well as the number of bedrooms and bathrooms, on the price of the house. As noted in table 5.5, the house price is generally expected to increase as these variables increase. In some cases, the addition of bedrooms may actually decrease the price of

¹³⁶ Landis, Guhathakurta, and Zhang, *Capitalization of Transportation Investments*; Kiel and Williams, "Impact of Superfund Sites;" Mathur, Waddell, and Blanco, "Impact Fees."

Table 5.4. Variables included in other hedonic models for single-family homes

Kiel and Williams	Landis, Guhathakurta, and Zhang	Mathur, Waddell, and Blanco
<i>A. Dependent Variable</i>		
(log) Price of SFR	Price of SFR	(log) Price of SFR
<i>B. Independent Variables</i>		
<u>B.1. Primary Interest</u>		
(log) Distance to Superfund site	Distance to transit station	Effect of Impact Fees
<u>B.2. Structural</u>		
Size of house	Size of house	(log) Size of house
Age of house	Size of lot	(log) Size of lot
Squared age of house	Age of house	# of bedrooms
# of bedrooms	# of bedrooms	Building grade
# of bathrooms	# of bathrooms	Fireplace (dummy)
Fireplace (dummy)		Quality of view (dummy)
Air conditioning (dummy)		
Pool (dummy)		
Garage/Parking (dummy)		
<u>B.2. Locational</u>		
	Distance to freeway interchange	Travel time to CBD
	Adjacent to freeway (dummy)	Auto accessibility to non-retail jobs
	Adjacent to transit line (dummy)	Auto accessibility to retail jobs
		Traffic noise (dummy)
		Distance to urban centers (inverse)
		Distance to urban growth boundary (inverse)
<u>B.3. Neighborhood, Jurisdictional, or Regional</u>		
(log) Median Income	Median Income	School expenditure / pupil
% homeowners	% homeowners	Violent crime rate
Unemployment rate	% Asian	Rate of population change
% College educated	% Black	# of new SFR building permits
% non-white residents	% Hispanic	Regional mortgage rates
	% White	Jurisdiction property tax rates
	City (dummy)	Regional construction costs
		City (dummy)
<u>B.4. Time</u>		
Year of sale		Year of sale
		Season

Sources: Kiel and Williams, "Superfund Sites," 176; Landis, Guhathakurta, and Zhang, *Capitalization of Transportation Investments*, 8-10; Mathur, Waddell, and Blanco, "Impact Fees," 1307.

the house if the overall size of the house has not increased accordingly, however. The locational variables shown in table 5.5 explain the impact that proximity to many of the observed amenities and disamenities shown in figures 5.2 and 5.3 have on housing prices. For the variables that measure distance, a negative (positive) sign on the coefficient in the estimated equation indicates that the price of the house decreases (increases) the farther a home is from that amenity (disamenity). The disamenity associated with being too close to a freeway or rail right-of-way was believed to be high for homes within two blocks of the freeway or railroad, but then to have no impact beyond that; because of this, dummy variables were included in the model to measure the impact of the disamenity and the coefficient was expected to be negative, as shown in table 5.5. Lastly, year dummies were included in both models to account for the impact of time on the price of homes. As the housing market was at its highest in the final year of each period and the final year of each study period was excluded from the estimated equation, the coefficients for all years included in the model were expected to be negative.

Table 5.5. Description of independent variables included in the final models

Variable	Description	Expected Sign
Variable of Primary Interest		
InDisCD_9200	(log) Distance to redevelopment activities in the Central District from 1992 through 2000	(-)
InDisCD_0106	(log) Distance to redevelopment activities in the Central District from 2001 through 2006	(-)
Structural		
InBLDGAREA	(log) Size of the SFR in square feet	(+)
InLOTAREA	(log) Size of the parcel in square feet	(+)
BEDRMS	Number of bedrooms in the SFR	(+ / -)
BATH	Number of bathrooms in the SFR	(+ / -)
Locational		
InDisCOMM	(log) Distance to a developed commercial parcel	(+ / -)
InDisOFFICE	(log) Distance to a developed office parcel	(+ / -)
InDisLGTINDUS	(log) Distance to a developed light industrial parcel	(+)
InDisHVYINDUS	(log) Distance to a developed heavy industrial parcel	(+)
InDisPARKS	(log) Distance to a neighborhood level park	(-)
InDisBARTst	(log) Distance to BART station	(-)
InDisBUSstop	(log) Distance to a bus stop	(+ / -)
InDisARTERIAL	(log) Distance to an arterial street	(+)
InDisCOLLECTOR	(log) Distance to a collector street	(+ / -)
Adj24	Dummy variable to indicate if SFR adjacent to (i.e., <600ft from the center line, ~2 city blocks from the edge) Highway 24, yes = 1, no = 0	(-)
Adj580	Dummy variable to indicate if SFR adjacent to (i.e., <600ft from the center line, ~2 city blocks from the edge) Highway 580, yes = 1, no = 0	(-)
Adj880	Dummy variable to indicate if SFR adjacent to (i.e., <600ft from the center line, ~2 city blocks from the edge) Highway 880, yes = 1, no = 0	(-)
AdjRAILIn	Dummy variable to indicate if SFR adjacent to (i.e., <400ft from the center line, ~2 city blocks from the edge) rail lines, yes = 1, no = 0	(-)

Table 5.5. Description of independent variables included in the final models (continued)

Locational (continued)		
InDisGrand	(log) Distance to the segment of Grand Avenue in Oakland with popular neighborhood commercial developments	(-)
InDisInternational	(log) Distance to the segment of International Boulevard in Oakland with popular neighborhood commercial developments	(+ / -)
InDisLakeshore	(log) Distance to the segment of Lakeshore Avenue in Oakland with popular neighborhood commercial developments	(-)
InDisPiedmont	(log) Distance to the segment of Piedmont Avenue in Oakland with popular neighborhood commercial developments	(-)
InDisTelegraph	(log) Distance to the segment of Telegraph Avenue in Oakland with popular neighborhood commercial developments	(+ / -)
InDisSanPablo	(log) Distance to the segment of San Pablo Avenue in Emeryville with popular neighborhood commercial developments	(+ / -)
InDisWebster	(log) Distance to the segment of Webster Street in Alameda with popular neighborhood commercial developments	(+ / -)
Neighborhood / Jurisdictional		
ALAMEDA	Dummy variable to indicate if SFR in the City of Alameda, yes = 1, no = 0	(+)
PIEDMONT	Dummy variable to indicate if SFR in the City of Piedmont, yes = 1, no = 0	(+)
InMEDINC	(log) Median income at the 2000 census block group level	(+)
PCT_OWNOCC	Percent owner occupied residences at the 2000 census block group level	(+)
PCT_ASN	Percent Asian residents at the 2000 census block group level	(-)
PCT_BLK	Percent African American residents at the 2000 census block group level	(-)
PCT_HSP	Percent Hispanic residents at the 2000 census block group level	(-)
Time		
FALL	Dummy variable to indicate if the sale occurred in the fall season, yes = 1, no = 0	(-)
WINTER	Dummy variable to indicate if the sale occurred in the winter season, yes = 1, no = 0	(-)
SPRING	Dummy variable to indicate if the sale occurred in the spring season, yes = 1, no = 0	(-)
YR1992	Dummy variable to indicate if the sale occurred in 1992, yes = 1, no = 0	(-)
YR1993	Dummy variable to indicate if the sale occurred in 1993, yes = 1, no = 0	(-)
YR1994	Dummy variable to indicate if the sale occurred in 1994, yes = 1, no = 0	(-)
YR1995	Dummy variable to indicate if the sale occurred in 1995, yes = 1, no = 0	(-)
YR1996	Dummy variable to indicate if the sale occurred in 1996, yes = 1, no = 0	(-)
YR1997	Dummy variable to indicate if the sale occurred in 1997, yes = 1, no = 0	(-)
YR1998	Dummy variable to indicate if the sale occurred in 1998, yes = 1, no = 0	(-)
YR1999	Dummy variable to indicate if the sale occurred in 1999, yes = 1, no = 0	(-)
YR2001	Dummy variable to indicate if the sale occurred in 2001, yes = 1, no = 0	(-)
YR2002	Dummy variable to indicate if the sale occurred in 2002, yes = 1, no = 0	(-)
YR2003	Dummy variable to indicate if the sale occurred in 2003, yes = 1, no = 0	(-)
YR2004	Dummy variable to indicate if the sale occurred in 2004, yes = 1, no = 0	(-)
YR2005	Dummy variable to indicate if the sale occurred in 2005, yes = 1, no = 0	(-)

Regression Results

Using the appropriate sub-set of dependent variables defined in table 5.5, Ordinary Least Squares (OLS) linear regression was performed on the following six models:

Model 1 – Single-family homes sold during period 1, 1992 through 2000

1.1 – Properties within 1-mile of redevelopment activities

1.2 – Properties between 1 and 1.5-miles of redevelopment activities

1.3 – Properties between 1.5 and 2-miles of redevelopment activities

Model 2 – Single-family homes sold during period 2, 2001 through 2006

2.1 – Properties within 1-mile of redevelopment activities

2.2 – Properties between 1 and 1.5-miles of redevelopment activities

2.3 – Properties between 1.5 and 2-miles of redevelopment activities

Table 5.6 summarizes the regression results with respect to the impact of the distance to the Central District on the price of single-family homes in surrounding neighborhoods. The results for each variable in all six models can be found in tables A.5 and A.6 of the Appendix.

Table 5.6. Regression results for study variables measuring the impact of proximity to Central District redevelopment activities

Variable	Models 1.1 & 2.1 less than 1 mile			Models 1.2 & 2.2 1-1.5 miles			Models 1.3 & 2.3 1.5-2 miles		
	Coeff.	t-stat.	p-val.	Coeff.	t-stat.	p-val.	Coeff.	t-stat.	p-val.
lnDisCD_9200	-0.002	-0.041	0.968	0.012	0.114	0.909	0.827	8.162	0.000
lnDisCD_0106	-0.038	-1.426	0.155	0.068	0.827	0.408	0.244	2.917	0.004

Models 1.1 and 2.1: Properties within 1-mile of redevelopment activities

Model 1.1 included 302 observations and the adjusted-R² was 0.630, while model 2.1 included 490 observations and the adjusted-R² was 0.545. All variables that were statistically significant at $p = 0.10$ had the expected signs except for the proportion of owner-occupants in both models. One possible explanation for counter-intuitive sign on owner-occupancy is that, as the neighborhoods surrounding the Central District have an extensive mix between multi-family and single-family dwellings, the multi-family properties may be equally well-maintained when compared to the single-family properties in the general area.

For period 1, 1992 through 2000, model 1.1 found that the distance to the Central District redevelopment activities had no impact on the sale price of a single-family home. As shown in table 5.6, the variable lnDisCD_9200 was statistically insignificant with a coefficient of -0.002 and $p = 0.968$. Although the redevelopment activities during this period were not positively capitalized into surrounding neighborhoods, there was no negative spill-over found to be associated with proximity to the Central District, either.

For period 2, 2001 through 2006, model 2.1 found that the probability had increased that the distance to Central District redevelopment activities had been capitalized into the price of single-family homes within one-mile of the activities, although the result ultimately remained statistically insignificant at $p = 0.10$. Model 2.1 had the expected sign for the variable $\ln\text{DisCD}_{0106}$, indicating that properties closer to the redevelopment activities had higher sale prices, holding all other variables constant. As shown in table 5.6, the coefficient of $\ln\text{DisCD}_{0106}$ was -0.038 with $p = 0.155$, indicating that the price of a house decreased by 0.038 percent with each one percent increase in distance from redevelopment activities during the 2001 through 2006 period.

Model 2.1 indicates that, if a house located one-half mile from Central District redevelopment activities sold for the area mean of \$443,767, a house with the exact same attributes but located 0.55-miles from the activities (or ten percent farther) would only sell for \$442,081, a 0.38 percent decrease in sale price.

Models 1.2 and 2.2: Properties between 1 and 1.5-miles of redevelopment activities

Model 1.2 included 924 observations and the adjusted- R^2 was 0.695, while model 2.2 included 962 observations and the adjusted- R^2 was 0.661. All variables that were statistically significant at $p = 0.10$ had the expected signs except for the distance to heavy industry. As figure 5.3b indicates that there are very few heavy industrial parcels in or near this particular proximity region, it is likely that the result in this case has been biased by an omitted variable.

In this proximity region, neither model produced statistically significant results with respect to the impact of distance from Central District redevelopment activities. As shown in table 5.6, the variable $\ln\text{DisCD}_{9200}$ was statistically insignificant with a coefficient of 0.012 and $p = 0.909$, and the variable $\ln\text{DisCD}_{0106}$ was statistically insignificant with a coefficient of 0.068 and $p = 0.408$. Although the redevelopment activities were not positively capitalized into surrounding neighborhoods in this proximity region, there was no negative spill-over found to be associated with proximity to the Central District, either.

Models 1.3 and 2.3: Properties between 1.5 and 2-miles of redevelopment activities

Model 1.3 included 1,294 observations and the adjusted- R^2 was 0.796, while model 2.3 included 1,181 observations and the adjusted- R^2 was 0.743. Similar to the results of models 1.1 and 2.1, (excluding the primary variable) all variables that were statistically significant at $p = 0.10$ had the expected signs except for the proportion of owner-occupants in model 3.1. In this proximity area the model results were statistically significant at $p = 0.01$ that the sale price of a house increased with distance to the Central District, contrary to the expectations of this study. For model 1.3 the coefficient of $\ln\text{DisCD}_{9200}$ was 0.827, while the coefficient of $\ln\text{DisCD}_{0106}$ was 0.244 in model 2.3.

While the results are consistent, there is an indication that the proximity to the Central District may have become relatively more desirable between the two periods since the coefficient decreased substantially. Additionally, the view associated with properties closer to the Oakland and Piedmonts hills has been omitted from the model as the data was not available; if this variable could have been included in the model, proximity to the Central District may have had a greater positive impact.

Ultimately, the results of models 1.3 and 2.3 indicate that, if a house located 1.5-miles from Central District redevelopment activities sold for \$500,000, a house with the exact same attributes but located 1.65-miles from the activities (or ten percent farther) would sell for \$541,350 in period 1 and \$512,200 in period 2, an 8.27 percent and 2.44 percent increase in sale price, respectively.

Conclusions

While the results did not clearly show that Central District redevelopment activities had positively impacted surrounding neighborhoods, there is evidence to support the likelihood of some level of positive spill-over from the redevelopment over time. In the first mile, proximity to redevelopment had no impact during period 1, while a positive impact was found with a fifteen percent level of significance during period 2. Additionally, in the furthest proximity region for this study (one-and-one-half to two miles away from the Central District redevelopment activities), proximity to the Central District had a negative impact on housing prices over the entire study period. However the impact was substantially lower in period 2 when compared to period 1, indicating a reduced negative impact of the Central District on single-family residences in this region. The next chapter will summarize the findings and limitations of this study, as well as discuss the relevant policy implications and potential for future studies.

Chapter 6

Conclusions

Redevelopment and Spill-over Effects

The California Community Development Act of 1945 was enacted to enable California jurisdictions to establish a redevelopment agency to focus on improving blighted areas.¹³⁷ The law notes that “the benefits which will result from ... redevelopment of blighted areas will accrue to all the inhabitants and property owners of the communities in which they exist,”¹³⁸ construing an intention for affected residents to experience a general improvement in their quality of life as a result of the act of public intervention.

The City of Oakland, California, had ten redevelopment project areas delineated as of 2006. This study examined the impact that redevelopment activities in one specific project area, the Central District, had on surrounding neighborhoods from 1990 through 2006. Such impacts are commonly referred to as spill-over effects. The Central District redevelopment plan specifically includes positive spill-over effects as an objective in the plan, noting that “economic benefits to disadvantaged persons living within or near the Project Area”¹³⁹ should be one of the outcomes of the redevelopment activities.

Prior to this study, there had been a number of studies measuring the spill-over effect of various types of development, as well as redevelopment strategies. Of the studies specifically discussed in chapter 4 of this report, there are three that set the stage for this study – Ellen et al.; Galster, Tatian, and Accordino; and Weber, Bhatta, and Merriman.¹⁴⁰

As discussed in chapter 4 of this report, Ellen et al. examined the impacts of a redevelopment strategy that focused new residential development on blighted parcels distributed throughout New York City; the properties tended to be in low-income neighborhoods and the City did not commit to further capital improvements in the neighborhood.¹⁴¹ The study found that the redevelopment activities had a positive spill-over effect on residential properties up to 2,000 feet from the site, but the initial sale price increase declined over time.¹⁴² In contrast, Galster, Tatian, and Accordino examined a redevelopment strategy that targeted improvements toward a limited number of extremely blighted public housing projects in Richmond, Virginia, while also prioritizing other City pro-

¹³⁷ Dardia, *Subsidizing Redevelopment*, 2.

¹³⁸ McDonough Holland & Allen PC, Attorneys at Law, *2008 Community Redevelopment Law*.

¹³⁹ Redevelopment Agency, *Central District Plan* (1969), 5.

¹⁴⁰ Ellen et al., “Building Homes;” Galster, Tatian, and Accordino, “Targeting Investments;” Weber, Bhatta, and Merriman, “Spillovers from Tax.”

¹⁴¹ Ellen et al., “Building Homes,” 189.

¹⁴² *Ibid.*, 203-4.

grams and capital improvements in the same neighborhoods.¹⁴³ That study found that the redevelopment investment had a substantial positive impact on the sale price of homes in the same neighborhood as the improvements; over a five-year period neighborhood sale prices “increased 10.85 [percent] per year faster than prices of comparable homes in the city overall ... and reached the citywide average for comparable homes.”¹⁴⁴ Galster, Tatian, and Accordino did not find any evidence of a broader spill-over effect outside of the target neighborhoods, however.¹⁴⁵

Finally, Weber, Bhatta, and Merriman examined the spill-over effect of various types of redevelopment distributed over seventy-nine districts in Chicago.¹⁴⁶ Weber, Bhatta, and Merriman found that “proximity to commercial and industrial TIF districts reduces predicted [residential property] appreciation [and] final sales prices increase with distance from these two kinds of TIF districts.” On the other hand, proximity to a mixed-use TIF district was estimated to result in appreciation.¹⁴⁷

The primary purpose for this study was to explicitly examine the spill-over effects associated with the utilization of a targeted redevelopment strategy on a mixed-use CBD. This study builds on the findings that a targeted redevelopment strategy is very effective within the redevelopment neighborhood, as well as the findings that positive spill-over effects are associated with distributed, mixed-use redevelopment.¹⁴⁸ Since a targeted investment strategy does not distribute city resources evenly throughout the jurisdiction however, it is important to determine if this strategy has a positive impact beyond the boundaries of the redevelopment area. Additionally, of the extant literature reviewed for this study, none focused on the impacts of redevelopment in California. As noted in chapter 1, California cities use redevelopment policies extensively and it is therefore important to understand how effective these policies are.

Study Findings

As discussed in chapter 3 of this report, the Oakland Central District experienced extensive redevelopment activities from 1990 through 2006. Projects during the 1990’s were often driven by public investment due to a weak private real estate development market; many projects involved the construction or renovation of public agency offices and affordable housing. As the private development market improved at the turn of the century there was a shift in redevelopment strategy to increase residential-commercial mixed-use developments in the district. Approximately twenty-one percent of the Central

¹⁴³ Galster, Tatian, and Accordino, “Targeting Investments,” 459.

¹⁴⁴ *Ibid.*, 463-4.

¹⁴⁵ *Ibid.*, 465.

¹⁴⁶ Weber, Bhatta, and Merriman, “Spillovers from Tax,” 276-7.

¹⁴⁷ Weber, Bhatta, and Merriman, “Spillovers from Tax,” 276, 278.

¹⁴⁸ Galster, Tatian, and Accordino, “Targeting Investments;” Weber, Bhatta, and Merriman. “Spillovers from Tax.”

District parcel-area had been redeveloped during the period and these activities had observably increased the attractiveness of the Central District by the end of 2006.

With respect to the changes in the Central District, this study hypothesized that the redevelopment activities would have a positive spill-over effect on the surrounding neighborhoods, thus increasing the desirability of the neighborhoods. The study measured neighborhood desirability by change in single-family house prices, utilizing hedonic regression analysis.

The hedonic regression analysis showed that proximity to the Central District had no impact, neither positive nor negative, for neighborhoods within one-and-one-half miles of the redevelopment activities through 2000. In the latter years of the study however, proximity to the Central District had likely been capitalized into the price of homes that were within one mile of the redevelopment activities, although the results were only statistically significant at $p = 0.155$. From 2001 through 2006, homes between one and one-and-one-half miles of redevelopment activities still showed no sign that proximity to the area had any impact on the neighborhood.

Throughout the study period, homes that were between one-and-one-half and two miles from redevelopment activities were negatively impacted by proximity to the Central District; these results were statistically significant at $p = 0.01$. In the latter years of the study the regression coefficient was relatively lower, however. This result indicates that the improvements to the Central District have been positively capitalized into home prices in this proximity region, lessening the overall negative impact of proximity to the Central District.

The results of the analysis did not provide enough evidence to reject the null hypothesis that redevelopment activities had no spill-over effect on surrounding neighborhoods. When comparing the results of the earlier years in the study versus the latter years there is a relative indication that the redevelopment activities may be slowly having a broader positive impact, however.

Study Limitations

While this study has taken one step toward examining the spill-over effect of the redevelopment of the Central District from 1990 through 2006, there are recognized limitations in the study that may have impacted the results.

First, with respect to the analysis of the redevelopment activities within the Central District, this study only accounted for the physical redevelopment at the parcel-level. While the physical changes in the area will affect the attractiveness, the change in amenities is critical for neighborhood desirability, per the theory of Brueckner, Thisse,

and Zenou,¹⁴⁹ and was not necessarily captured by this measurement. Next, with respect to the housing price analysis, bias may have been introduced into the results due to the exclusion of data that could not be obtained, such as beat-level crime data or the quality of the view from a given property.

Finally, as mentioned in chapter 1, the Redevelopment Agency budgets suggested very low levels of public investment in the other redevelopment project areas in the city, some of which are adjacent to the Central District. Based on personal observations, minimal change within the adjacent redevelopment areas was believed to have taken place during the study period from the type of public-private, large-scale investments that are common within active redevelopment areas. Under this assumption, the study did not account for any specific impact associated with such improvements in or around the study area. If there were, in fact, significant redevelopment activities in those areas, the results on impact of proximity to the Central District may have been skewed by those improvements.

Policy Implications

The Oakland Redevelopment Agency focused public money and energy on redevelopment of the Central District at the expense of a more distributed redevelopment strategy throughout the period of this study. As indicated, Galster, Tatian, and Accordino found evidence that this type of targeted investment strategy was very successful for properties within the redevelopment area, itself.¹⁵⁰ While the Central District has been observably improved, there is not yet clear evidence that this redevelopment strategy can have a broader impact on the quality of life in Oakland. This study did find encouraging evidence that Central District investments may be spilling-over to the surrounding neighborhoods however. First, the housing price analysis did not find a statistically significant negative impact associated with living within the first one-and-one-half miles of the Central District. Additionally, the analysis gave some indication that proximity to the Central District may have been positively capitalized into housing prices in the latter years of the study period.

Potential for Future Studies

This study did find some evidence to support the hypothesis that a targeted redevelopment strategy implemented on a mixed-use district had positive spill-over effects on surrounding neighborhoods, however the results were statistically insignificant.

As redevelopment activities have continued within this area beyond the study period, a follow-on study in three to five years could provide a more clear indication of how far the impacts of focused redevelopment efforts can reach. With 72.0 parcel-acres of the Central District having been redeveloped during the study period and 23.7 parcel-acres

¹⁴⁹ Brueckner, Thisse, and Zenou, "Why is Central Paris Rich."

¹⁵⁰ Galster, Tatian, and Accordino, "Targeting Investments."

still under construction when the period ended, it is clear that this area is going through an aggressive transition. An examination of the study area after the current projects have been completed and the immediate population in the Central District has grown through the new housing units added by the 10K Initiative would likely give a better indication of the overall change in attractiveness of the area. Lastly, the addition of crime and 2010 census data may provide useful insights that were not accounted for in the current study.

Another line of study that could provide useful insights into the Central District redevelopment activities is one that evaluates the success of the redevelopment projects. This type of study would give insight into the change in the overall desirability of the area. Indicators measuring the desirability of major uses – office, commercial, and residential – could include vacancy rates and monthly rents.

Bibliography

- Abrew, Carole Joy. "Patterns and Process of Change in Oakland, California." Master's thesis, California State University, San Francisco, 1973.
- Aronson, J. Richard. *Management Policies in Local Government Finance*. Edited by Eli Schwartz. Washington, DC: International City/County Management Association, 2004.
- Bagwell, Beth. *Oakland: The Story of a City*. Novato, CA: Presidio Press, 1982.
- Blash, Lisel, Holley Shafer, Monique Nakagawa, and September Jarrett. *Getting Behind the Headlines: Families Leaving San Francisco*. San Francisco: San Francisco State University Public Research Institute, September 2005. <http://www.dcyf.org/downloads/Final%20White%20Paper10_21_05.pdf> [November 11, 2007].
- Brasington, David M. "The Demand for Local Public Goods: The Case of Public School Quality." *Public Finance Review* 30 (2002): 163-187.
- Brueckner, Jan K., Jacques-François Thisse, and Yves Zenou. "Why is Central Paris Rich and Downtown Detroit Poor? An Amenity-Based Theory." *European Economic Review* 43 (1999): 91-107.
- Bui, Linda, and Christopher Mayer. "Regulation and Capitalization of Environmental Amenities: Evidence from the Toxic Release Inventory in Massachusetts." *The Review of Economics and Statistics* 85, no. 3 (August 2003): 693-708.
- Byrne, Paul F. "Determinants of Property Value Growth for Tax Increment Financing Districts." *Economic Development Quarterly* 20, no. 4 (November 2006): 317-329.
- California Department of Transportation. *California Highway and Interstate Historic Photos: Construction, 880 (Eastshore Freeway), Market to Tenth St. in Oakland, 5/23/55*. <<http://www.dot.ca.gov/interstate/photos.htm>> [March 13, 2008].
- California Redevelopment Association. *Redevelopment – An Essential Tool in Returning California to Economic Prosperity*. August 8, 2006. <<http://www.calredevelop.org/AM/Template.cfm?Section=Home&Template=/CM/HTMLDisplay.cfm&ContentID=1752>> [September 25, 2007].
- Carroll, Deborah, and Robert Eger III. "Brownfields, Crime, and Tax Increment Financing." *The American Review of Public Administration* 36, no. 4 (December 2006): 455-477.

- Cervero, Robert, and Michael Duncan. "Benefits of Proximity to Rail on Housing Markets: Experiences in Santa Clara County." *Journal of Public Transportation* 5, no. 1 (2002): 1-18.
- Chin, Hoong Chor, and Kok Wai Foong. "Influence of School Accessibility on Housing Values." *Journal of Urban Planning and Development* 132, no. 3 (2006): 120-129.
- Community and Economic Development Agency of the City of Oakland. *10K Housing Initiative*. May 2007. <<http://www.business2oakland.com/main/10kdowntownhousinginitiative.htm>> [July 26, 2007].
- . *Downtown Oakland: 10K Housing Activity*. August 2007.
- . *Redevelopment*. <<http://www.business2oakland.com/main/redevelopment.htm>> [July 26, 2007].
- . *Redevelopment: Central District*. <<http://www.business2oakland.com/main/centraldistrict.htm>> [July 26, 2007].
- Dardia, Michael. *Subsidizing Redevelopment in California*. San Francisco: Public Policy Institute of California, 1998. <<http://www.ppic.org/main/publication.asp?i=70>> [September 25, 2007].
- DQNews.com, Real Estate News & Custom Data. *Bay Area Home Sales Remain at Two-Decade Low*. March 13, 2008. <<http://www.dqnews.com/News/California/Bay-Area/RRBay080313.aspx>> [March 23, 2008].
- Ellen, Ingrid Gould, Michael H. Schill, Scott Susin, and Amy Ellen Schwartz. "Building Homes, Reviving Neighborhoods: Spillovers from Subsidized Construction of Owner-Occupied Housing in New York City." *Journal of Housing Research* 12, no. 2 (2001): 185-216.
- Gabriel, Stuart A., Joe P. Matthey, and William L. Wascher. "House Price Differentials and Dynamics: Evidence from the Los Angeles and San Francisco Metropolitan Areas." *Federal Reserve Bank of San Francisco Economic Review* 1 (1999): 3-22.
- Galster, George, Peter Tatian, and John Accordino. "Targeting Investments for Neighborhood Revitalization." *Journal of the American Planning Association* 72, no. 4 (Autumn 2006): 457-474.
- Gayer, Ted and W. Kip Viscusi. "Housing Price Responses to Newspaper Publicity of Hazardous Waste Sites." *Resource and Energy Economics* 24 (2002): 33-51.
- Greenwood, Alex, and Patrick Lane. "Oakland's 10K Race for Downtown Housing." *Planning*, August 2002: 14-18.

- Hellman, Daryl A., and Joel L. Naroff. "The Impact of Crime on Urban Residential Property Values." *Urban Studies* 16, no. 1 (February 1979): 105-112.
- Johnson, Marilyn S. *The Second Gold Rush: Oakland and the East Bay in World War II*. Berkeley, CA: University of California Press, 1993.
- Jones, David W., Jr. *California's Freeway Era in Historical Perspective*. Berkeley, CA: Institute of Transportation Studies, University of California, Berkeley, 1989.
- Kiel, Katherine A., and Michael Williams. "The Impact of Superfund Sites on Local Property Values: Are all Sites the Same?" *Journal of Urban Economics* 61 (2007): 170-192.
- Landis, John, Subhrajit Guhathakurta, and Ming Zhang. *Capitalization of Transportation Investments into Single-Family Home Prices: A Comparative Analysis of Five California Rail Transit Systems*. Berkeley, CA: The University of California Transportation Center, 1994. No. 246.
- Lowy, Martin E. *High Rollers: Inside the Savings and Loan Debacle*. NY: Praeger Publishers, 1991.
- Man, Joyce Y., and Mark S. Rosentraub. "Tax Increment Financing: Municipal Adoption and Effects on Property Value Growth." *Public Finance Review* 26, no. 6 (November 1998): 523-547.
- Mathur, Shishir, Paul Waddell, and Hilda Blanco. "The Effect of Impact Fees on the Price of New Single-Family Housing." *Urban Studies* 41, no. 7 (June 2004): 1303-1312.
- McDonough Holland & Allen PC, Attorneys at Law. *2008 Community Redevelopment Law of the State of California: Health & Safety Code Sections 33000, et seq.* January 2008. <<http://www.calredevelop.org/AM/Template.cfm?Section=Legislation&CONTENTID=1749&TEMPLATE=/CM/ContentDisplay.cfm>> [May 1, 2008].
- Meese, Richard A., and Nancy E. Wallace. "The Construction of Residential Housing Price Indices: A Comparison of Repeat-Sales, Hedonic-Regression, and Hybrid Approaches." *Journal of Real Estate Finance and Economics* 14 (1997): 51-73.
- Modern Transit Society. *Traffic Engineers vs. Transit Patrons*. <<http://moderntransit.org/ctc/ctc03.html>> [December 8, 2007].
- Morgan Quitno Press. *13th Annual America's Safest (and Most Dangerous) Cities*. November 2006. <<http://www.morganquitno.com/cit07pop.htm>> [September 28, 2007].

- O'Brien, Bill. "Old Oakland Languishes: Retailers Remain Unimpressed with Victorian Row Development." *East Bay Express*. May 6, 1988.
- Oakland City Planning Department. *Retail Trade in the Oakland Central District: Analysis and Projections, 1962 to 1980*. Prepared by Larry Smith and Company, Real Estate Consultants. July 1965.
- Oakland Redevelopment Agency. *1993-94 Proposed Annual Budget*. Prepared by the Agency Administrator's Budget Office, 1993.
- . *1996-97 Adopted Annual Budget*. Prepared by the Budget and Finance Agency, 1996.
- . *1997-99 Adopted Budget*. Prepared by the Budget and Finance Agency, 1997.
- . *1999-2001 Adopted Budget*. Prepared by the Office of the City Manager, 1999.
- . *Adopted 1991-92 Annual Budget*. Prepared by the Agency Administrator's Budget Office, 1991.
- . *Adopted Budget: FY 2001-03*. Prepared by the Office of the City Manager, Budget Office, 2001. <<http://www.oaklandnet.com/budgetoffice/ORA.htm>> [October 12, 2007].
- . *Adopted Budget: FY 2003-05*. Prepared by the Office of the City Manager, Budget Office, October 2003. <<http://www.oaklandnet.com/budgetoffice/ORA.htm>> [October 12, 2007].
- . *Adopted Budget: FY 2005-07*. Prepared by the Office of the City Administrator, Budget Office, 2005. <<http://www.oaklandnet.com/budgetoffice/ORA.htm>> [October 12, 2007].
- . *Annual Financial Report, Year Ended June 30, 1990*. Prepared by the Office of Finance, 1990.
- . *Central District Urban Renewal Plan*. Amended March 27, 1990.
- . *Central District Urban Renewal Plan*. Amended July 24, 2001.
- . *Central District Urban Renewal Plan*. Amended June 20, 2006. <<http://www.business2oakland.com/main/documents/CentralDistrictUrbanRenewalPlan6-20-06.pdf>> [July 26, 2007].
- . *FY 2004-05 Midcycle Amended Budget Summary*. Prepared by the Office of the City Administrator, Budget Office, 2004. <<http://www.oaklandnet.com/budgetoffice/ORA.htm>> [October 12, 2007].

- . *FY 2006-07 Adopted Midcycle Budget Summary*. Prepared by the Office of the City Administrator, Budget Office, 2006. <<http://www.oaklandnet.com/budgetoffice/ORA.htm>> [October 12, 2007].
- Preservation Park History. <<http://www.preservationpark.com/index.html>> [November 27, 2007].
- Raine, George. "A Sea Change in Shipping: 50 Years Ago Container Ships Altered the World." *San Francisco Chronicle*. February 5, 2006. <<http://www.mindfully.org/Industry/2006/Container-ShipsMcLean5feb06.htm>> [May 12, 2007].
- Redevelopment Agency of the City of Oakland. *Central District Urban Renewal Plan*. May 27, 1969, adopted June 12, 1969.
- . *Central District Urban Renewal Plan*. Amended May 29, 1973.
- . *Central District Urban Renewal Plan*. Amended December 16, 1975.
- . *Central District Urban Renewal Plan*. Amended June 12, 1979.
- . *Central District Urban Renewal Plan*. Amended August 13, 1982.
- . *Invitation for Proposals: Neighborhood Development Program, Oakland Chinatown Redevelopment Project*. February 1974.
- . *Peralta College: An "Open Door" Downtown Campus through Urban Renewal*. May 1967.
- . *Victorian Row/Old Oakland: Environmental Impact Report (Draft)*. October 31, 1975.
- Rosen, Sherwin. "Hedonic Prices and Implicit Markets: Product Differentiation in Pure Competition." *Journal of Political Economy* 82 (1974): 34-55.
- Tita, George E., Tricia L. Petras, and Robert T. Greenbaum. "Crime and Residential Choice: A Neighborhood Level Analysis of the Impact of Crime on Housing Prices." *Journal of Quantitative Criminology* 22, no. 4 (December 2006): 299-317.
- United States Census Bureau. *American FactFinder: 2006 American Community Survey Data Profile Highlights*. <http://factfinder.census.gov/home/saff/main.html?_lang=en> [September 2, 2007].
- University-Oakland Metropolitan Forum. *Plan for Oakland's Downtown Redevelopment Area*, May 1993. Working Paper 028.

Walker, Richard A. "Oakland: Dark Star in an Expanding Universe." Draft paper, University of California, Berkeley, 1997. <http://geography.berkeley.edu/PeopleHistory/faculty/R_Walker/OaklandDarkStar.pdf> [November 30, 2007].

Weber, Rachel, Saurav Dev Bhatta, and David Merriman. "Spillovers from Tax Increment Financing Districts: Implications from Housing Price Appreciation." *Regional Science and Urban Economics* 37 (2007): 259–281.

Weber, Rachel, and Laura Goddeeris. *Tax Increment Financing: Process and Planning Issues*. Cambridge, MA: Lincoln Institute of Land Policy, 2007.

Appendix

A.1. Constant spending factors for Oakland Redevelopment Agency fiscal years

Consumer Price Index - All Urban Consumers, All items (San Francisco - Oakland - San Jose, CA)								
Year	Constant spending based on \$100 in 1982-84, rep. by BLS			Adjusted constant spending based on the 1990 annual dollar			Adjusted for Oakland RDA Fiscal Year, Jul-Jul	
	Annual	Half 1	Half 2	Annual	Half 1	Half 2	FY	FY Avg.
1989	126.4	125.3	127.4	1.043150	1.051476	1.035579	1989-90	1.025360
1990	132.1	130.1	134.0	1.000000	1.015140	0.985617	1990-91	0.976154
1991	137.9	136.5	139.4	0.956094	0.966692	0.944739	1991-92	0.937169
1992	142.5	141.4	143.6	0.921272	0.929599	0.912945	1992-93	0.903861
1993	146.3	146.0	146.7	0.892506	0.894777	0.889478	1993-94	0.884936
1994	148.7	147.9	149.4	0.874338	0.880394	0.869039	1994-95	0.862604
1995	151.6	151.1	152.1	0.852385	0.856170	0.848600	1995-96	0.841787
1996	155.1	153.9	156.3	0.825889	0.834974	0.816805	1996-97	0.806964
1997	160.4	158.9	161.9	0.785768	0.797123	0.774413	1997-98	0.765708
1998	165.5	164.2	166.9	0.747161	0.757002	0.736563	1998-99	0.721802
1999	172.5	170.8	174.2	0.694171	0.707040	0.681302	1999-00	0.668055
2000	180.2	177.7	182.3	0.635882	0.654807	0.619985	2000-01	0.595761
2001	189.9	188.7	191.1	0.562453	0.571537	0.553369	2001-02	0.548827
2002	193.0	192.3	193.7	0.538986	0.544285	0.533687	2002-03	0.521953
2003	196.4	196.8	196.1	0.513248	0.510220	0.515519	2003-04	0.507570
2004	198.8	198.2	199.5	0.495079	0.499621	0.489780	2004-05	0.482210
2005	202.7	201.5	203.9	0.465556	0.474640	0.456472	2005-06	0.441332
2006	209.2	207.9	210.6	0.416351	0.426192	0.405753	2006-07	0.390098
2007	216.0	214.7	217.4	0.364512	0.374444	0.354570		

Source: Data adapted from the Bureau of Labor Statistics, Consumer Price Index – All Urban Consumers (Current Series), U.S. Department of Labor. <<http://data.bls.gov/PDQ/outside.jsp?survey=cu>> [March 13, 2008].

A.2. City of Oakland Redevelopment Area nominal spending by project area, July 1989 through July 2007

Total Expenditures/Appropriations per 2-Year Budget Periods ^a Fiscal Year July to July, Actual Dollars (in Thousands)												
Redevelopment Project Area	Area (acres) ^b	Adopted	1989-91 ^c	1991-93 ^d	1993-95	1995-97	1997-99	1999-2001	2001-03 ^e	2003-05	2005-07	Avg 2-yr exp/acre
Acorn ^f	25	Nov-1961	–	399	1,797	5,356	3,761	3,383	1,887	1,605	1,893	100.4
Broadway/MacArthur/San Pablo	676	Jul-2000						0	268	943	2,760	1.5
Central City East	3,339	Jul-2003								0	9,870	1.5
Central District	827	Jun-1969	–	105,172	89,461	110,891	91,065	91,652	95,590	86,121	113,675	118.4
Coliseum	6,764	Jul-1995				1,879	2,893	12,982	28,810	32,927	20,453	2.5
Oakland Army Base	1,200	Jul-2000						0	0	775	3,610	0.9
West Oakland	1,546	Nov-2003								0	1,385	0.4
Project Areas with no Redevelopment Agency Investment in New Capital Projects												
Elmhurst	79	1973	–	0	0	Incorporated into Coliseum Project Area						
77th Avenue	10	1978	–	0	0	Incorporated into Coliseum Project Area						
Oak Center	30	Nov-1965	–	486	568	411	188	1,112	1,926	2,172	1,421	
Stanford/Adeline	4-blks	Apr-1973	–	0	0	0	0	0	146	140	168	
Oak Knoll	183	Jul-1988	Project on hold - property must be transferred from U.S. Navy									

Sources: Data adapted from the City of Oakland Redevelopment Agency Budgets, FY 1991-92 through 2005-07

^a Table is organized into 2-year budget cycles based on Oakland Redevelopment Agency practice at the time of this report.

^b Oakland Redevelopment Agency, *Adopted Budget: FY 2005-07*, prepared by the Office of the City Administrator, Budget Office (2005), A-3. <<http://www.oaklandnet.com/budgetoffice/ORA.htm>> [October 12, 2007]; Oakland Redevelopment Agency, *Annual Financial Report, Year Ended June 30, 1990*, prepared by the Office of Finance (1990), 7.

^c 1989-91 expenditures excluded because data could not be obtained for the 1990-91 fiscal year.

^d Expenditure included for 1992-93 is a projection; this fiscal year data was collected from the *1993-94 Proposed Annual Budget*.

^e Expenditures included for all years after 2001 are projections; actual expenditures were not reported by project area starting in 2001.

^f Oakland Redevelopment Agency, *Adopted Budget: FY 2003-05*, prepared by the Office of the City Manager, Budget Office, October 2003, C-40. <<http://www.oaklandnet.com/budgetoffice/ORA.htm>> [October 12, 2007]. The Acorn Redevelopment Project Area was reported to have completed physical development during the 2001-03 budget cycle.

A.3. Supplemental notes and source information to figures 3.2 and 3.3

Several sources were required to determine the year and primary function for redeveloped parcels in the Oakland Central District. The base information was extracted from a database of Alameda County property provided by CD-DATA; the data fields “YRBLT” and “COUNTYUSE” were used to determine the year that a new development was completed and the primary function of the new development. The Assessor’s Parcel Number (APN) was used to link the CD-DATA dataset to a GIS spatial database of parcels in the county. Additionally, a description of “Use Codes” was obtained from the Alameda County Tax Assessor. When the CD-DATA data was applied, it was obvious that the data available for many of the redeveloped, non-single family residential parcels was not accurate.

A field survey was then conducted from September 2007 through January 2008 to identify parcels that may have been redeveloped during the study period; the survey noted all parcels with:

- 1) an architectural style that implied the building may have been built in the 1970’s or later;
- 2) all buildings with a pre-1970’s architectural style that appeared to have been substantially renovated (including both exterior and interior, not just a potential façade renovation).

Notes taken during the field survey included:

- 1) a diagram of parcel reconfiguration when observations differed from the parcel map available from the GIS database;
- 2) the primary, secondary, etc. functions of potentially redeveloped buildings;
- 3) address(es) identified on developments with multiple street addresses;
- 4) name(s) of buildings and/or major tenants;
- 5) information available on plaques posted on the buildings.

The data collected during the field survey was used to perform internet searches for information on the developments; as many of the Central District developments are large commercial properties, this process provided most of the necessary information. For smaller properties that could not be identified through the internet, the APNs and addresses were used to obtain permit records from the City of Oakland Planning Department.

The following list of internet sites provided supplemental information for figures 3.2 and 3.3:

Berkeley Lab. *Berkeley Lab’s Oakland Facility Under Construction*. December 17, 1999. <<http://www.lbl.gov/CS/Archive/othernews12-17-99.html>> [October 14, 2007].

Business Wire. *CIM Group Enters Dynamic Oakland Market with Acquisition of Two Downtown Hotel Properties*. June 6, 2007. <<http://www.encyclopedia.com/doc/1G1-164556239.html>> [September 15, 2007].

- Chen, Adelaide. "Oakland Tenants Win Settlement." *AsianWeek*. September 28, 2007. <<http://asianweek.com/2007/09/28/oakland-tenants-win-settlement/>> [October 21, 2007].
- City of Oakland. *City of Oakland Administration Complex*. <http://www.oaklandnet.com/government/splash/admin_splash.html> [September 2, 2007].
- . *Elihu M. Harris State Office Building*. <http://www.oaklandnet.com/government/splash/elihu_splash.html> [September 2, 2007].
- . *Oakland History Timeline*. <<http://www.oaklandnet.com/celebrate/Historytimeline.htm>> [September 2, 2007].
- Community and Economic Development Agency of the City of Oakland, *Downtown Oakland: 10K Housing Activity*. August 2007.
- . *Publicly Assisted Rental Units in the City of Oakland*. August 12, 2006.
- . *Redevelopment: Central District*. <<http://www.business2oakland.com/main/centraldistrict.htm>> [September 2, 2007].
- East Bay Asian Local Development Corporation. *Properties: Commercial Properties*. 2007. <<http://www.ebaldc.org/pg/19/properties/commercial-properties>> [October 21, 2007].
- East Bay Municipal Utilities District. *District History*. <http://www.ebmud.com/about_ebmud/overview/district_history/default.htm> [September 15, 2007].
- Emporis.com. *Oakland: High-rise Buildings (Completed)*. 2007. <<http://www.emporis.com/en/wm/ci/bu/sk/li/?id=102062&bt=9&ht=2&sro=1>> [September 15, 2007].
- Forest City. *Projects and Properties: Residential, Uptown Oakland*. <<http://www.forestcity.net/PROPERTIES/uptown-oakland.asp>> [March 13, 2008].
- Oakland City Center. *Office & Retail*. <http://www.oaklandcitycenter.com/office_retail.cfm> [October 21, 2007].
- Old Oakland Historic District. <<http://oldoakland.org/index.cfm>> [September 2, 2007].
- Mailman, Erika, ed. *Oakland's Neighborhoods* (Oakland: Mailman Press, November 2005), 53.
- Metrovation. <<http://terraneconomicsdevelopment.com/index.html>> [October 14, 2007].
- Preservation Park History. <<http://www.preservationpark.com/index.html>> [September 2, 2007].

Platoni, Kara. "Die Hard: Sears has Made Its Fortune by Selling Everyday Things to Everyday People, Maybe That's Why It's Oakland's Only Surviving Department Store." *East Bay Express*. August 22, 2001. <<http://www.eastbayexpress.com/ebx/PrintFriendly?oid=282573>> [March 13, 2008].

Redevelopment Agency of the City of Oakland. *Invitation for Proposals: Neighborhood Development Program, Oakland Chinatown Redevelopment Project*. February 1974.

ScanlanKemperBard Companies, Real Estate Merchant Banking. *ScanlanKemperBard Buys East Bay Office Portfolio for \$61.5 Million*. August 28, 2007. <<http://www.scanlankemperbard.com/news/>> [September 15, 2007].

Strategic Urban Development Alliance, LLC. *SUDA Job Experience*. <<http://sudallc.com/CompleteListofProjectsbySUDAPrincipals.pdf>> [October 20, 2007].

University of California, Office of the President. *University of California Recognized for Sustainable Practices at its Systemwide Office*. August 27, 2007. <<http://www.universityofcalifornia.edu/news/2007/aug27.html>> [October 20, 2007].

U.S General Services Administration. *California Buildings and Properties*. 2007. <<http://www.gsa.gov/Portal/gsa/ep/channelView.do?pageTypeId=8199&channelId=-15897>> [September 2, 2007].

A.4. Constant spending factors for single-family home sales during study period

Consumer Price Index - All Urban Consumers, All Items Less Shelter (San Francisco - Oakland - San Jose, CA)				
Year	Constant-dollar term based on \$100 in 1982-84, rep. by BLS			Adjusted constant-dollar based on the 2006 annual dollar
	Annual	Half 1	Half 2	
1990	128	126	129.9	1.48
1991	133.4	132	134.8	1.42
1992	138.3	137.2	139.5	1.37
1993	142.3	142.1	142.5	1.33
1994	144.4	143.7	145.1	1.31
1995	147.4	147.1	147.7	1.29
1996	150.2	149.4	151.1	1.26
1997	153.4	152.7	154.2	1.24
1998	155.1	154.7	155.6	1.22
1999	159.3	158.1	160.4	1.19
2000	164.4	162.6	166.2	1.15
2001	168.5	168.9	168.1	1.13
2002	169.4	168.7	170.1	1.12
2003	173.2	173.7	172.7	1.10
2004	177.7	176.8	178.6	1.07
2005	182.7	181.1	184.4	1.04
2006	189.7	188.2	191.1	1.00

Source: Data adapted from the Bureau of Labor Statistics, Consumer Price Index – All Urban Consumers (Current Series), U.S. Department of Labor. <<http://data.bls.gov/PDQ/outside.jsp?survey=cu>> [March 13, 2008].

A.5. Regression results for Model 1, 1992 through 2000

Variable	Model 1.1 less than 1 mile			Model 1.2 1-1.5 miles			Model 1.3 1.5-2 miles		
	Coeff.	t-stat.	p-val.	Coeff.	t-stat.	p-val.	Coeff.	t-stat.	p-val.
Constant	7.456			9.900			5.836		
lnDisCD_9200	-0.002	-0.041	0.968	0.012	0.114	0.909	0.827	8.162	0.000
lnBLDGAREA	0.245	3.825	0.000	0.335	9.709	0.000	0.404	14.594	0.000
lnLOTAREA	0.118	2.601	0.010	0.114	4.704	0.000	0.127	6.369	0.000
BEDRMS	-0.016	-0.888	0.375	0.001	0.138	0.890	0.004	0.554	0.580
BATH	0.033	1.289	0.198	-0.007	-0.544	0.587	0.013	1.462	0.144
lnDisCOMM	-0.023	-1.181	0.239	0.047	5.215	0.000	0.029	3.217	0.001
lnDisOFFICE	0.042	1.936	0.054	-0.020	-1.454	0.146	0.002	0.210	0.834
lnDisLGTINDUS	0.010	0.524	0.600	0.009	0.684	0.494	0.032	2.653	0.008
lnDisHVYINDUS	0.014	0.396	0.692	-0.053	-2.053	0.040	0.093	3.483	0.001
lnDisPARKS	-0.008	-0.430	0.667	0.008	0.737	0.461	-0.011	-1.055	0.292
lnDisBARTst	0.058	1.124	0.262	0.052	0.929	0.353	-0.141	-4.558	0.000
lnDisBUSstop	0.061	1.793	0.074	0.010	0.781	0.435	0.000	0.003	0.998
lnDisARTERIAL	-0.021	-0.637	0.525	-0.025	-1.752	0.080	-0.013	-1.552	0.121
lnDisCOLLECTOR	0.024	0.800	0.425	0.020	1.911	0.056	0.032	4.101	0.000
Adj24	0.256	1.472	0.142	0.095	1.440	0.150	-0.050	-0.980	0.327
Adj580	0.043	0.880	0.379	-0.064	-1.598	0.111	-0.140	-4.189	0.000
Adj880		N/A			N/A			N/A	
AdjRAILln		N/A			N/A			N/A	
lnDisGrand	-0.091	-2.015	0.045	-0.039	-1.821	0.069		--	
lnDisInternational	0.057	1.337	0.182	0.034	1.090	0.276	-0.028	-0.881	0.379
lnDisLakeshore	-0.035	-0.722	0.471	-0.137	-5.274	0.000	-0.294	-9.099	0.000
lnDisPiedmont	-0.051	-1.143	0.254	-0.089	-4.932	0.000	-0.134	-6.316	0.000
lnDisTelegraph	0.061	1.152	0.250	-0.024	-0.702	0.483	-0.078	-3.236	0.001
lnDisSanPablo	0.128	2.007	0.046	0.035	1.126	0.261	-0.089	-3.948	0.000
lnDisWebster		--		0.056	2.345	0.019		--	
ALAMEDA		N/A		0.491	6.011	0.000	0.563	9.527	0.000
PIEDMONT		N/A		0.190	4.266	0.000	0.103	3.605	0.000
lnMEDINC	0.080	1.037	0.301	0.043	0.937	0.349	0.111	2.675	0.008
PCT_OWNOCC	-0.543	-2.393	0.017	0.025	0.352	0.725	-0.108	-1.930	0.054
PCT_ASN	-0.444	-1.620	0.107	-0.187	-2.085	0.037	-0.475	-6.959	0.000
PCT_BLK	-0.354	-1.730	0.085	-0.249	-2.694	0.007	-0.619	-10.184	0.000
PCT_HSP	-0.549	-2.351	0.019	-0.424	-2.657	0.008	-0.403	-2.979	0.003
FALL	0.046	1.280	0.202	0.030	1.706	0.088	0.019	1.292	0.197
WINTER	-0.026	-0.710	0.478	-0.065	-3.591	0.000	-0.025	-1.604	0.109
SPRING	0.004	0.124	0.901	-0.027	-1.555	0.120	-0.038	-2.647	0.008
YR1992	-0.167	-2.551	0.011	-0.303	-10.457	0.000	-0.306	-12.892	0.000
YR1993	-0.183	-3.163	0.002	-0.301	-10.344	0.000	-0.327	-13.332	0.000
YR1994	-0.285	-4.577	0.000	-0.382	-13.879	0.000	-0.401	-17.760	0.000
YR1995	-0.448	-7.617	0.000	-0.421	-15.160	0.000	-0.421	-17.711	0.000
YR1996	-0.309	-5.600	0.000	-0.456	-16.023	0.000	-0.446	-19.754	0.000
YR1997	-0.333	-5.956	0.000	-0.395	-14.823	0.000	-0.395	-18.124	0.000
YR1998	-0.296	-5.978	0.000	-0.323	-12.425	0.000	-0.310	-14.865	0.000
YR1999	-0.199	-4.034	0.000	-0.205	-8.500	0.000	-0.219	-10.585	0.000
	N = 302			N = 924			N = 1294		
	Adj-R-sq = 0.630			Adj-R-sq = 0.695			Adj-R-sq = 0.796		

A.6. Regression results for Model 2, 2001 through 2006

Variable	Model 2.1 less than 1 mile			Model 2.2 1-1.5 miles			Model 2.3 1.5-2 miles		
	Coeff.	t-stat.	p-val.	Coeff.	t-stat.	p-val.	Coeff.	t-stat.	p-val.
Constant	9.991			10.944			8.906		
lnDisCD_0106	-0.038	-1.426	0.155	0.068	0.827	0.408	0.244	2.917	0.004
lnBLDGAREA	0.139	3.665	0.000	0.264	10.198	0.000	0.333	14.246	0.000
lnLOTAREA	0.114	4.269	0.000	0.069	3.895	0.000	0.094	5.350	0.000
BEDRMS	0.006	0.589	0.556	0.000	-0.102	0.918	0.003	0.466	0.641
BATH	0.011	0.674	0.500	0.001	0.148	0.883	0.003	0.344	0.731
lnDisCOMM	0.001	0.073	0.942	0.022	3.183	0.002	0.014	1.795	0.073
lnDisOFFICE	-0.005	-0.388	0.698	-0.003	-0.304	0.761	-0.013	-1.491	0.136
lnDisLGTINDUS	0.044	4.102	0.000	0.014	1.688	0.092	-0.009	-0.930	0.353
lnDisHVYINDUS	0.007	0.340	0.734	-0.003	-0.190	0.849	0.016	0.897	0.370
lnDisPARKS	0.014	1.151	0.250	0.018	1.924	0.055	0.008	0.908	0.364
lnDisBARTst	-0.040	-1.392	0.165	-0.029	-0.706	0.481	-0.106	-5.082	0.000
lnDisBUSstop	0.018	1.040	0.299	0.004	0.394	0.693	0.008	0.857	0.391
lnDisARTERIAL	-0.017	-1.075	0.283	-0.012	-1.311	0.190	0.006	0.754	0.451
lnDisCOLLECTOR	-0.006	-0.454	0.650	0.009	1.225	0.221	0.018	2.569	0.010
Adj24	-0.052	-0.298	0.766	-0.103	-1.888	0.059	-0.010	-0.359	0.720
Adj580	-0.022	-0.749	0.454	0.005	0.154	0.878	-0.105	-3.438	0.001
Adj880	-0.073	-0.577	0.565		N/A			N/A	
AdjRAILln		N/A			N/A			N/A	
lnDisGrand	-0.088	-2.753	0.006	-0.036	-1.742	0.082		--	
lnDisInternational	-0.021	-0.845	0.399	0.057	2.645	0.008	0.080	3.934	0.000
lnDisLakeshore	0.021	0.697	0.486	-0.097	-3.854	0.000	-0.173	-5.375	0.000
lnDisPiedmont	0.018	0.757	0.449	-0.055	-3.958	0.000	-0.028	-1.309	0.191
lnDisTelegraph	0.042	1.810	0.071	-0.007	-0.397	0.691	0.008	0.569	0.569
lnDisSanPablo	-0.018	-0.782	0.435	0.015	0.863	0.389	0.007	0.512	0.609
lnDisWebster		--		-0.031	-1.938	0.053		--	
ALAMEDA	0.270	2.652	0.008	0.126	2.324	0.020	0.149	3.302	0.001
PIEDMONT		N/A		0.131	3.305	0.001	0.094	3.280	0.001
lnMEDINC	0.209	3.720	0.000	0.064	1.903	0.057	0.066	1.920	0.055
PCT_OWNOCC	-0.344	-2.957	0.003	-0.064	-1.330	0.184	0.000	-0.009	0.993
PCT_ASN	-0.357	-2.997	0.003	-0.228	-3.391	0.001	-0.256	3.722	0.000
PCT_BLK	-0.179	-1.698	0.090	-0.199	-3.306	0.001	-0.338	-5.950	0.000
PCT_HSP	-0.251	-2.017	0.044	-0.029	-0.263	0.793	-0.337	-3.311	0.001
FALL	-0.005	-0.238	0.812	0.013	0.987	0.324	0.006	0.438	0.661
WINTER	-0.027	-1.155	0.249	-0.025	-1.747	0.081	-0.056	-3.967	0.000
SPRING	-0.017	-0.777	0.438	-0.029	-2.108	0.035	-0.024	-1.864	0.063
YR2001	-0.357	-12.114	0.000	-0.312	-16.431	0.000	-0.323	-18.984	0.000
YR2002	-0.301	-10.761	0.000	-0.254	-15.563	0.000	-0.237	-14.757	0.000
YR2003	-0.233	-9.245	0.000	-0.210	-13.435	0.000	-0.217	-14.421	0.000
YR2004	-0.129	-3.797	0.000	-0.125	-5.785	0.000	-0.125	-5.881	0.000
YR2005	-0.027	-1.092	0.275	0.009	0.590	0.555	-0.005	-0.347	0.729
	N = 490			N = 962			N = 1181		
	Adj-R-sq = 0.545			Adj-R-sq = 0.661			Adj-R-sq = 0.743		