

**Capitalizing on a Third Wave of Federal Investment:  
Reenvisioning an Energy Efficiency Retrofit Strategy for Oakland, California**

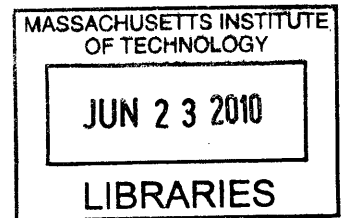
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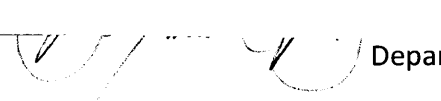
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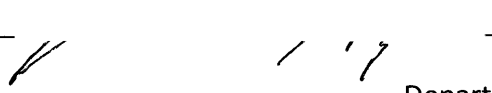
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## **abstract**

For some time, Oakland, California has suffered the cruel misfortune of persistently negative challenges, including high unemployment, poverty, and slow economic growth. Oakland leaders believe that the American Recovery and Reinvestment Act of 2009 can help relieve the city of these ailments. Thus far, the City has received over \$200 million in Stimulus awards from the government. Over one third of the grant total is designated for workforce and economic development as well as the promotion of energy efficiency. This thesis explores the role of federal investment in local economic development in Oakland. The research first evaluates the effects of two prior periods of government funding in the City – the injection of federal funds to finance the war industries during World War II and the Economic Development Administration’s City Rebuilding Program during the 1960s – and then contrasts how the current flow of stimulus dollars represents a third installment of federal investment that offers a new opportunity for sustained, equitable, and green economic development. Through comparative analysis with similar efforts in Seattle, Washington and Portland, Oregon I argue that in its current form, Oakland’s Weatherization and Energy Retrofit Loan Program relies upon a weak finance structure, provides no guarantees for disadvantaged workers, and fails to consider how the age of the city’s building stock, income distribution, and racial spread influence where the City should focus retrofit services. By amending these aspects of its retrofit program Oakland can realize its own goals of improved economic, environmental and social equity, and fulfill the promise of the Recovery Act. Therefore, Oakland could serve as a model displaying how cities with nascent energy retrofit programs can improve them to achieve a triple-bottom line of economic, social, and environmental benefits.





# table of contents

<b>Acknowledgments</b> .....	<b>6</b>
<b>List of Terms</b> .....	<b>7</b>
<b>Preface</b> .....	<b>8</b>
<b>Introduction</b> .....	<b>10</b>
The American Recovery and Reinvestment Act.....	10
Federal Investment in Oakland, California.....	10
Methodology.....	12
Moving Forward.....	12
<b>Chapter One: The Federal Government as an Economic Agent (Case History &amp; Context)</b> .....	<b>14</b>
World War II: Federal Investment and Oakland’s Contribution to the War Effort.....	14
1966: The Economic Development Administration’s Rebuilding Program.....	17
Impacts of the First Two Waves of Federal Economic Development on Oakland.....	19
The Opportunity Presented by a Third Wave of Federal Investment.....	20
<b>Chapter Two: Retrofitting the American City</b> .....	<b>26</b>
Energy Efficiency and Weatherization Benefits.....	26
The Weatherization Assistance Program.....	27
Components of a City-wide Retrofit Program.....	31
<b>Chapter Three: Case Studies – Seattle, Portland, and Oakland Compared</b> .....	<b>34</b>
Competing Models.....	34
1) An Appropriate and Robust Financial Model.....	36
2) High-Road Job Development.....	43
3) City and/or Regional Program Scale.....	49
4) Focus on Low-Income Service Delivery and Job Development.....	55
5) The Role of Partnerships.....	57
<b>Chapter Four: A Vision of the Future: A City-wide Oakland Retrofit Model</b> .....	<b>61</b>
Retrofit Oakland.....	62
1) Revise the RLF and Find a CDFI Partner to Manage the Fund.....	63
2) Use Policies to Promote Job Growth.....	63
3) Involve Multiple City Agencies, Community and Non-Profit Organizations.....	65
4) Prioritize Historically Disadvantaged Groups.....	66
5) Consider Means to Increase Program Scale by Analyzing Building Stock and Demographic Data to Shape Program Targeting Policies.....	66
<b>Chapter Five: Securing Change: Implications for Oakland’s Community, Non-profit, and Other Partners</b> .....	<b>79</b>
Recommendations for Community-Based Organizations and Local Non-Profits.....	80
A Role for Emerald Cities Collaborative in Advancing a New Oakland Retrofit Program.....	81
<b>Conclusion</b> .....	<b>83</b>
<b>Appendix I</b> .....	<b>87</b>
Limitations to this Study & Recommendations for Future Research.....	87
<b>Appendix II</b> .....	<b>89</b>
Opinion-Editorial of Oakland’s Stimulus Activity.....	89
<b>Bibliography</b> .....	<b>91</b>

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# list of terms

**ARRA:** American Recovery and Reinvestment Act

**CDBG:** Community Development Block Grant

**CEWP:** Clean Energy Works Portland

**CWA:** Community Workforce Agreement

**DHCD:** Department of Housing and Community Development

**DOE:** Department of Energy

**EBASE:** East Bay Alliance for a Sustainable Economy

**ECC:** Emerald Cities Collaborative

**EDA:** Economic Development Administration

**EECBG:** Energy Efficiency and Conservation Block Grant

**FHA:** Federal Housing Administration

**GBCI:** Green Building Capital Initiative

**GIS:** Geographic Information Systems

**SEIC:** Stakeholder Evaluation and Implementation Committee

**WAP:** Weatherization Assistance Program

**WERLP:** Weatherization & Energy Retrofit Loan Program



## **preface**

On January 29, 2010, I attended a meeting in Oakland convened by PolicyLink to discuss whether local community organizations, non-profits, and the Alameda County Building Trades should partner with the City and join the Emerald Cities Collaborative (ECC). A second purpose of the meeting was to consider if the group did form Emerald Cities Oakland, could it develop an energy efficiency retrofit strategy for the City. ECC is a national alliance of business, labor, community, environment, social justice, technical assistance and research organizations dedicated to greening the nation's cities. As core principles, the collaborative promotes equal opportunity, community wealth, and democratic engagement as social drivers for responsible environmental development in cities. ECC's first project echoes an initiative put forth by President Obama as he signed the American Recovery and Reinvestment Act into law a year ago: the comprehensive energy retrofit of the United States' urban building stock. The Emerald Cities Collaborative also intends to use this first project as a means to integrate career pathways in training and job placement and secure community-labor agreements for all retrofit work.

At the same time, the City of Oakland was preparing to launch a new home energy retrofit program funded through the Recovery Act. That both of these processes were developing separately highlights a critical paradox of the Stimulus Package and the difficulty of planning

around it. One Oakland staffer described the Stimulus as both a facilitator and an obstacle. It presents cities with opportunities to do things that would not have been possible in the absence of the money, but given the transparency and spending requirements, there is huge pressure to activate the funds within a short time frame (Chin). In light of this reality, it becomes easier to comprehend that city staffs are overwhelmed, organizations are pursuing innovative ideas to promote their causes in the midst of the post-Stimulus frenzy, and members of both groups require more support to ensure success. This is the climate in which cities, organizations, and the federal government are working aggressively to simultaneously tackle three of the largest challenges facing this nation: the impacts of stagnant economic development, joblessness, and environmental degradation. I began wondering how the city's retrofit program could better align with the ideas put forth at the ECC meeting, what that partnership might look like, and whether a cohesive retrofit strategy could be established and still capitalize off of the present Stimulus moment. This thesis explores how Oakland, California can maximize the promise of the Recovery Act and the opportunities it presents.

# introduction

## ***The American Recovery and Reinvestment Act***

On February 17, 2009, President Barack Obama signed the American Recovery and Reinvestment Act (ARRA) into law, injecting \$787 billion into the U.S. economy to stem the financial crisis facing the nation. In developing the Act, Congress hoped to achieve three goals: (1) create new and secure existing jobs; (2) generate immediate economic activity and support sustainable economic growth; and (3) standardize government accountability and transparency of spending (The United States Federal Government, “The Act,” 2009). We commonly refer to this legislation as the Stimulus or Recovery Act.

In terms of energy efficiency retrofitting, the federal government set aside \$5 billion for the Weatherization Assistance Program (WAP), \$3.2 billion for the Energy Efficiency and Conservation Block Grant Program, \$3.1 billion for the State Energy Program, and \$2 billion for the Neighborhood Stabilization Program. The Obama Administration claimed that the influx of money designated for energy efficiency and weatherization could cover weatherization retrofits for 75% of all federal buildings and one million private homes throughout the nation. These weatherization goals represent an important step in jumpstarting the green economy through retrofit job creation and market expansion.

## ***Federal Investment in Oakland, California***

As stated earlier, legislators drafted the Recovery Act to create and preserve jobs, stimulate economic activity and support extended economic growth, and demand a level of government accountability theretofore never witnessed. In his Denver address marking the passage of the bill, President Obama announced another goal of the Stimulus Package – “laying the groundwork for a new, green energy economy that can create countless well-paying jobs.” Additionally, he added, the Recovery Act would increase the economic stability of low-income families and lower their energy bills by weatherizing one million American homes through the Weatherization Assistance Program (Obama 2009). While the goals of the Stimulus and the President’s comments assume a national tone, they apply to Oakland in very localized ways.

As of January 2010, Oakland’s unemployment rate stood at 17.7% compared to the national unemployment rate of 9.7% for the same month (Oakland Community and Economic Development

Agency; United States Department of Labor). Within Alameda County, Oakland's unemployment rate tops all other cities. The high unemployment rate in the city is likely exacerbated by the stagnant growth of the national economy, but for years Oakland has experienced other problems such as disinvestment and poverty. These deep-rooted realities hinder economic development that could benefit all Oakland residents, especially its least advantaged. A 2007 report produced by the East Bay Alliance for a Sustainable Economy (EBASE) and Oakland NetWork for Responsible Development (ONWRD) assessed that 42% of city residents live in poverty (earning incomes of 200% or less that of the Federal poverty level). Almost half of renters and homeowners in the city spend in excess of 30% of their income on housing costs, contributing to an increased income disparity within the city. Combined with the high unemployment rate, these problems reflect the need for meaningful economic development in the City. The Stimulus Package and its programs are designed to relieve some of the social and economic pressures that cities like Oakland face.

The second point defending why Oakland serves as the unit of analysis is the fact that twice in the city's history the federal government played both an indirect and direct role in local economic development. The Stimulus Package, though relevant to all U.S. states and cities, represents a critical third wave of federal investment in Oakland. To date, the City has received almost \$71 million of federal grant funding from ARRA for economic and workforce development and energy efficiency. Understanding the impacts of these two prior investment periods and why they failed to develop a thriving, balanced economy in Oakland is critical to evaluating the opportunity for change posed by this third wave of federal investment.

Finally, I find Oakland both challenging and enticing as a research topic. Growing up on the west side of San Francisco, Oakland always seemed so far away. As a youth I rarely visited the East Bay. Even as I attended UC Berkeley as an undergraduate I always commuted to school and therefore never properly engaged with Oakland other than passing through it on my BART (Bay Area Rapid Transit) rides home. The paradox of being only 15 miles from a city that felt so different is a symptom of the Bay Area's uneven regional development, privileging certain geographic areas over others. Therefore, this analysis of Oakland provides a way for me to understand my own home as well as place its urban growth in my deep understanding of the region. Prior to this endeavor I knew little of Oakland's geography, history, or demographics. Now I understand how these factors shape city policy and the future of its residents.

## ***Methodology***

The research design for this thesis incorporates historical, case study, and comparative analysis methods to shape the argument. Admittedly, the author's personal connection to the San Francisco Bay Area region was also a reason for selecting Oakland as the primary focus of the thesis. Still, the analysis advances the notion that understanding a place's history is critical to shaping policies and programs that will guide its future. Research began with a literature review exploring major periods of federal investment in Oakland over the last 70 years. A subsequent review of energy efficiency retrofit practice, its benefits to homeowners, and economic promise ultimately identified the other two cases examined in this thesis. Then followed the case studies, which included an in-depth qualitative analysis examining how Oakland, California, Seattle, Washington, and Portland, Oregon enacted individual energy retrofit programs relative to five criteria. Next, the comparative analysis of these cases evaluated the strengths and weaknesses of the individual programs in order to devise an optimal retrofit strategy for Oakland. The comparison also helped distill a set of best practices for other cities interested in establishing retrofit programs of their own. The historical, case study, and comparative analyses form the base of the argument, but the thesis also utilizes Geographic Information Systems (GIS) mapping. A GIS survey of Oakland's housing stock, median income and racial distributions helped identify city areas in greatest need of retrofit services and supplements the argument with a geographical analysis.

This thesis differs from traditional comparative case studies in that it does not evaluate the outcomes of these programs. Their outcomes cannot be measured yet as the programs either are currently in the pilot phase or have not completed a full funding cycle. Instead, the research investigates how differences in the programs' designs shape whether or not they achieve their respective goals. This approach was intentional as it produces a clear picture of city-scale home energy retrofit programs sponsored by the Stimulus at a time when much of the money continues to roll out to states and municipalities. In this way, cities can learn about innovative ways of leveraging federal funds to establish retrofit programs capable of providing years of economic, social and environmental benefits to residents. Additionally, this approach offers a way for the City of Oakland and its organizational, business, and community partners to react in real time to improve WERLP.

## ***Moving Forward***

Chapter 1 explores Oakland's previous experiences with federally-sponsored economic



development. Chapter 2 articulates the value of energy efficiency and weatherization. It explains the history, role, and limitations of the Weatherization Assistance Program and presents the idea of energy efficiency retrofitting as an economic driver. Chapter 3 explores how retrofit efforts in Seattle, Washington and Portland, Oregon, compare with Oakland's own retrofit program. Chapter 4 highlights Oakland's need for a greatly expanded city-scale retrofitting strategy and suggests ways the City can achieve this goal. Finally, Chapter 5 presents how local organizations and ECC can partner with Oakland to expand and improve retrofit service delivery, job quality, and environmental gains.

# chapter one

## the federal government as an economic agent (case history and context)

### ***World War II: Federal Investment and Oakland's Contribution to the War Effort***

Prior to World War II, Oakland existed both as a suburban San Francisco sibling and the growing urban, financial, business, and industrial center of the eastern Bay Area. The transcontinental railroad ended in Oakland, making the city a west coast freight destination, and the dry dock companies that built ships during World War I further contributed to the city's industrial growth. On the eve of the Second World War, Oakland was primarily a blue-collar city and immigrants of Italian, Portuguese, Mexican, and Eastern European descent, as well as blacks and other non-white groups accounted for almost a third of the city's population (U.S. Bureau of the Census 601, 637). With the attack on Pearl Harbor, the U.S. surged into World War II and the Pacific campaign established the need for massive maritime combat resources expanding west coast shipbuilding activity to unprecedented levels. The federal government allocated incredible sums of money to private California companies to produce ships for the war. For example, California received \$35 billion between 1940 and 1946, with the state taking in \$8 billion from the federal government in 1945 alone (Bagwell 234).

In order to achieve the high production levels necessitated by the war effort, the East Bay imported a vast number of workers and their families to ensure that the shipyards of Richmond, Oakland, and Vallejo operated at full capacity. As Marilyn Johnson explains in *The Second Gold Rush: Oakland and the East Bay in World War II*, the migration of workers to California during the World War II spurred the largest population growth in the state since the 1850s (31). Between 1940 and 1945 the population of the San Francisco Bay Area grew by one million people, half of which settled in the East Bay. Oakland increased by nearly one third from 302,163 residents to 400,935 over the same time period (Bagwell 237). As a result of the overwhelming amount of work created in the Bay Area created to sustain the war effort, East Bay industrialists had to look beyond local and state borders to fill jobs – a situation that demanded new outreach and management efforts.

Early on in this effort, wartime industrialists like Henry Kaiser, who specialized in large engineering projects and shipbuilding, partnered with the War Labor Board and the local shipyard unions to secure an agreement intended to maximize production, manage migration, and stabilize labor relations between employers and workers. A second partnership between Kaiser and the War Manpower Commission assumed responsibility for guiding laborers to the union halls where labor leaders steered them to jobs. The industrial firm managers turned to every known corner to supply the skilled labor demand. Kaiser enlisted workers from his other two large projects, the Hoover and Grand Coulee dams. But, as the war in the Pacific intensified and California failed to supply the workforce necessary to keep the dry docks operating at full tilt, shipbuilders began looking outside the state for supplemental labor (Johnson 34, 36, 37). The shipyards recruited laborers from across the nation, but a majority of them emigrated from southern U.S. states like Oklahoma, Arkansas, Texas, and Louisiana. For many individuals seeking respite from the Depression years, wartime work in the East Bay shipyards offered a level of economic stability that had been absent for some time.

Johnson explains that the government-sponsored war migration, “increased the racial and cultural diversity of the population, making the East Bay and other urban centers more black and more southern than ever before” (31). In fact, Oakland’s black population increased from almost 8,500 to 37,000 during the war years. Vehement race and class issues (intensified by Jim Crow laws) gripped the nation in the mid-twentieth century, and played an important role in shaping Oakland today. Professionally and socially, blacks were not well received in Oakland. “Auxiliary” unions were created to segregate blacks, requiring them to pay dues but denying them union voting power (Bagwell 238-240). A quote from an Oakland weekly, *The Observer*, clearly articulates how blacks were perceived in Oakland in 1944:

[There has been an] influx of what might be called socially-liberated or uninhibited Negroes who are not bound by the old and peaceful understanding between the Negro and the white in Oakland, which has lasted for so many decades, but who insist upon barging into the white man and becoming an integral part of the white man’s society (Bagwell 240).

Though the federal government can be attributed with stimulating job growth in the East Bay during World War II, it also had a hand in Oakland’s segregated housing development pattern. Local governments and defense contractors completed the team that would shape where Oakland’s migrants would live. Policies that favored white homebuyers further limited the housing options of blacks and ethnic minorities in Oakland. In 1941, Congress authorized the Federal Housing Administration (FHA) to oversee the Title 6 program which guaranteed private housing construction loans. However, most Title 6 programs only allowed white homebuyers to

participate. Hence, the program assumed a critical role in facilitating the white exodus to the suburbs, whose development exploded after the war.

The federal government began offering public housing options in 1942<sup>1</sup> and the East Bay housing authorities created a residential zone along the bay flatlands to construct housing units for the huge numbers of migrants flocking to the area (Johnson 92). The flatland areas that run along the eastern edge of San Francisco Bay were at the time sparsely populated and undesirable because they faced drainage problems. For these reasons, Oakland's flatland districts offered the government large blocks of cheap land to set up public housing (Johnson 98). The government built these projects as temporary housing for migrant war workers and therefore failed to consider such factors as social implications, design quality, and safety when planning the public housing developments of the East Bay. In many cases, the need to quickly house workers to ensure maximum production at the shipyards resulted in rows of wood frame two story homes composed of poor materials (109).

In Oakland, these shipyard ghettos sprang up in the flatland neighborhoods of East and West Oakland. Migrants were segregated into black and white projects, which served two purposes for the local housing authorities: it enabled them to one, dampen the racial strife between blacks and whites and two, control the impacts of wartime migration. Most native populations resided in neighborhoods outside the flatland areas, providing the housing authorities a physical means of protecting those communities. The crush of migration to the war industries in the East Bay subjected the housing stock to intense use while the poor-quality construction ensured its decline. The segregation statutes established by the local housing authorities effectively ushered black families to the worst housing stock, often in overcrowded and deteriorating neighborhoods (Johnson 93,107,109).

The facts regarding the federal government's involvement in Oakland's growth and the manner in which it was settled are important because as the city experienced the postwar vacuum of disinvestment (both government and private), minority populations suffered disproportionately as job opportunities languished. The federal government may have intended the wartime housing programs in the Oakland shipyard ghetto communities to serve a temporary purpose, but history has revealed that the housing policies enacted during World War II exacted persistently negative effects on blacks and other minority groups. In *American Babylon: Race and the Struggle for Postwar Oakland*, author Robert Self reasons that the racist actions of the federal government on

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1 The U.S. Maritime Commission and Federal Works Agency built the units, but local housing authorities were responsible for occupancy and management decisions.

the postwar housing market effectively established American “apartheid”. After the war, the FHA and Veterans Association, the two primary agencies responsible for managing the federal state’s housing policy, continued to produce programs like Title 6 that institutionalized segregation by securing the suburbs for white settlement (97). Importantly, Self explains that it is inappropriate and inadequate to describe the construction and colonization of the suburbs as the outcome of a particular social behavior termed “white flight.” Rather, he asserts:

“...that white suburbanization in this period represented the complicated intersection of public policy and subsidy, economic individualism and self-interest, and regional development and underdevelopment ...” (100)

Self’s description of the “push” factors that compelled white families to leave Oakland in the postwar era is important. First, they directly contributed to the vacuum of disinvestment (both public and private) Oakland began experiencing in the years after World War II. The FHA policies that subsidized suburban home construction essentially robbed cities like Oakland twice: Federal money that formerly flowed to the city in the forms of job and housing opportunities was now directed to the development of new towns and cities that excluded minorities from moving out of their city neighborhoods. Second, local city-builders also targeted new industrial and commercial properties in proximity to the new suburbs, isolating minorities from many of the new jobs being generated after the war. This framework of urban underinvestment and minority isolation set Oakland’s flatland neighborhoods on a course of decline that would have effects into the present day.

### ***1966: The Economic Development Administration’s Rebuilding Program***

Only twenty years after the end of World War II, the U.S. government again tried to influence economic development in Oakland. As part of his campaign to end poverty and racial injustice in the United States, President Lyndon Johnson established a set of government programs known as “the Great Society.” One outcome of the plan was the passage of the Public Works and Economic Development Act of 1965. The Act included a provision creating the Economic Development Administration (EDA), tasked with generating new jobs, protecting existing jobs, and promoting commercial growth in economically distressed communities. In April of 1966 the EDA selected Oakland as the pilot city for its Rebuilding Program. The program represented President Johnson’s urban economic development plan, designed to save the nation’s struggling cities from such intensifying problems as poverty, unemployment and racial strife (Pressman and Wildavsky 1). As discussed in relation to Oakland, similar processes of disinvestment, segregation, and suburbanization all contributed to the decline of many U.S. cities by the 1960s.

Two points puzzled people regarding Oakland’s selection and the implementation of the new

program. The first intriguing element was that the Johnson administration had not placed the new program under the purview of the newly formed Department of Housing and Urban Development. Next, people took interest in the fact that larger cities like New York, Los Angeles, or Chicago – places that had all endured the wrath of racial conflict – were not selected as the pilot test sites. The Wall Street Journal article that publicized the program offered insight into how Oakland was chosen, describing the City as a place, “of high unemployment and racial unrest that Federal agents have dubbed a powder keg” (qtd. in Pressman & Wildavsky, *Implementation*, p. 1). A black community leader in Oakland, Curtis Lee Baker reflected the anger bubbling to the surface in minority city neighborhoods stating:

“We hate Whitey because he hates us, thinks us no better than dogs. Call me ‘Nigger,’ it gives me respect. I have no respect for Whites, because they have no respect for me. I just want to be considered human. I’m not responsible for five hundred years of history, but for getting justice now. If we don’t get it, we’ll have a Watts here, and kill and bomb” (Bradford 4).

Unemployment in the city was more than twice the national average in 1966, and government officials must have feared a repeat of the Watts Riots that had torn apart the Los Angeles neighborhood a few months earlier. Baker made his remarks at a meeting in December of 1965 between EDA chief Eugene Foley and Oakland community members, where resident leaders described the state of the city’s black neighborhoods to the department head and some of his staff. The Oakland community representatives expressed great skepticism as to the nature and potential of the EDA pilot. Later in that meeting, Mr. Baker inquired, “What did it cost to bring you rich White men out here? We’d rather have the money. We’ve had enough studies. What we need now is justice, action, jobs!” (Bradford 5)

Jeffrey Pressman and Aaron Wildavsky explain in *Implementation: How Great Expectations in Washington Are Dashed in Oakland*, that the EDA presented a very straightforward purpose for Oakland’s pilot program: assuage the economic and social unrest in the city by underwriting public works projects and business loans that would create jobs for primarily black unemployed residents (1). The program allocated over \$23 million<sup>2</sup> for public works grants and loans to fund four large development projects consisting of the construction of a new hangar at the Oakland International Airport; a new Marine Terminal for the city port; an industrial park also on port property; and an access road to the recently completed Oakland Coliseum. Foley claimed that the projects would generate 3,000 jobs for unemployed Oakland workers. In order to ensure the development of the projects and the promised number of jobs, the EDA established guidelines requiring all recipients of federal funding to submit an employment plan describing how they would diligently work to hire Oakland’s most disadvantaged and unemployed workers.

2 In 1966 real dollars. Adjusted for inflation, the same investment today would amount to \$130.5 million.

The program created an Employment Plan Review Board, comprised of businesspersons, labor representatives, and the poor, and stipulated that it must approve all plans. The EDA also mandated that all employers submit monthly hiring reports to the review board. In these ways, the Economic Development Administration tied federal dollars to employer performance standards (Pressman and Wildavsky 2,3).

Despite the community mistrust, the program presented an innovative new form of local economic development by brokering partnerships between business, labor, and minorities. The EDA oversight was intended to be the glue that held these partnerships together, just as the Employment Plan Review Board was designed to keep the contracting firms honest as far as hiring the locally unemployed. Therefore, the success of the program very much depended on the government's ability to impel diverse participants to work collectively, in spite of their organizational differences and objectives (Pressman and Wildavsky 30). This proved difficult from the onset as local firms expressed great interest in government funds and measured interest in the hiring quotas. They accepted the EDA's terms as a means to access financing, but the facts reveal that the agency struggled to enforce their stated hiring practices. EDA grantees often maneuvered around the hiring restrictions. Even as administrators set stricter requirements for minority hiring, agency officials pointed out that enforcing them was tough. On the terminal project, the grantees reported that 60% of total workers were minorities. But a sly caveat clouded this claim – the 60% figure described the workforce on peak days. On off-peak days minority workers amounted to a much smaller number. Moreover, many EDA contract companies would hire minorities as temporary labor, prohibiting access to training and skilled positions (Pressman and Wildavsky 65). Five years after the program's inception, the EDA Office of Public Works produced a project report of the Oakland pilot. The total number of minority jobs created in Oakland between 1965 and 1970 summed to 500.<sup>3</sup> Collectively, the EDA projects in Oakland generated less than half of the 3,000 positions Foley guaranteed, and dispelled any lasting hope that they would be an agent for economic change to improve the lives of the inner-city unemployed (Pressman and Wildavsky 68).

### ***Impacts of the First Two Waves of Federal Economic Development on Oakland***

Between 1945 and 1970, the United States government funded two separate economic development initiatives in Oakland. The sole purpose behind the first campaign was to serve the World War II effort. The employment opportunities created and the subsequent worker migration

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<sup>3</sup> Total minority hiring numbers are inaccurate to the degree that figures are not available for two of the EDA projects in Oakland – the American Toy Company which occupied the industrial park and Universal Airlines' terminal development.

to fill those positions came out of government concern to keep the war machine operating at full capacity. The closure of the shipyards in the years after the war deprived minorities of the job security they had depended on. This was especially unsettling considering the lingering memories of the Great Depression from only a half-decade earlier. Housing policies that favored white homebuyers and the growth of suburban economic opportunities physically isolated Oakland minorities and further limited their access to the new jobs of the flourishing postwar American economy.

Within a decade of World War II, President Johnson launched the “Great Society” programs including the War on Poverty. The Economic Development Administration was charged with spearheading a pilot program to put Oakland’s inner-city unemployed minorities back to work. The EDA revealed an innovative approach to securing its employment objectives: all firms receiving government grants or business loans would not only be required to produce a business plan subject to agency approval, but also an employment plan explaining how they intended to recruit, train, and hire unemployed minority workers from Oakland. In his book *Oakland’s Not for Burning*, the EDA special representative in the city, Amory Bradford, explains that the task force performed exceptionally well as far as procuring agency funds, selecting and approving projects, and establishing the employment plan (requiring firms to target minority unemployed workers for hire). Failure occurred in the implementation process as the EDA struggled to keep beneficiary firms on schedule and elicit the minority jobs the program promised. By 1970 Oakland stood in much the same place it had five years earlier. For the city’s worst off, it was a place of increasing physical and economic starvation.

### ***The Opportunity Presented by a Third Wave of Federal Investment***

It would be both unfair and untrue to claim that the U.S. government was solely responsible for the decline of Oakland and similar cities. In an article challenging government complicity in urban decline, Robert Beauregard asserts that the scholarship connecting the federal government to the failure of cities is more, “accusation rather than an empirically substantiated argument” (130). Beauregard may be correct that the U.S. government cannot be held as the only or principal agent in the deterioration of all American cities after World War II, but the evidence shows that two waves of federal policies did contribute to Oakland’s current state of high-unemployment and limited economic opportunity. As the prior section indicates, the City’s current situation links to decisions dating back more than half a century.

Municipal funding through the Recovery Act represents a third wave of government investment



capable of reshaping the Oakland along new economic, social, and environmental lines.<sup>4</sup> Economic development exists at the heart of the Recovery Act, but President Obama's words clearly advance the specific notion of the green economy and its workforce development promise, as well. In 2008, the founder of Green for All and The Ella Baker Center for Human Rights (two Oakland organizations), Van Jones, authored *The Green Collar Economy: How One Solution Can Fix Our Two Biggest Problems*. Jones presented the idea that green jobs could simultaneously improve the nation's environmental and economic problems.

Over 30 years before Van Jones began promoting this strategy, the federal government presented a program built on two green economic principles: increased economic equity and environmental improvement. In 1976, the U.S. Department of Energy (DOE) launched the Weatherization Assistance Program to install energy-efficient technologies in low-income homes. Based on the successful track record of DOE and WAP over the past 30 years, Congress allocated \$5 billion dollars to the program through the Recovery Act.

In agreement with the federal government, organizations, think tanks, and consulting firms also acknowledge the promise and need for energy efficiency retrofitting programs (which incorporate air-sealing, lighting, and insulation improvements as well as appliance upgrades) as a key tool for national economic development and increased energy independence.<sup>5</sup> However, to be impactful on both fronts these programs must widely exceed the Weatherization Assistance Program. Later chapters will illuminate that the effectiveness of retrofit programs depends on achieving city-wide scale as opposed to a piecemeal approach to weatherization retrofits. To the degree that this proposal can provide jobs for the urban unemployed, many cities that have struggled to generate programs that pursue the triple-bottom line of economic development, social equality, and environmental improvement are exploring energy efficiency retrofitting programs as a potential solution. This past January, Oakland initiated its Weatherization and Energy Retrofit Loan Program (WERLP), which represents the City's attempt to address these converging issues using federal monies. Chapter 3 evaluates WERLP's performance in depth.

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4 Thus far, Oakland has garnered \$205,746,401 of Federal Stimulus money. Another \$217.5 million are currently pending. If Oakland received all of the pending awards, the total amount of Stimulus funding for the City would amount to almost half a billion dollars for a city of approximately 400,000 residents.

5 McKinsey & Co., Green for All, and the Center for American Progress have each produced papers celebrating the benefits of and need for energy efficiency retrofitting programs.

## ***Takeaways from Oakland's Prior Experiences with Federal Investment and Their Implications for the Current Use of Stimulus Funds***

Oakland's first two federally-sponsored economic development experiments present some key takeaways about the difficulty of such endeavors. The war proved to be an economic boon, a way to lift the nation out of the Depression by putting people to work in wartime industries. The policies that lured Americans to the East Bay promised transplants good jobs serving an admirable cause. However, the government exerted minimal effort to help workers transition to jobs in the postwar economy. Eventually, the economic situation in the Oakland inner-city and other American urban areas deteriorated to the point where the federal government was again willing to try its workforce development hand. The Oakland EDA pilot provided a platform for the government to test a locally-based economic development strategy that failed to produce its intended results. These two episodes reveal four important lessons regarding the federal government's role in local job creation.

### **1) Federal investments are time contingent.**

Federal investments are often associated with particular events, campaigns, or policies. The two Oakland episodes described above both connected to dominant government interests. The nation's World War II entrance activated a war machine requiring a dedicated labor force. During the war years, the federal government made every effort to ensure that workers were moved large distances to the exploding job markets of the country's port cities. However, after World War II the government ceased financing many wartime industries leaving many workers jobless. The EDA pilot signified a response to dwindling economic opportunities in the cores of U.S. cities, and Oakland served as the government's test case for its new Rebuilding Program. By 1970, the program had failed and the guarantee of good jobs for disadvantaged Oakland workers proved inaccurate. These cases exhibit that when a government-supported campaign ends, money and job opportunities can disappear. In both situations the federal government did not provide contingency plans for unemployed workers; subsequently, when the money was spent they were left to fend for themselves.

Time also plays important roles regarding the implementation of Recovery Act programs. Congress passed the bill to quell the possibility of a national economic meltdown and the two primary tenets of the Act boast immediate job creation and economic revival as expected net results. Likewise, legislators claim that the Stimulus will induce private sector spending in a range of commercial sectors leading to sustained job development even after all government dollars are spent. These

last two points directly address the notion of expectation. ARRA mandates that grantees spend all government monies by 2012, setting a discrete end date for the program. The current outflow of taxpayer dollars forces us to question the federal government's post-stimulus contingency plans for potentially still unemployed workers after the 2012 deadline or for those who may lose jobs if the funding dries up. Given that neither of the previous Oakland experiences with federally-funded economic development successfully produced sustained positive outcomes for minority workers, city employees, planners, business leaders, and community organizations should brainstorm possible safety nets now to stave off surprises down the road.

## **2) Government-sponsored programs are highly politicized affairs.**

Presidents Roosevelt and Johnson used their respective campaigns to address social problems plaguing the nation under their tenure. As mentioned above, joining the Allied war effort resuscitated the American economy and rallied the nation around a patriotic cause. Meanwhile, President Johnson's Great Society programs intended to address poverty and racial injustice in the United States. The government programs that mobilized workers during World War II and established the EDA pilot directly served President Roosevelt and Johnson's political agendas. As political agendas shift, a once popular policy or program can easily be cancelled. Upon the war's end, President Truman (President Roosevelt died in early 1945) pared back shipbuilding leading to mass layoffs at the dry docks. Similarly, as the highly publicized EDA pilot struggled to fulfill its promise, the Johnson Administration deemed it was better to end the program than suffer additional embarrassment.

President Obama is using ARRA in much the same way that his predecessors capitalized on the flow of public funds to pursue political goals. This statement does not suggest that Presidents Roosevelt, Truman and Johnson only acted in pursuit of political gain. Nor does it contend that President Obama pushed Congress to pass the Stimulus bill out of opportunism. Instead, the President likely believed that the Recovery Act was necessary to buoy the economy, and if positive results materialized as a result would play to his political advantage. For some time political pundits, Congresspersons, and the President considered the possibility of a second Stimulus, but in recent months increasing skepticism about ARRA has all but dispelled this idea. This political shift places increased pressure on ARRA's ability to produce sustainable and long-term jobs and stimulate the economy which recalls similar pressure the EDA experienced implementing the Rebuilding Program.

**3) It can be difficult for a federal campaign to affect local change, even with extensive oversight.**

This lesson directly relates to the EDA pilot program. EDA oversight intended to ensure that the businesses and labor organizations satisfied their minority hiring and training quotas. Yet, the EDA had never before managed an urban economic development strategy. The agency failed to exact the desired results from Oakland employers and labor organizations, particularly given that the oversight standards only mandated that funding recipients submit regular employment reports and hiring plans. While tighter restrictions - like withholding a portion of funds unless employers met certain hiring targets - would have slowed the EDA pilot's progress even more, it might have improved the program's overall performance.

It appears the federal government learned the above lesson. Thus far, it has released less than half of the \$20 billion dollars awarded to California (The United States Federal Government, "State / Territory Summaries: California"). The Act stresses that it will display unprecedented levels of accountability and transparency in government spending, and given the bewildering amount of money the federal government issued to states and municipalities, taxpayers should commend the government's commitment to oversight. Still, the government must seek to strike a balance between controlling the flow of funds and releasing them to promote state and city economic growth.

**4) Government investment can produce positive economic development results when the funding is directed to "shovel ready" activities with.**

An important similarity between the federal government's investment in the wartime industries, the EDA Rebuilding Cities program, and the Stimulus is that money is being directed through public channels to private industry. As evidenced during WWII, government investment can produce positive economic development results when allocated to "shovel ready" activities. Government contracts to firms that shifted their operations to supply goods and services supporting the Armed forces put the nation back to work. Shipbuilding represented a "shovel ready" investment once the U.S. entered World War II and the government helped businesses recruit workers from around the nation.

However, a key difference between expending money to finance a war and promoting economic development is the concept of demand. The war created a sustained period of demand whereby the government dedicated monumental amounts of funding to private industry to achieve a single

goal – perseverance over the Axis powers. The EDA experiment and the Stimulus represent approaches with less defined goals and limited demand for services. Oakland possessed a demand for economic development strategies that would benefit disadvantaged workers. Yet, the industries the EDA invested in continued to exclude minority employees. A critical disconnect existed between those needing jobs and employers willing to hire them. The EDA failed to properly align disadvantaged workers with growing businesses. The resulting labor surplus only contributed to Oakland’s economic development challenges experienced by its least secure residents. The Recovery Act faces a similar situation but at an exponentially larger scale. The federal government is confronted with the task of matching hundreds of billions of dollars to growing industries that can employ almost 30 million Americans - but is there going to be sustained demand for these services?<sup>6</sup>

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6 Numerical figure based on the U.S. Census estimate of a current national population of 309 million Americans and an unemployment rate of 9.7% in March of 2010.

## chapter two

# retrofitting the american city

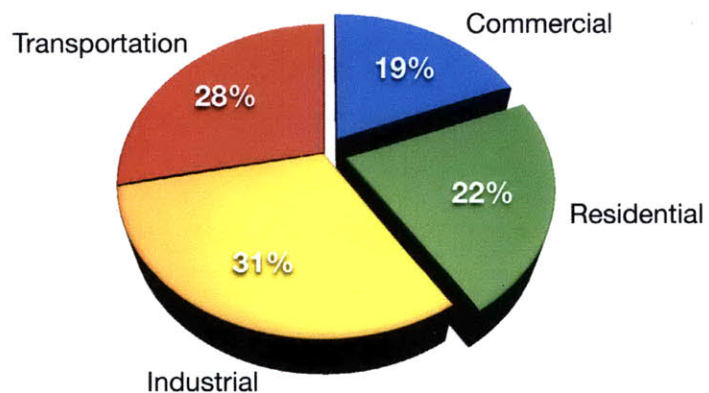
### ***Energy Efficiency and Weatherization Benefits***

Energy efficiency simply refers to technological building improvements that deliver more services for the same or reduced energy input. According to the International Energy Agency, maximizing energy efficiency constitutes a key step for securing a sustainable energy future. Energy efficiency advancements reduce the need to construct new power plants, cut fuel costs, and reduce the nation's dependence on foreign oil. Furthermore, energy efficiency offers huge environmental benefits in the form of fewer greenhouse gas emissions and improved air quality.

In the U.S., buildings account for roughly 40% of primary energy use and 38% of CO<sub>2</sub> emissions, but they account for 72% of U.S. electricity consumption (EIA). In response to these figures, pundits often characterize weatherization and energy efficiency as the “low-hanging fruit” in terms of return on investment dollars and reduction in greenhouse gas emissions. Investing in energy efficiency retrofits could reduce building energy consumption by 20 - 40%.

In addition, these investments would amount to huge savings on energy bills and could pay for themselves over time (Green for All, Green for All and Center on Wisconsin Strategy: A Short Guide to Setting Up a City-Scale Retrofit Program 2). For example, the average American household could save between \$300 and \$1,200 each year (Hendricks et al. 1,2). This is especially important for low-income families who spend four times as much of their income on energy than the average American household (Millhone).

**Share of Energy Consumed by Major Sectors of the Economy, 2008**



Additionally, energy efficiency retrofits could spur the creation of a whole new green job sector. The Center for American Progress has proposed an ambitious plan to retrofit 50 million residential and commercial buildings – or 40 percent of the nation’s building stock – by 2020. The organization believes that such a campaign could generate as many as 625,000 jobs over the next ten years. These retrofits would also help employ the 2.4 million currently unemployed construction workers (Bureau of Labor Statistics). A national retrofit plan on the scale of the Center for American Progress’ “Rebuilding America” model would also open the door for a huge number of individuals lacking college degrees to access high quality job ladders in energy efficiency materials and parts manufacturing, retrofit training, building energy auditing, and retrofit construction work. Stimulating the expected economic and employment gains would require an estimated \$500 billion decade-long investment. Therefore, an average investment of \$50 billion a year is necessary to realize the goal, accounting for almost 30 billion extra dollars each year over the current \$21 billion retrofit market (SBI Energy). The private sector must act as the primary financier in order for the U.S. retrofit market to reach its full potential. Even though the Federal government has supported residential retrofits of low-income homes for over thirty years, the Weatherization Assistance Program requires more extensive support if the nation is to pursue a national plan for energy efficiency retrofits. The WAP represents an important platform on which to build a national retrofit strategy, but as the following section will show, the program alone cannot provide the necessary funding or service capacity to achieve the level of scale prescribed by energy efficiency advocates.

### ***The Weatherization Assistance Program***

The purpose of the Weatherization Assistance Program is to install energy efficient technologies in low-income family residences.<sup>7</sup> Weatherization represents the first level of home retrofitting and focuses on sealing the building envelope, improving the efficiency of heating, cooling and electrical systems, and installing energy efficient appliances. The Energy Conservation and Production Act that created the program stresses, “The weatherization assistance program is to increase the energy efficiency of dwellings owned or occupied by low-income persons, reduce their total residential expenditures, and improve their health and safety, especially low-income persons who are particularly vulnerable such as the elderly, persons with disabilities, families with children, high residential energy users, and households with high energy burden”(The United States National Archives and Records Administration). The United States Department of Energy initiated the Weatherization Assistance Program in 1976 under title IV of the Energy Conservation and Production Act, the purpose of which was to curb heating bills and conserve imported

<sup>7</sup> The Dept. of Energy produces annual guidelines based on the federal poverty level to help states set the qualifying income threshold for the WAP. Even so, the states set the rules that determine who qualifies.

oil. The legislation was a specific reaction on the part of the U.S. government to stem some of the unforeseen but tragic consequences of the 1973 oil shock. While most Americans faced tighter budgets due to the increase in oil prices, the spike in energy costs disproportionately affected low-income households where rising heating bills dragged some families into debt and in extreme cases even poverty. Senior citizens faced similarly fearful situations, especially those on strict budgets or social security. Legislators – particularly those from cold winter climates – legitimately feared that some of their constituents might actually freeze in their own homes. Concerns about whether the price of oil would remain persistently high and the effects this could have on the least advantaged Americans, prompted public officials to pass the Energy Conservation and Production Act and establish the Weatherization Assistance Program.

Early in its existence, the Weatherization Assistance Program primarily focused on emergency and provisional upgrades (United States Department of Energy, “DOE Weatherization Assistance Program: History of the Weatherization Assistance Program”). These included caulking and weather-stripping doors and windows to prevent leakage and other economical modifications (Kaiser and Pulsipher). As time progressed and program administrators learned the value of newer energy efficient upgrades, they began incorporating more cost-effective measures such as storm windows, attic insulation, and enhanced space and water heating systems. The push to maximize the cost-effectiveness of weatherization home retrofits promoted the practice and adoption of home energy audits. Energy audits refer to analyzing individual homes to determine where energy is being wasted and identifying the optimal weatherization improvements to abate energy problems. Energy audits now represent the benchmark of weatherization practice. To expand access to the Weatherization Assistance Program to benefit low-income families in warmer climates, the Department of Energy (DOE; the federal agency responsible for administering the WAP) expanded the program to include measures that would reduce cooling costs, which often exceed heating costs in such places. The program’s adaptability and improved building analysis tools have enabled the Weatherization Assistance Program to continually expand its reach (even in times of budget cutbacks) and improve its own efficiency to relieve the energy needs of low-income Americans who own or rent single-family, multi-family, or mobile residences (United States Department of Energy, “DOE Weatherization Assistance Program: History of the Weatherization Assistance Program”).

The success with which the WAP delivers services to low-income households depends on three levels of actors comprised of (1) the Department of Energy; (2) the states, the District of Columbia, and Native American Tribal Governments; and (3) a cadre of local governmental or non-profit agencies. These actors work in concert, performing specific actions that ultimately



deliver weatherization services to low-income families. The DOE provides program funds to the states, suggests guidelines for eligibility, determines the associated value of particular energy efficiency upgrades, chronicles energy savings, and offers technical support and training assistance to weatherization service providers. In turn, the states set the program qualifying standards, contract with local agencies or organizations that provide weatherization services, and monitor their work for quality assurance (United States Department of Energy, “DOE Weatherization Assistance Program: DOE and States’ Roles in the Weatherization Assistance Program”). The service delivery work is either performed by Community Action Partnership (CAP) agencies or other organizations the agencies contract to provide weatherization services (Kaiser and Pulsipher). CAP agencies, created by the Economic Opportunity Act of 1964 to combat U.S. poverty, are both private non-profit and local government organizations. In addition to local management of the Weatherization Assistance Program, CAP agencies deliver a host of other services, such as education job training, economic development, and healthcare, among others (Community Action Partnership: The National Association).

While the structure governing the delivery of the WAP services has remained static over time, the guidelines dictating the amount of funding allocated to each state have been revised. The Federal Energy Administration (FEA), the predecessor to the DOE established the original allotment formula in 1977. In developing the formula, FEA addressed four factors deemed most relevant to achieving an equitable distribution of weatherization funds: 1) the number of dwelling units to be weatherized, 2) the weather patterns in each state, 3) the various types of weatherization work to be completed, and 4) the cost of heating and cooling as well as other factors set by the DOE (Federal Register 1977 a, b, 1978). In 1995, the DOE amended the allocation formula to ensure greater equity for warmer-climate states, but still apportioned fair funding quantities to cold-climate states to deliver weatherization services to low-income residents. The DOE continues to use the 1995 revised WAP funding allocation formula.

Currently, four primary sources fund the Weatherization Assistance Program: the U.S. Department of Energy, the U.S. Department of Health and Human Services Low-Income Home Energy Assistance Program (LIHEAP), Petroleum Violation Escrow funds, and “Other” sources such as states, utility companies, and private property owners. The DOE has consistently served as the primary financing source for the Weatherization Assistance Program – allocating an excess of \$6 billion since 1978. In recent years though, LIHEAP has surpassed the DOE as the primary financier of the program. In 2008, total LIHEAP weatherization funding also eclipsed the \$6 billion mark (LIHEAP Clearinghouse).

Understanding the purpose, history, structure, funding sources, and allocation formula of the Weatherization Assistance Program are critical to examining the expansion of the program under the Recovery Act. Congress dealt \$4.7 billion of Stimulus funds to the program because the DOE deemed weatherization to be a “shovel ready” activity (Wald and Kaufman). The Legislature qualified “shovel ready” based on five WAP factors:

- 1) The program possessed an existing infrastructure of processes and procedures that had been in place for decades;
- 2) Weatherization science and techniques are well understood, relatively uncomplicated, and transferable;
- 3) Performance metrics assess total units weatherized per total investment dollars;
- 4) The program guarantees immediate benefits to low-income residents; and
- 5) Weatherization measures produce appreciable environmental gains (U.S. Department of Energy Office of Inspector General Office of Audit Services 4-5).

Regardless of the perceived ease of administering the WAP through the Stimulus Act, such a massive funding injection also brings huge pressure against the DOE, the states, and local actors to rapidly expand capacity and provide services. To fully comprehend the magnitude of the changes to WAP as a result of the ARRA and its role in broadening the larger energy efficiency market requires a few points of clarification. The DOE distributed \$6 billion to the Weatherization Assistance Program over its first 33 years. The department intends to disburse nearly \$5 billion between 2009 and 2012 (United States Department of Energy, “DOE Weatherization Assistance Program: 2009 Recovery Act — Frequently Asked Questions about Weatherization”). With the increased funding, the DOE estimates the program will grow from approximately 140,000 to an average of 240,000 weatherization retrofits per year through 2012 (United States Department of Energy, Weatherization Assistance Program - The American Recovery and Reinvestment Act of 2009). To further clarify, WAP only addresses residential units. Considering that many units retrofitted through the program are in multi-unit buildings, the program can only weatherize a fraction of the total number of structures the Center for American Progress asserts is necessary to maximize the economic and environmental benefits of energy efficiency retrofits. In order to realize its potential through the Recovery Act, WAP must operate at full capacity; thus far, problems at the federal, state, and municipal levels have severely impeded program success.

In February of 2010, the DOE Inspector General released a special report titled, “Progress in Implementing the Department of Energy’s Weatherization Assistance Program Under the American Recovery and Reinvestment Act.” The analysis found that despite the DOE’s efforts

to smoothly implement the widely expanded WAP, local administrators made minimal progress actually weatherizing residences. In fact, state grantees drew less than 8% of the nearly \$5 billion awarded to the program. Accordingly, the slow activation of Weatherization Assistance Program grants translated into a miniscule number of retrofits. The ten highest funded recipients weatherized just 3% of the planned combined units for those states. A quote from the report reflects the Inspector General's concern for the state of the program: "Because the consequences of the lack of progress by grantees in the implementation of the Weatherization Program were so significant, we found this alarming" (2). In sum, the program is failing to produce the economic returns of the enormous public investment in the WAP and low-income households continue to suffer from higher utility costs the Recovery Act promised to relieve.

To improve the WAP's performance, the DOE engaged 32 states to identify problems inhibiting implementation. The Inspector General examination organizes those findings and explains that regulatory requirements, various state-level issues and training mishaps contributed to the program's poor results. Even as the DOE aggressively works to ameliorate program impediments, the Office of the Inspector General recognizes that the Department will experience increased pressure to weatherize as many units as possible over the remaining two years grantees can access funds through the ARRA. This fact calls attention to the possibility of, "wasteful, inefficient, and...even abusive practices" on the part of the DOE, states, and sub-grantees as they struggle to meet weatherization targets (U.S. Department of Energy Office of Inspector General Office of Audit Services 3-5).

As evidenced above, the Weatherization Assistance Program represents a component for states, regions, and cities to incorporate into energy efficiency retrofit strategies, but it cannot be relied upon to drive the entire retrofit market or meet the total service demand. Broad-based retrofit strategies must reach a larger population outside of income-eligible programs like the Weatherization Assistance Program. This will require new marketing tactics, but a more comprehensive system for retrofitting both residential and commercial properties should also be developed. Additional obstacles such as overcoming financial barriers, establishing good labor and workforce development standards, and monitoring and evaluating retrofit work must also be considered when designing an effective city-scale retrofit program.

### ***Components of a City-wide Retrofit Program***

In order to take full advantage of the economic, environmental and social benefits of energy-efficiency, municipalities must make concerted efforts to grow the retrofit market. The DOE's

commitment to provide and increase utility cost relief to low-income American households deserves praise, but the evidence presented here reveals that the program alone cannot unlock energy efficiency in the national economy. Federal Stimulus dollars designed to seed the green economy must also leverage far more private sector investment to simultaneously impact carbon emissions and joblessness. Furthermore, energy efficiency proponents assert that the city-scale retrofit program is the silver bullet capable of minimizing utility bills, generating green job growth, restoring the environment, expanding business opportunities, and extend the reach of ARRA funding (Green for All, Clean Energy Works Portland ii).

Such programs consist of five primary components:

- 1) a mechanism to recycle the monetary savings produced by energy efficiency upgrades in order to fund additional retrofits;**
- 2) the development of high-road jobs that are accessible to all; and**
- 3) a degree of scale beyond the incremental level (Green for All, Green for All and Center on Wisconsin Strategy: A Short Guide to Setting Up a City-Scale Retrofit Program 3).**

A number of social, environmental and economic justice organizations, as well as organized labor affiliates also stress the importance of a fourth component:

- 4) programs that focus on low-income service delivery and job development.<sup>8</sup>**

The following chapter draws attention to a fifth and final criterion of city-scale retrofit programs:

- 5) partnerships between local governments, community, business and labor institutions.**

These components broadly address those factors that municipalities or regional planning associations need to consider when designing a retrofit program to achieve economies of scale. Broad-based energy efficiency programs are complex and their success hinges on the ability of a managing party to plan and facilitate various activities. The importance of a managing body cannot be understated – coordinating program activities involving many partner organizations, businesses, and the public demands an organized entity. The effectiveness of the entity

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<sup>8</sup> The following list includes all the organizations supporting a focus on low-income neighborhoods in city-scale retrofit programs: AFL-CIO Center for Green Jobs, Apollo Alliance, Bronze Investments, Building and Construction Trades Department, AFL-CIO, Building Futures, C-Change Investments, California Construction Academy, Change to Win, Community Action Partnership, COWS, Corps Network, DC Project, Detroiters Working for Environmental Justice, Enterprise Community Partners, Green For All, International Brotherhood of Electrical Workers, International Union of Painters and Allied Trades, Laborers' International Union of North America, Local Initiatives Support Corporation, MIT Community Innovators Lab, National Association for the Advancement of Colored People, NeighborWorks America, Pantheon Properties, Partnership for Working Families, Policy Link, United Association of Plumbers and Pipefitters, United Steelworkers, US Green Buildings Council, YouthBuild USA.

administering the program rests on its capacity to respond to a multitude of local interests. By incorporating program design input from local community and business stakeholders cities can establish programs that exhibit a commitment to democratic engagement and balance various interests. Chapter 5 addresses how the Emerald Cities Collaborative could play this directing role.

As the first city-scale retrofit pilots unfurled over the past year in places like Seattle, Washington, Portland, Oregon, and Babylon, New York, local governments, existing organizations, business representatives, and in some cases, nascent administrative bodies have all contributed to designing and steering the programs. Of these, Green for All, a national organization dedicated to green economic development, outlined the regular activities that retrofit program entities need to supervise, including:

- identifying the appropriate building stock and target areas
- devising a recruitment, hiring, and training strategy for all energy auditors, workers and contractors
- arranging retrofit financing
- overseeing and coordinating work
- managing customer accounts
- quality assurance

The organization adds that a primary managing entity in each city should serve as a clearinghouse for all retrofit program activities, though some responsibilities could be contracted out to third parties.

Ideally, local energy retrofit programs should complement WAP by also offering services to middle- and higher-income households, creating loan funds to expand and recycle retrofit capital rather than WAP's grant approach, and performing deep retrofits (retrofits beyond the typical suite of weatherization upgrades such as wall and floor insulation or heat and water system improvements). Two cities working in innovative ways to take advantage of the energy efficiency opportunities created by the Stimulus are Seattle and Portland. Both municipalities developed retrofit programs they believe will extend service delivery beyond WAP and undertake the challenge of achieving triple-bottom line returns. The following chapter compares Seattle, Portland, and Oakland's retrofit programs in terms of the five retrofit components outlined above.

## chapter three

# case studies – seattle, portland, and oakland compared

### *Competing Models*

This analysis will examine the best practices of retrofit pilots currently underway in Portland and Seattle – two cities that have been lauded by green economy advocates for their innovative programs. These two cities were selected because, like Oakland, they were doing green strategic planning prior to the Stimulus, they initiated their retrofit programs using Recovery Act funds, and designed programs capable of growing in scale. Further, as west coast locales, Seattle and Portland have similar climates as Oakland. The climate statistics for the three cities are presented on the next page (see Table 1). Climate is important in that retrofit programs must be tailored to their respective city’s weather conditions. A suite of energy efficiency improvements regularly implemented in Boston, New York, or Washington, D.C. – cities that face more extreme winters than Seattle, Portland, or Oakland – wouldn’t make the same economical sense for the three west coast cities. Lastly, the three cities are reasonably comparable in population size. Although their histories of federal investment and urban growth are different, and I will not address these rich pasts here, these similarities make them productive case studies to compare. The purpose here is to evaluate how Oakland’s WERLP compares with Seattle’s Green Building Capital Initiative (GBCI) and Clean Energy Works Portland (CEWP) using the five retrofit program components described previously. The findings reveal both the strengths of Oakland’s program relative to its counterparts as well as the ways it can be improved in terms of job creation and increased scale.

### Seattle



Picture accessed at [www.goseattlecard.com/blog/page/2/](http://www.goseattlecard.com/blog/page/2/)

### Portland



Picture accessed at [www.bankruptcyoregon.com/](http://www.bankruptcyoregon.com/)

### Oakland



Picture by Michael Halberstadt



<b>Cities Compared</b>			
	<b>Seattle</b>	<b>Portland</b>	<b>Oakland</b>
<b>City Population</b>	571,000	582,000	404,000
<b>Average High ° F</b>	59.7	62.9	67
<b>Average Low ° F</b>	44.8	45.2	52.1
<b>Average Precipitation (in.)</b>	37.07	37.08	23.15
<b>Average Snowfall (in.)</b>	7.1	3.9	0

Table 1: National Weather Service Forecast Office: Yearly averages for 1971-2000; Population data from City websites and U.S. Census American Community Survey 2006-2008.

Beginning in May 2009, Seattle, Washington instituted GBCI. The City outlines the goals of the program as reducing overall energy use within Seattle, increasing the energy efficiency of its existing building stock 20% by year 2020, generating jobs, and minimizing homeowner energy costs (City of Seattle et al. 2). Through the pilot, the Seattle Green Building Taskforce, a stakeholder committee convened to advise the City about program policies, means to display the economic advantage of energy efficiency to hopeful investors, utilities, businesses and residents (Green for All, “Green For All: Case Studies from the Green Collar Economy - City of Seattle Office of Sustainability Green Jobs Taskforce” 1). Moreover, the City of Seattle hopes that this program can serve as a model for other American cities.

Similarly, Portland, Oregon recently initiated its CEWP plan in September of 2009. The strategy uses ARRA funding both to promote near-term economic growth and outfit the city for sustained social, environmental, and economic health. Two innovative achievements – on-bill financing and a Community Workforce Agreement – could make the Portland pilot an exciting program to model. The City boasts that the program will ultimately lay the groundwork to retrofit 100,000 homes in Multnomah County (Green for All, Clean Energy Works Portland 4).

In early 2010, Oakland launched WERLP which uses Stimulus award money to finance energy efficiency retrofits for low-income Oakland residents. The program could retrofit between 70 and 300 units in its initial cycle. One of WERLP’s most appealing features, that it does not require loan repayment until transfer of property, is also one of its greatest liabilities in that it restricts program capital from being easily recycled. A comparative analysis evaluating the ways Seattle, Portland, and Oakland finance their retrofit programs, promote high road job development, work to increase program scale, prioritize disadvantaged communities, and build partnerships between the municipalities and community, labor and business institutions, elucidates the differences between each of the programs. The following sections explore each of these retrofit program

elements in depth, and allow for a comprehensive understanding of their relative strengths and weaknesses.

**1) An Appropriate and Robust Financial Model**

<b>Comparison of Retrofit Programs' Revolving Loan Funds</b>			
	<b>Seattle, WA's Green Building Capital Initiative</b>	<b>Portland, OR's Clean Energy Works Portland</b>	<b>Oakland, CA's Weatherization &amp; Energy Retrofit Loan Program</b>
<b>MECHANISM TO RECYCLE FUNDS</b>	1. Capital Funding for Program: \$3-5 million	1. Capital Funding for Program: \$2.5 million	1. Capital Funding for Program: \$2 million
	2. Uses a revolving loan fund (RLF) to extend EE home retrofit loans to program participants	2. Uses RLF to extend EE home retrofit loans to program participants	2. Uses RLF to extend EE home retrofits to program participants
	3. Loan amounts from \$8,000-\$20,000	3. Loan amount average: \$10,700	3. Loan amounts from \$6,500-30,000
	4. Low-interest rates (2-6% depending on income)	4. Low-interest rates (2-7% depending on income)	4. 0% interest rate and no amortization period. Loans paid back when program participant sells property or transfers the title
	5. Loan amortization periods up to 15 years (depending on income)	5. 20 year amortization period for all loans	

Table 2

The success of any large-scale retrofit program depends on its ability to reclaim the monetary savings achieved through energy efficiency retrofits and use them to finance additional retrofits for interested homeowners. Each of the programs analyzed herein exhibits a contextualized finance structure intended to ensure program longevity and accessibility, but they also share some similarities. Early in the visioning stages of GBCI's development, former Seattle Mayor Greg Nickels chose a team of 50 local stakeholders<sup>9</sup> to serve on the program's Green Building Task Force. The mayor then split the Task Force into two groups, one of which would focus on program policy design for new buildings as the other explored policy options for the City's existing buildings. The Existing Building Task Force evaluated four funding mechanisms including (1) a public financing pool (by establishing either a Local Improvement District or selling bonds); (2) a private financing pool; (3) low-interest loans; and (4) energy efficiency mortgages. Ultimately, the group determined that a combination of public and private capital would fund the initiative. The task force defined energy efficiency retrofits as upgrades to lighting, furnaces, water heaters, and windows, and agreed that the program would sponsor these activities.

9 The Task Force includes low-income housing providers and supporters, building owners and operators, real estate professionals, green building experts, architects, engineers, historic preservationists, energy providers, financial institutions, and other interested groups.



In the case of energy efficiency retrofits, capital always stipulates the reach of a program. The finite nature of money determines the particular scale any retrofit program will achieve: 500 units, 1000 units, or 10,000 units? As a result, program designers continue to utilize ARRA funds in innovative ways that extend the reach of retrofit programs beyond any scale cities could achieve alone. For instance, each of the three cities used grant funds from the Recovery Act to establish loan funds that would finance their retrofit programs. The Obama administration sees this as one of the great successes of the Stimulus Package, as this represents a particularly strong development of the Act's promised outcomes (City of Oakland 1). In Seattle's case, the City originated GBCI with seed capital from ARRA's Energy Efficiency and Conservation Block Grant (EECBG) program.<sup>10</sup> The city will rely on the EECBG funds to launch the program and will seek additional support from philanthropic sources and private investors to fully finance GBCI pilot. Seattle expects that \$12 million could pay for 1,000 energy efficiency home retrofits. This amounts to an average of \$12,000 per home, which almost doubles the \$6,500 energy efficiency provision limit of the Weatherization Assistance Program. The City hopes to grow the fund to between \$20 and \$40 million, translating to a minimum of 1,500 and a maximum of 3,300 residential retrofits. Those numbers would build upon the 1,000 homes the City intends to upgrade through the pilot program.

The means of financial sustainability are a critical issue for retrofit programs, and such programs must devise a method to recycle the monetary savings achieved by energy efficiency upgrades. In Seattle, a revolving loan fund (RLF) supplies the capital to finance its program. An RLF is an unregulated pool of capital used to provide loans to small businesses and/or development projects with loan repayments recycled over time. RLFs exist to address capital supply gaps in communities and stimulate local economic development. In this case, the RLF fills the financing gap that private investment has failed to meet. Debtors are responsible for repaying their loans to the RLF and these repayments then allow the fund to extend new loans. Subsequently, a revolving loan fund can produce waves of debt capital for a community (Seidman).

GBCI's loan fund provides property owners with reasonable interest rates, longer amortization terms, and loans up to \$20,000. The interest rates vary between 2% and 6% and the borrower's income level determines their loan interest rate. The initiative allows program participants to amortize their debt over 15 years, and again, qualifying for a longer-term payback schedule depends on the homeowner's income. Property owners can access between \$8,000 and

10 "The Energy Efficiency and Conservation Block Grant Program (EECBG) provides grants to U.S. local governments, states, territories, and Indian tribes to fund programs and projects that reduce energy use and fossil fuel emissions and improve energy efficiency. The Program represents a Presidential priority to deploy the cheapest, cleanest, and fastest energy sources" (Green For All citation needed; see G4A EECBG pamphlet from last summer or use another source).

\$20,000 for energy efficiency retrofits. However, in order to receive an energy efficiency retrofit loan borrowers must pay a \$450 origination fee to a local community development financial institution (CDFI)<sup>11</sup> that manages the loan accounts. A lien on the property suffices as collateral for each retrofit loan (City of Seattle et al. 12; Seattle Mayor's Office 8).

Portland's CEWP program also uses a RLF. Like Seattle, Portland used ARRA funds to help start its retrofit pool, but the City also contributed its own money to the \$2.5 million of seed capital for the program. As a result, city officials continue to consider other ways to supplement and enlarge the RLF. Issuing government bonds or assuming low-interest debt comprise two tools city officials could use to broaden the program's financial scale. Socially conscious investors might also increase the RLF's lending power. For example, if investors supplied the fund with additional capital with the expectation of only a 2-3% return, the RLF could raise additional capital and consequently provide more energy efficiency retrofit loans. However, private investment could require the fund manager to charge retrofit loan debtors higher interest rates in order to cover the RLF's debt to its investors. The Portland pilot program expects to retrofit 500 homes in its first year and aspires to retrofit a total of 100,000 units in the larger Multnomah County.

On-bill financing separates Portland's CEWP from the Seattle retrofit model. In this system, the RLF enters into a loan agreement with participating homeowners, but the fund pays contractors directly for the retrofit work. The utility pays the aggregate costs of all energy efficiency retrofits to the bank managing the RLF, which in turn replenishes the fund, enabling the CDFI to issue new loans. After contractors complete all work and an Energy Advocate tests and approves the upgrades, the utility begins charging the property owner an additional fee on her bill. This fee represents the monthly payment plus interest that the building owner must repay to settle the loan. The interest paid on the monthly retrofit charge guarantees a new and consistent form of profit for the utility. The reduction in energy costs offsets some of the cost for the efficiency upgrade, but because the utility produces less overall energy as a result of the retrofit, the interest it collects from customers improves the energy supplier's profit margin. This model offers property owners the ability to improve the energy efficiency of their building without expending any up-front costs. Additionally, utilities benefit from the continued income stream without needing to boost energy production in the form of new, extremely costly power plants.

ShoreBank Enterprise Cascadia, a CDFI operating in Oregon and Washington, will manage the CEWP RLF for a small fee attached to each loan it advances. The RLF offers interest rates between 2% and 7% but with even longer amortization periods than the possible 15 years extended by

<sup>11</sup> CDFIs are financial institutions that provide credit and banking services to underserved communities.

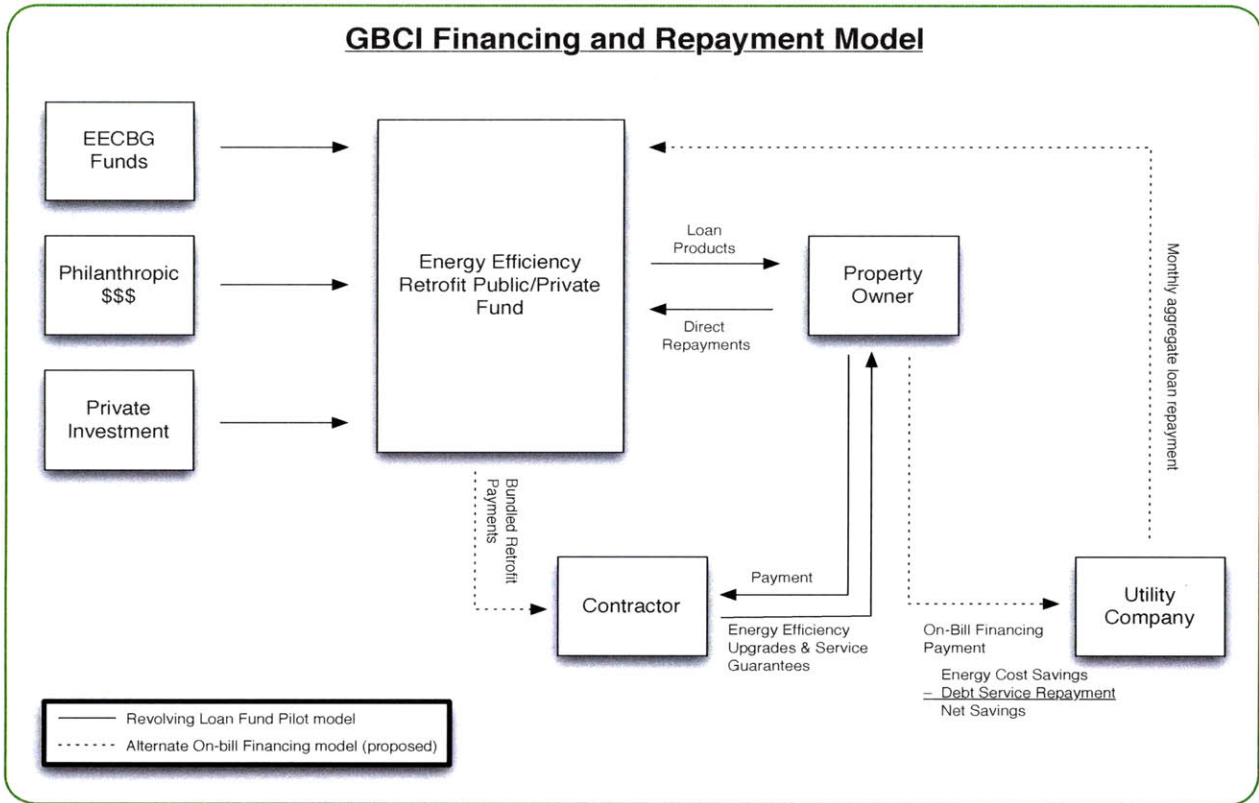


Figure 1: Produced by author

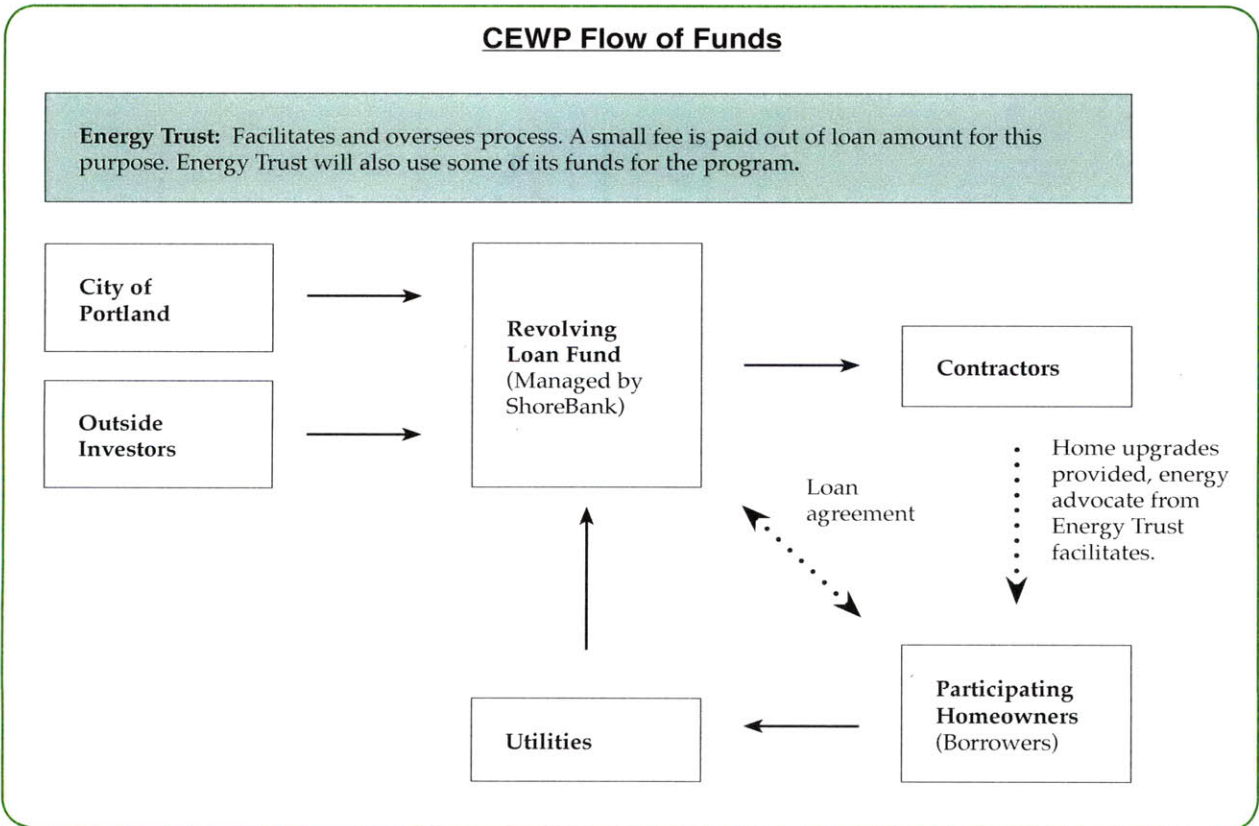


Figure 2: Produced by Green For All

the Seattle model. CEWP recoups each loan it makes available by collecting payments over 20-year terms. Loan amounts and monthly fees average \$10,700 and \$46 respectively. The deed of trust will serve as collateral for the loan associated with a given home, but any mortgage will still assume first position. This means that if a property owner sells a retrofitted home but has not yet paid off the loan for the energy efficiency improvements, the bank holding the mortgage(s) must be paid first before the RLF receives any money for outstanding fees on the retrofit loan (Green for All, Clean Energy Works Portland 5-8; Clean Energy Works Portland, “Clean Energy Works: Portland Frequently Asked Questions”).

Oakland’s retrofit program also operates via a RLF, but does so in a way different from both the Seattle and Portland models. In January 2010, the City activated approximately \$2 million dollars of ARRA Community Development Block Grant funds to seed WERLP. Oakland’s Housing and Community Development division, the municipal office that administers WERLP, wanted the program to serve poor and moderate-income homeowners (residents who earn up to 80% of Area Median Income). Oakland offers WERLP participants extremely flexible terms because the City desires that homeowners use the money to install measures that exceed traditional weatherization retrofits so that they may maximize the investment (City of Oakland Housing and

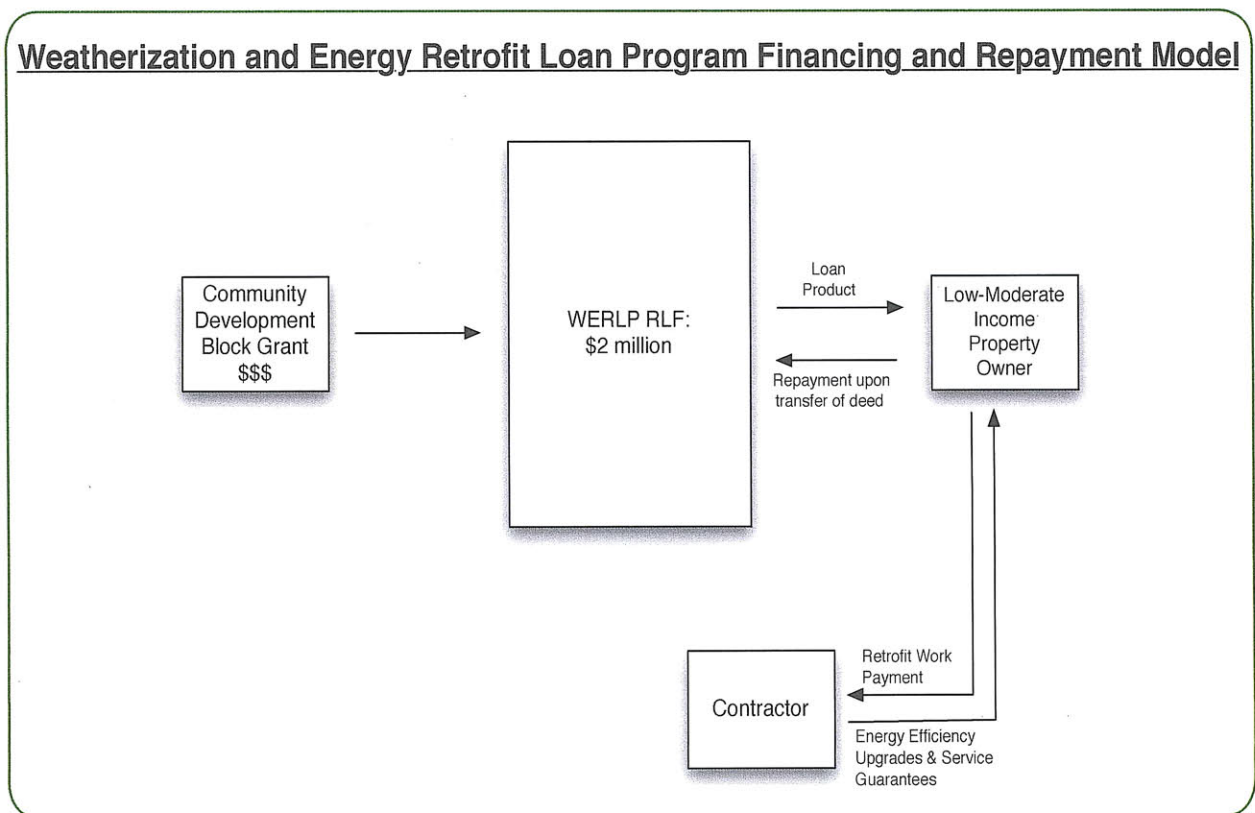


Figure 3: Produced by author

Community Development). Hence, homeowners can access between \$6,500 and \$30,000 for energy efficiency upgrades. The RLF charges no interest on these loans and sets no amortization period over which the loan must be repaid. Instead, Oakland recovers its investment when the property title transfers hands. For example, when a property owner that has received money from the City for energy efficiency upgrades sells their home, they must repay the city the cost of the loan upon completing the sale. This replenishes the RLF and allows the city to extend new loans. Oakland's development and redevelopment program manager, Loyd Ware, explained the City decided that the most effective way to extend services to homeowners with limited budgets was to stipulate loan repayment when the property title is transferred. This releases them from having to pay another monthly bill.

The fact that all three of the programs evaluated here use revolving loan funds as the financing tool of choice stands as a testament to the RLF's ability to fill capital gaps and finance these types of initiatives. However, the success of the programs will depend on their ability to manage, recycle, and procure additional loan capital over time. Still, RLFs possess many strengths that make them an optimal instrument for economic development. The three funds outlined here align their financing policies with their economic development goals – providing zero- or low-interest loans to homeowners so that they might retrofit their homes to increase energy efficiency and reduce costs. The low-interest rates and flexible payback terms encourage homeowner participation. The faster loan amortization periods required through GBCI and CEWP should recycle program capital faster enabling the funds to extend new loans. Also, higher loan thresholds will likely attract property owners because they enable landlords to finance deeper retrofits and reap greater energy efficiency gains as in the case of Oakland. Resultantly, these financing terms should foster retrofit market growth and contribute to job and business development.

However, revolving loan funds also come with weaknesses that retrofit program managers must monitor and minimize to meet their retrofit goals. Both the Portland and Seattle programs intend to attract supplemental investment dollars to expand the programs. Unless Seattle can acquire the philanthropic and private investment funding program managers expect, GBCI will fail to achieve the level of intended scale. Portland has considered issuing government bonds or securing low-interest debt to increase CEWP program funds. If Portland takes on debt to finance CEWP's revolving loan fund, it could present problems for the program down the line. Capitalizing an RLF with debt requires fund managers to charge higher interest rates to program participants to ensure the fund can cover its own debt payments. Similar to Seattle, Portland could face problems if it cannot attract sufficient funding to expand the pilot. Further, CEWP faces another possible hazard: a second position on home mortgages puts the fund in a potentially precarious situation.

Energy efficiency retrofits should increase the value of a home, and since the loan must be paid in full upon sale of the property this could bode well. However, if a property owner defaults on their mortgage or sells the home at a lower value, homeowners will be ill-equipped or unable to pay back the retrofit loan. As the financing is currently designed, property owners may transfer the retrofit loan to a homebuyer at the time of sale. This requires the two parties to negotiate a transfer fee, which could act as a deterrent for homebuyers if the loans drove up prices. CEWP plans to explore a tariff model whereby loans would directly transfer to new homeowners at the point of sale. Retrofit program managers refer to such loans as ones that “run with the meter” because they remain connected to their respective properties rather than the homeowner(s) that initiated them (Green for All, Clean Energy Works Portland). Whether CEWP on-bill financing affects home sales in Portland will not be known until the pilot runs its course.

Oakland’s WERLP revolving fund faces its own challenges. First, the fund charges no interest on its retrofit loans. This will certainly attract people to participate in the program but it deprives the RLF of supplemental capital that could help expand the program and extend more loans. Likewise, loans will only be settled when a participating homeowner sells her property. This suggests that homes retrofitted through WERLP will be priced at a value that, at a minimum, covers the loan the owner took out to make the efficiency improvements. Regardless, the owner of the property must pay the city the total loan amount when she sells. WERLP developers did not create a loan loss reserve fund, meaning the fund maintains no protection against losses or a participant’s failure to repay their loan. Unless benefitting homeowners replenish the fund by selling their home or transferring its title, Oakland’s Housing and Community Development division lacks an alternate means of recharging the RLF.

One Oakland staffer explained that the reason the City did not require WERLP participants to repay loans over a fixed time period was so that residents would not be burdened with another monthly bill. The City believed that lower-income or older program participants should be able to enjoy the benefits of deep retrofits without being subjected to an additional charge. Instead, WERLP requires that energy retrofit loans be repaid upon the sale or title transfer of upgraded homes. This structure makes WERLP redundant to the degree that it offers energy efficiency retrofit services to low-income local residents. The WAP provides similar services to low-income residents, and does so in the form of grants that do not require repayment. Even though WERLP gives poorer Oakland homeowners the opportunity to invest in more comprehensive energy efficiency retrofits, it does not recover its loans at a pace that enables the City to expand the program. On-bill financing, with guaranteed low-interest rates, represents a reasonable strategy to minimize the financial strain experienced by WERLP participants, but still replenish the RLF



and offer new loans.

Since the property sale payback mechanism limits WERLP’s ability to recoup and relend loan funds, it magnifies the reality that, of the three programs, Oakland’s underperforms regarding the possible total of retrofitted units. The Oakland program could retrofit between 67 and 307 low- to moderate-income homes based on its loan option range. The Portland pilot will retrofit 500 homes in year one and Seattle’s program could reach as few as 250 units and as many as 400 units given its current financing. WERLP’s slow payback periods and inability to generate additional capital for the RLF seriously hampers the program’s reach and could spell significant shortcomings in Oakland’s green economic development efforts.

**2) High-Road Job Development**

<b>Comparison of Retrofit Programs’ Job Development Strategies</b>			
	<b>Seattle, WA’s Green Building Capital Initiative</b>	<b>Portland, OR’s Clean Energy Works Portland</b>	<b>Oakland, CA’s Weatherization and Energy Retrofit Loan Program</b>
<b>HIGH ROAD JOB DEVELOPMENT</b>	Tool: Residential Energy Efficiency Pathway (Stratified Training Program)	Tool: Community Workforce Agreement (sets job quality, worker access, and employment standards.	Tool: Qualified Contractor Criteria and Local Hire Incentives
	Expected Job Creation: 230	Expected Job Creation: 30-40 (from Pilot Program)	Expected Job Creation: 108

Table 3

The term high-road jobs refers to positions that provide family-sustaining wages and benefits to employees. They should secure long-term positions for existing workers and open career-development pathways for poor, disadvantaged, or new workers. In addition to putting unemployed construction hands back to work, retrofit program designers and managers can also focus workforce development efforts in economically depressed communities. This will contribute to the establishment of a local and economically balanced workforce that provides jobs for people of various backgrounds (Gelman 58). Community Workforce Agreements (CWAs) represent the most effective strategy to assure the development of high-road jobs. These agreements define the contracting, training, and employment policies intended to produce high-quality jobs for community members. They empower cities to set the economic development terms of a program: which contractors can participate, whom employers hire, and the types of benefits workers receive. Each of the programs analyzed here professes a commitment to the creation of high-road jobs as an integral component; however the following survey reflects that

the three cities apply different approaches and standards regarding this responsibility.

Seattle's Office of Economic Development and the South Seattle Community College designed a Residential Energy Efficiency Pathway as the primary job development tool associated with the GBCI pilot, but thus far no CWA is connected with the program. The retrofit job ladder contains four rungs, beginning with educational training for the least educated and least skilled energy efficiency employment seekers. The "General Education – New worker" rung offers trainees basic Mathematics, English, and Computer coursework. They also receive physical fitness education, soft technical skills, safety training, and career counseling. The downside is that the first rung of the career pathway affords no pay to trainees. In the second step of the trainees' progression, as an "Installer," participants receive between \$10-15 per hour and learn such skills as air and duct sealing, insulation, and base energy load measures. 6th-grade Mathematics accompanies the technical skills training. The rise to "Crew Chief" denotes a program participant's jump to the third rung of GBCI's Residential Energy Efficiency Pathway. At this level of the career chain, workers earn slightly more in wages (\$16-17 per hour) but acquire greater responsibility. Crew chiefs learn project management skills, energy load inspection and measurement, diagnostic testing, combustion and appliance safety, insulation codes, and how to provide energy efficiency installation training. Once promoted to the fourth position, "Auditor," participants learn information concerning advanced inspection and measurement, advanced diagnostic testing, advanced combustion appliance safety, and 12th-grade Math. This four-step apprenticeship program will prepare workers for various positions in the energy efficiency market, including work as a building contractor, an HVAC (heating, ventilating, and air conditioning) installer or contractor, an energy inspector, a consumer educator, or a certified energy manager.

The commitment to design and implement a well-articulated training program for novice energy efficiency workers as it tests the GBCI pilot program indicates Seattle's dedicated approach to green retrofit job development. Currently, the City expects GBCI to generate 230 jobs from the existing building policies initiated by the program. The success of the Residential Energy Efficiency Pathway hinges on four factors. First, program managers must secure connections with an array of energy efficiency employers and regional leaders to identify and mitigate green retrofit workforce barriers. Second, the program must provide low-income and low-skilled populations a means of accessing the training ladder. Only then will the program begin to offer high-road jobs to those who need them most. Third, after completing the pilot, the Green Building Task Force will need to evaluate, improve, and streamline the residential and commercial retrofit career pathways the program intends to develop. Finally, Seattle could benefit from building on other successful planning practices to better understand how to take its own program to scale



and sustainability (City of Seattle et al. 12-15).

Seattle's GBCI exhibits a number of strengths. The Residential Energy Efficiency Pathway trains workers in a specific skill set associated with the program. It acknowledges that workers possess different levels of education and abilities, and provides them with a number of "on ramps" to access different rungs of the energy efficiency retrofit job ladder based on these distinctions. Furthermore, the Seattle program prepares workers for and exposes them to other facets of the green economy. The experience will increase their economic value and improve their lateral and upward job movement in the field. Lastly, GBCI benefits from new legislation adopted in Seattle this past January 2010. The ordinance mandates an energy performance disclosure from owners of commercial and large multi-unit residential buildings. Owners of the largest buildings will begin reporting energy performance this year, while mid-size and smaller structures would start reporting in 2011 and 2012 respectively. The Seattle Green Building Capital Initiative Summary Report clearly states how the city expects these policies to drive the energy efficiency retrofit market, explaining, "By increasing the amount of information available to building owners and occupants, measurement and disclosure of building performance will help identify opportunities for energy efficiency gains, encourage voluntary upgrades, and create a mechanism for market differentiation" (9). Following this logic, the policy should increase retrofit demand and generate job growth.

The policies driving the Seattle pilot illustrate one way a city can institute an energy efficiency retrofit strategy, but GBCI reveals some minor flaws. The initiative's growth rests on the ability of program fund managers to attract additional RLF capital to extend new loans. The local policymakers designed key legislation to drive the development of the retrofit market, but without adequate financing GBCI could produce an excess demand and limited capital to cover service delivery. In addition, the Seattle pilot lacks a CWA and therefore the mandate to enforce particular workforce development goals such as minority training and hiring. The implementation of the program and the outcomes it yields will evidence whether or not it has successfully produced equitable retrofit workforce development.

In contrast, Portland's CEWP program relies on a binding agreement to generate positive workforce development outcomes. Where the Seattle program tailored its training program to the developing energy efficiency retrofit market, Portland's CWA influences the market to produce the desired workforce development results. In this way CEWP's CWA can serve as a model for other energy efficiency programs developed to induce economic and workforce development. The CWA addresses six separate but related principles relative to workforce development: job

# Community Workforce Agreement Model

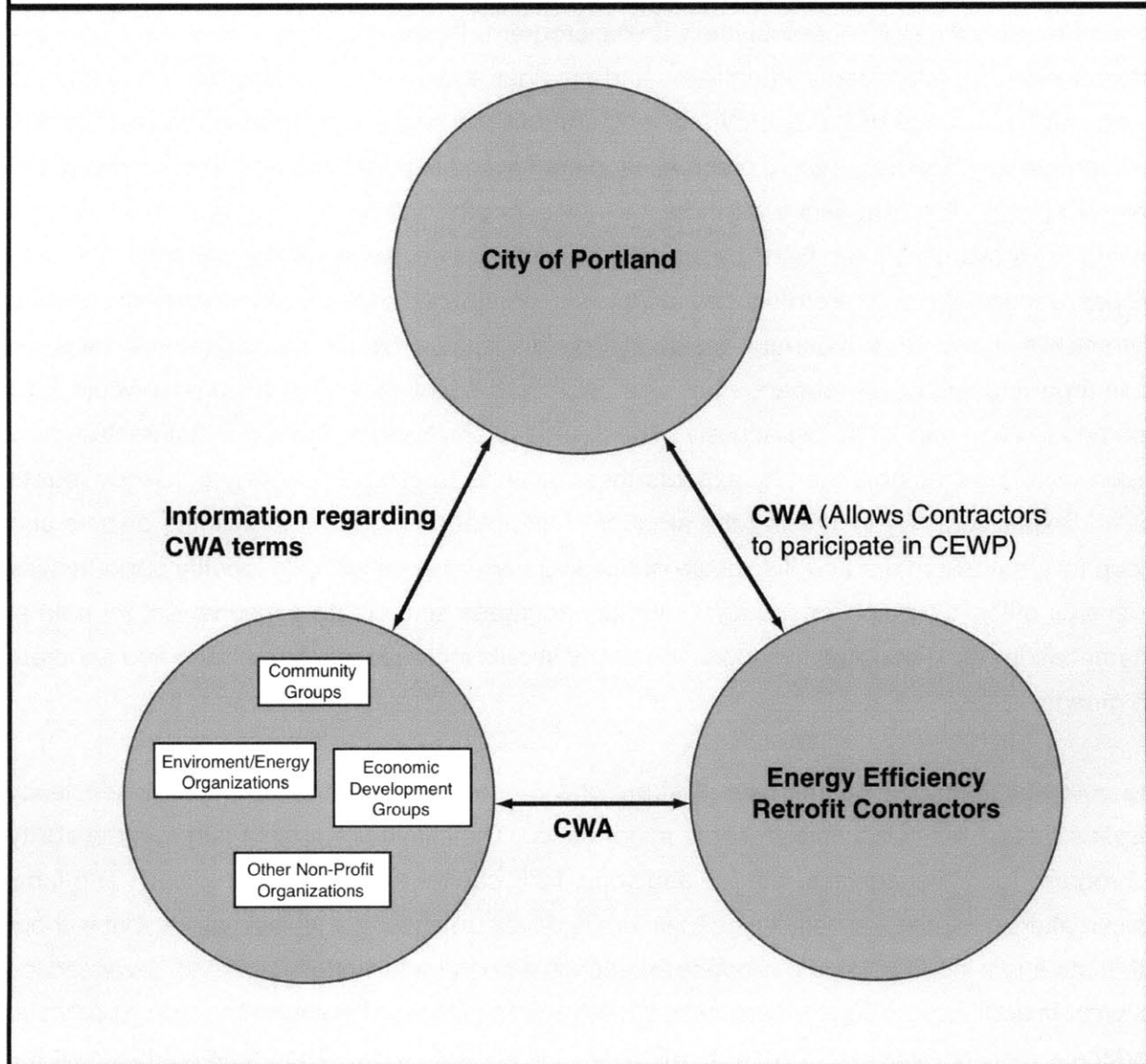


Figure 4: Produced by author

quality, access, high-road employers, legal enforceability, democracy, and accountability. This comprehensive approach aims to assert control over how the market functions to produce greater economic equity from the energy efficiency retrofit market.

The job quality standards included in the Portland agreement center on wages, benefits, and upward mobility. In this case, wages must equate living wages – more specifically, contractors must pay workers any existing prevailing wage or 180% of Oregon’s minimum wage, whichever is higher. CEWP awards points to employers that provide workers with benefits, such as health

insurance, a pension plan, vacation time, or sick days. The CWA also stresses upward mobility as a key element of good job quality standards. Importantly, the program has involved local unions and training providers from the outset to open up job pathways for retrofit workers.

The involvement of key partners is a critical element of the next principle outlined by the CWA – access. The agreement emphasizes the importance of local hiring, the development of a diverse workforce, and high-quality training programs. According to the CWA, 80% of energy efficiency retrofit workers must originate from Portland. The agreement necessitates that historically disadvantaged<sup>12</sup> or underrepresented employees (people of color, women, or low-income workers) must work about one-third of total work hours. The statute also requires that contractors staff 100% of their workforce with individuals from “high-quality training programs” until such workers assume 50% of firms jobs. Further, training programs must fulfill a set of given criteria to be designated a qualified training program. CEWP managers believe that a proliferation of qualified training programs can increase the pool of skilled workers from historically marginalized backgrounds by setting a minority contract threshold. The CWA guarantees that a minimum of 20% of all contracts be granted to minority business owners.

CEWP will not succeed without a supply of high-road employers. Program managers maintain a list of approved contractors, but contractors who wish to be added to the list must complete a mandatory training. In addition, the CWA established an incentive-based structure to garner the most qualified efficiency contractors for the program. Contractors receive points for their energy retrofit experience, a positive service record, hiring local and disadvantaged workers, and having a favorable reputation dealing with employees, city staff, and members of other organizations. The strength of the CWA is its legal enforceability. Contractors sign legal documents that mandate they uphold the standards outlined in the CWA. So, in contrast to the EDA’s attempt for workforce development in the 1960s, Portland’s CWA excludes any energy retrofit contractors that fail to agree to its terms.

The market regulation achieved through the CWA assures that CEWP balances disparate interests between private business and the public sector, organized labor and non-unionized firms, and among the assortment of participating contractors. Program managers recognized that maintaining CEWP would be an intensive, multifaceted, and difficult task. CEWP created the Stakeholder Evaluation and Implementation Committee (SEIC) to support the City and state

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<sup>12</sup> CEWP defines a disadvantaged worker as an individual that earns a household income less than the area median income or faces barriers to employment such as homelessness, being a custodial single parent, receiving public financial assistance, lacking a GED/high school diploma, or possessing a criminal record (Green for All, Clean Energy Works Portland 11).

Energy Trust as they actualize the CWA. The SEIC retains other responsibilities, too, such as developing new program procedures and practices to ensure CEWP delivers on its promises. Following the pilot, the committee will begin regularly evaluating the program and realign the it's goals as necessary. Collectively, the Portland city government, the state Energy Trust, and SEIC not only assume responsibility for the workforce development success of CEWP, but also the program's other environmental goals (Green for All, Clean Energy Works Portland 10-12). Even though the Portland pilot reports it will produce only 30-40 direct jobs, the program's comprehensive and thoughtful approach sets the stage for much greater positive economic results (Clean Energy Works Portland, "Clean Energy Works: Portland More Frequently Asked Questions").<sup>13</sup>

Portland's CWA-based model aims to promote equitable, local, green workforce development and some key program attributes deserve mention. The legal enforceability of the CWA grants the SEIC power to regulate the participating contractors and determines the standards by which they must abide. The agreement guarantees high job quality and access to training and employment. It promotes business and employment standards for contractors. These principles matter as Portland codifies an energy efficiency retrofit market culture. By establishing the SEIC, the program displays a commitment to democratic input and engagement, places a value on accountability, and stresses the importance of implementing changes when appropriate. The CWA demonstrates how a diverse set of actors can negotiate terms that promote collective economic benefits, a strength that cannot be understated and will be further explored later in this paper.

The CWA model presents an attractive retrofit job driver, but characterizing it as an economic development surety could be premature. The agreement cannot drive market growth; rather it defines the terms governing energy efficiency retrofit workforce development standards. Similar to the Seattle pilot, CEWP will require additional capital to generate jobs and stimulate market expansion. Another drawback is that the CWA imposes restrictions that could dissuade some independent contractors from participating in the program. However, if the pilot succeeds and contractors realize that all roads to energy efficiency retrofits go through the program, they will

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13 The Center for American Progress (CAP) estimated that for every \$1 million invested in building efficiency retrofits 12.5 direct and indirect full-time equivalent jobs would be created. CAP claims that this target aligns with other estimates produced by the Political Economy Research Institute, the National Association of Homebuilders, the Center on Wisconsin Strategy and others. About 2/3 of jobs are created from energy efficiency installation and 1/3 are created for retrofit parts and material manufacturing (Hendricks et al. 9).

CEWP claims it will produce approximately 14 jobs per every million invested in the program. Even though this number is higher than the conservative estimates provided by CAP it is clear that if cities are going to experience large job growth in the energy efficiency sector these programs will require much more private and public investment capital.

be forced to comply with CEWP rules. The ultimate effectiveness of Portland's CWA will rest on its enforceability, specifically the ability of the SEIC to attract contractors even as it holds them to strict workforce protection standards.

Much like the other two programs, Oakland's WERLP champions equity, opportunity, and high-road job development. The City is currently producing an application for contractors to be added to a qualified retrofit contractor list. The criteria to be listed dictate that a contractor comply with Alameda wage standards, hire Oakland residents, and recruit workers from local green jobs training programs like the Oakland Green Jobs Corps. Of course, all contractors will need to show they are licensed, possess insurance, and are trained in energy retrofit standards. Through ARRA, the City incentivized local job development. The government will reimburse contractors who hire Oakland job seekers or graduates of local training programs 80% of paid wages through Fall 2010.

Oakland's Weatherization and Retrofit Loan Program economic development potential leaves more to be desired when compared with the other two programs. The City anticipates WERLP will generate 108 project jobs, a number that at face value appears to be solid relative to the 230 positions Seattle expects from GBCI and the 30-40 jobs Portland's CEWP pilot will create (Green for All, "Weatherization and Energy Retrofit Loan Program Summary for Oakland, CA" 2). The key difference here is that the GBCI and CEWP workforce development numbers reflect the initial phases of the respective programs. As the Seattle and Portland program designers developed both pilots to grow, their job creation capacity should increase at full implementation. In comparison to Seattle's program, the absence of a CWA in Oakland poses less of a problem because the pre-screened contractor list at least requires that energy efficiency retrofit business owners satisfy a set of criteria to be listed. WERLP's reimbursement for local hire incentive should also attract contractors to participate in the program. The workforce development agenda of the Oakland program, though not as robust as GBCI or CEWP, nonetheless establishes a good base the city can build on.

### ***3) City and/or Regional Program Scale***

The two Northwest pilot programs aim to achieve scales that will expand energy efficiency retrofits far beyond the initial test units. Still, building up retrofit programs to serve larger populations of residents and buildings is a difficult task, and one that requires a careful understanding of how these retrofit programs will perform. Ladan Sobhani of the organization Green for All offers a clarifying definition of scaled retrofit development stating, "Scale is more about the long-term



<b>Comparison of Retrofit Programs' Scale Development Strategies</b>			
	<b>Seattle, WA's Green Building Capital Initiative</b>	<b>Portland, OR's Clean Energy Works Portland</b>	<b>Oakland, CA's Weatherization and Energy Retrofit Loan Program</b>
<b>CITY AND/OR REGIONAL SCALE</b>	<ol style="list-style-type: none"> <li>1. Building Energy Disclosure Requirement</li> <li>2. City seeking additional RLF capital to offer more loans</li> <li>3. Scale of Pilot: 250-400 homes (given current capital)</li> <li>4. Goal: 20% of City building stock by 2020</li> </ol>	<ol style="list-style-type: none"> <li>1. Building Stock Analysis</li> <li>2. CBO-supported marketing strategy</li> <li>3. Coordinated business &amp; training programs</li> <li>4. (Also investigating) Bundling of properties</li> <li>5. Goal: 100,000 homes in Multnomah County by 2020</li> </ol>	<ol style="list-style-type: none"> <li>1. Marketing strategy to advertise program</li> </ol>

Table 4

goal and the ability to expand...It is about having a model and an infrastructure for this work to [grow]" (Sobhani). Seattle and Portland intend to broaden their respective programs' reach to retrofit large-multifamily buildings, but because the focuses of the individual pilots differ, their building targeting strategies and policies serve separate goals. In contrast, Oakland aims to use Stimulus CDBG funding to retrofit as many homes as possible with the understanding that the loans will ultimately be recycled to finance future retrofits. The City solely established income criteria for homeowners to participate in the program, and therefore does not address the age of homes, their condition, or appropriateness for retrofitting. Of the three cities examined in this study, only Portland explicitly evaluated the age of building stock as a targeting criteria for taking its retrofit program to scale.

As referenced earlier, Seattle plans to retrofit 20% of the city's existing building stock by 2020. The pilot program will test the implementation of GBCI and inform the city of changes that must occur to best position Seattle to achieve its goal. The pilot targets owners of single-family homes and condominiums in small multi-family buildings. Seattle will use an 18-month 5,000-unit energy performance and home rating program to jumpstart GBCI. Interested parties may volunteer their properties to be included in the year and a half pilot. GBCI's goals to increase program scale and produce positive results depend heavily on the Existing Building Policies developed by the Existing Building Task Force and the City. The Seattle Building Energy Disclosure requirement discussed earlier indicates that the City views policy as the essential instrument to energy retrofit scale maximization.

Seattle intends to use the policy lever to achieve two ambitious economic development goals: grow the local energy efficiency retrofit market and subsequently increase the scale of GBCI. City officials believe that mandating commercial and multi-family property owners to disclose how much energy their buildings consume will induce them to invest in energy efficiency retrofits. They also anticipate that building owners will discover that upgrading their property to be more energy efficient provides the supplemental benefit of increasing the overall value of their properties. The model gambles on these beliefs when it is very possible that property owners may conform to new regulation by disclosing energy consumption information, but not go on to solicit energy efficiency upgrades for their buildings. This also boils down to the problem of split-incentives between building owners and tenants. Landlords bear the responsibility of providing energy-using appliances in buildings but tenants pay the cost of the energy they use. Hence, building owners gain little direct benefit from any energy efficiency retrofit upgrades they invest in. The Seattle model will clearly benefit single-family homeowners, but the jury is out regarding how commercial property and multi-family unit owners will respond. Another factor could also impede scale development of GBCI: the disclosure requirement strictly applies to commercial and multi-family properties, highlighting a disconnect between the policy and those who stand to gain most from such an initiative. Mandating single-family homeowners to disclose their energy usage would likely require some political innovation, but it seems that one way to encourage energy retrofits would be to market them more strategically. Finally, the disclosure ordinance does not mandate that property owners cut energy usage, only that they disclose how much their buildings consume. Thus, it is unclear whether GBCI will market the benefits of energy efficiency well enough to grow the program.

Portland plans to use an alternate approach to take CEWP to scale. The method complements Oregon state legislation, the Energy Efficiency and Sustainable Technology Act of 2009, that frees the market of regulatory barriers that would inhibit taking large-scale retrofitting to scale. What separates CEWP from the Seattle and Oakland models is its focus on physical characteristics of the building stock. To participate in CEWP pilot a homeowner must live in a home constructed prior to 1993 and less than 4,500 square feet (see Map 1 on page 53). These criteria evidence a clear focus on older and smaller homes where energy efficiency upgrades will yield greater benefits for property owners. CEWP managers give pilot priority to residences possessing the greatest promise for energy savings (“Clean Energy Works Portland Pilot Application”). Even though the CEWP pilot phase will not end until Fall 2010, program managers continue to consider both policy and targeting approaches that will grow the program. These efforts consist of exploring such options as pre-weatherization investments in lead and asbestos abatement; bundling properties; community-based outreach strategies; and coordinated business support and training support

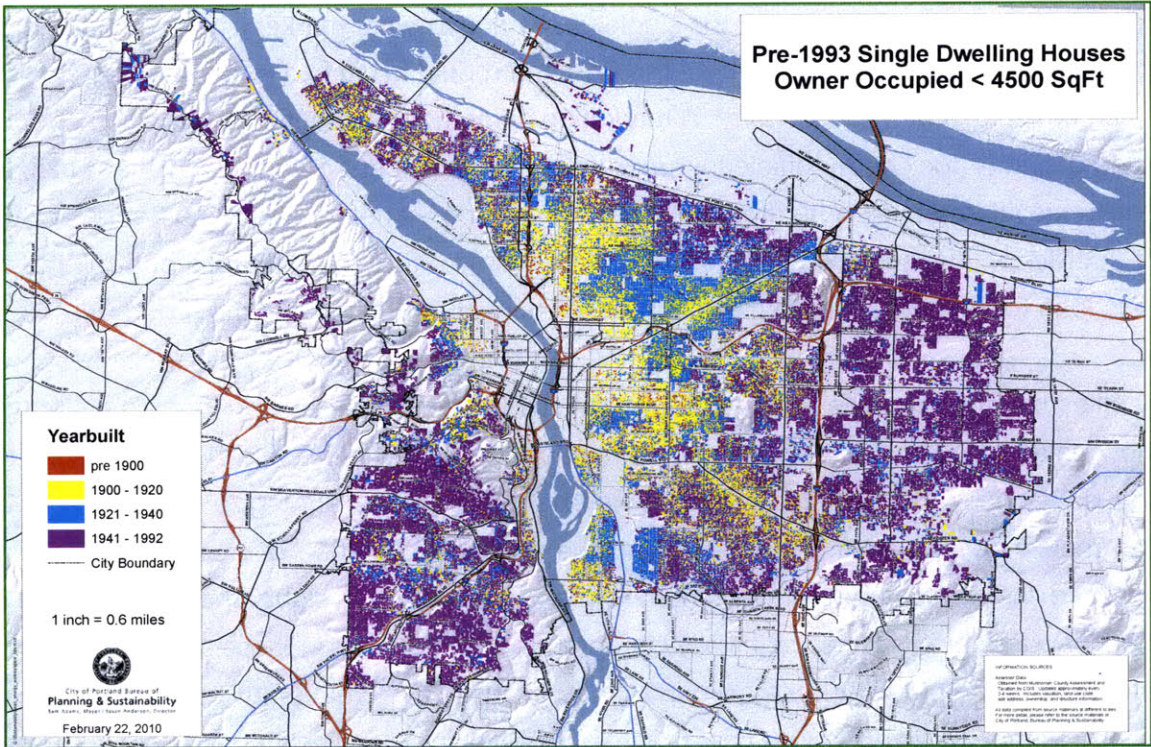
services. Pre-weatherization investments necessitate a key step in the development of healthy Portland communities. Therefore, the City believes that retrofitting homes first to remove toxins like asbestos, lead, and mold must occur prior to energy efficiency retrofits on homes. Portland's City Council must either roll such healthy home upgrades into CEWP energy efficiency home loans or create a new funding stream to finance these improvements.

The healthy home improvements impact the scale of CEWP because they create a pool of additional units that can later receive energy efficiency retrofits. Bundling retrofits will allow the Portland program to achieve economies of scale. Compiling adjacent properties to be retrofitted simultaneously not only streamlines the delivery of services but also provides large-scale contractors with opportunities to participate in the program. Producing economies of scale with respect to energy efficiency retrofits generates cost savings and enables service providers to reach more units. In order to alert homeowners to the benefits of energy efficiency retrofitting, CEWP managers will utilize community-based organizations (CBOs) to assist the city in marketing the program. These organizations often maintain closer ties to neighborhood residents and consequently possess greater access to certain target populations (see Map 2 on page 53).

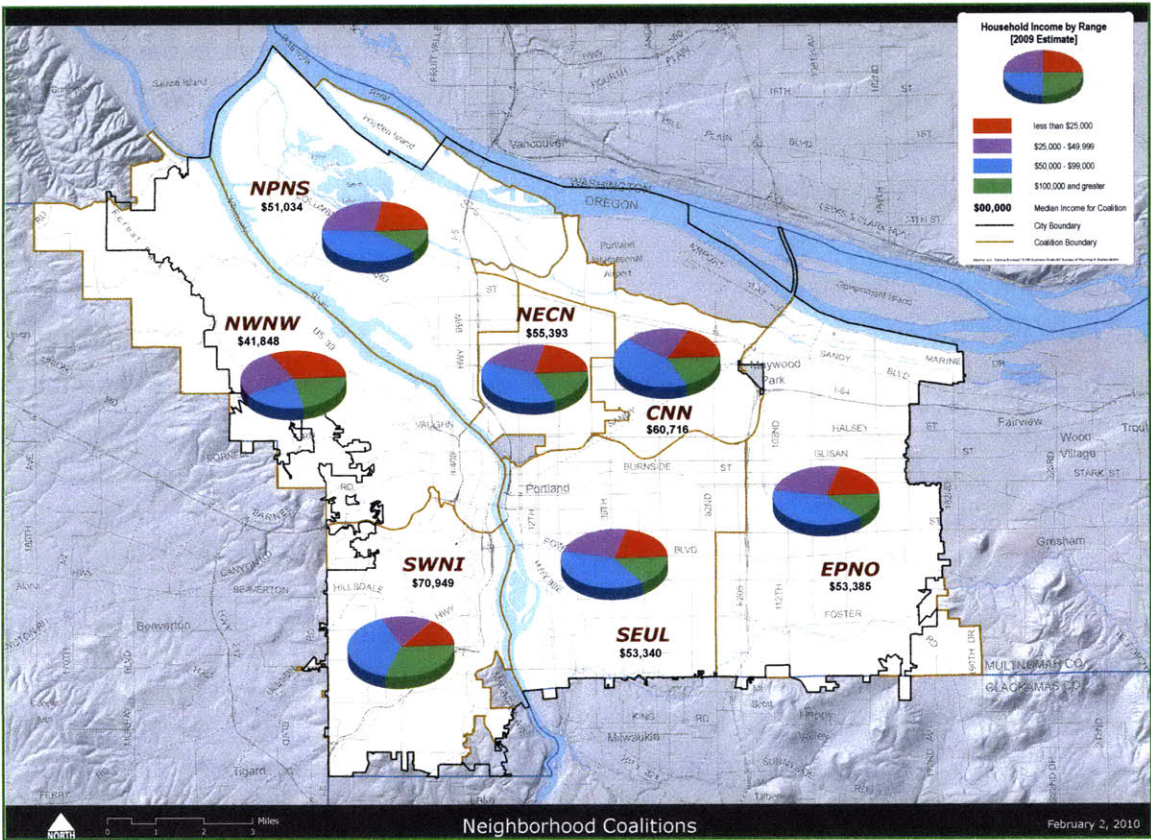
Finally, the Portland model relies on coordinated business and training support strategies to boost the reach of CEWP. Providing business support services gives program managers the ability to assist smaller contractors, as well as minority- or women-owned businesses as they enter the field of energy efficiency retrofitting. Business support services could include information about necessary certifications, access to training programs, links to business capital, and energy efficiency retrofitting best business practices. Another theory holds that particular populations may be more receptive to having their homes retrofitted by members of their own cultural, ethnic, or gender group. Hence, ensuring that a diverse number of contractors can engage the energy efficiency retrofit market represents an important step towards market expansions. Likewise, as the retrofit market grows contractors will require additional skilled workers to perform the work and therefore CEWP managers must initiate connections between the building trades unions and local training programs. Program managers will also work to promote the leading energy efficiency retrofit practices in training curricula. In these ways CEWP can grease the rails for individuals moving up the energy efficiency green job ladder (Green for All, Clean Energy Works Portland 13, 14).

CEWP will need to address the split incentive problem regarding rental properties as the pilot phase ends and the program ramps up scale delivery of energy retrofit services. All three of the





Map 1: City of Portland



Map 2: City of Portland

pilot programs in this analysis target the single-family homeowner market as the starting point to launch energy retrofits in their cities, yet the Portland model exhibits a more complete vision of how market expansion would occur.<sup>14</sup> A marketing campaign promoting “healthy homes” could serve as a primer for energy efficiency upgrades. Homeowners comprehend that hazardous material removal improves both their quality of life and the monetary value of a home. If CEWP could coordinate these home improvements with energy efficiency upgrades and roll the cost into one loan for customers, then more homeowners might participate in the program.

Many cities maintain records on the age of their building stock, racial, and income distribution, but how cities utilize this information will be critical to the equitable scaling of energy retrofit programs. Understanding these facts enables municipalities to strategize where retrofit loan dollars should be extended first. Based on the age and condition of a home or residential district, and the percentages of poor homeowners in particular neighborhoods, Portland can develop loan-targeting policies to initially concentrate retrofit efforts in these areas. Furthermore, the inclusion of community-based organizations in the CWA creates an outreach conduit to communities that would otherwise be unaware of CEWP. This signifies an added strength behind the program’s design. Portland will spend less by using grassroots partners to market CEWP while still increasing energy retrofit demand. Also, CEWP’s coordinated business and training support should secure a steady supply of qualified contractors to meet expected demand. Devising a bundling strategy, where groups of homes or residential blocks could be retrofitted simultaneously, denotes a smart strategy that would capitalize on coordinated renovations, program targeting policies, and intelligent marketing approaches.

CEWP’s expansion model may outline smart steps to expand energy retrofitting in a city or metropolitan area, but success in Portland is by no means guaranteed. In CEWP’s case, program results will determine success and sustainability. If program managers activate the measures described above and streamline the process, then Portland could provide a model for other cities to follow. Like the Seattle pilot, however, CEWP managers must ultimately attract more capital. Achieving the goal of retrofitting 100,000 homes will be nearly impossible without it.

Oakland aims to perform energy efficiency retrofits on as many homes as possible with the \$2 million it received from the Community Development Block Grant Program through the Recovery Act. As the property titles of retrofitted buildings transfer to new owners over time, the loans will be repaid and new weatherization and energy efficient retrofit loans will be extended to interested

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<sup>14</sup> The claim, “a more complete vision,” reflects the author’s analysis of the differing energy retrofit plans produced by Seattle, Portland, and Oakland and their visions of what their respective plans will yield.

homeowners. The City understands the need to market WERLP but it will not carry out this task on its own. In fact, Oakland's Residential Lending and Rehabilitation Services department already announced a Request for Qualifications to solicit bids for outreach services for WERLP. The City expects the subcontractor to perform specific duties – general outreach and referral, informing participating contractors of the City's intention to generate jobs via the program, and conducting follow-ups to ensure job quality and customer satisfaction (Green for All, "Weatherization and Energy Retrofit Loan Program Summary for Oakland, CA" 2). Oakland's Department of Housing and Community Development (DHCD), the office responsible for administering WERLP, will not charge the marketing organization with growing the program. That would require additional funding and a finance mechanism capable of recycling program loans at a faster rate. As a result, WERLP will assuredly retrofit some Oakland homes, but subsequent waves of energy efficiency retrofits will depend on the how long it takes the RLF to recoup loans.<sup>15</sup>

In the absence of an expansion model for WERLP, Oakland's DHCD staff can focus on developing a cadre of qualified contractors, promoting local hiring practices, ensuring quality service delivery, and evaluating the program. Prioritizing quality service delivery simplifies the program and enables managers to set and strive for manageable goals. The limited reach of the Oakland program obviously means that many low- to moderate-income homeowners will go unserved, exactly those that the program aims to assist. Oakland recently submitted an innovative federal grant proposal describing a plan to retrofit affordable housing units, buildings operated by the Oakland Housing Authority and city schools, but beyond WERLP no plan exists to expand energy retrofits beyond single-family homes.

#### ***4) Focus on Low-Income Service Delivery and Job Development***

In their own respective ways, each of these programs acknowledges the needs of low-income families. Seattle's GBCI pilot targets homeowners who do not qualify for the City's HomeWise program, which provides low-income renters and homeowners at or below 200% of the federal poverty level with weatherization grants. GBCI will address the needs of low-income city residents through its workforce development strategy, and the Task Force recognizes that creating access for disadvantaged workers will be one of its larger challenges. The GBCI Task Force claims that in order to promote success the program must, "increase the number of on-ramps...for low-skilled, low-income residents to acquire clean energy workforce skills," but it offers no policy regarding how it will achieve this. The energy efficiency career pathways established by GBCI

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<sup>15</sup> The brief analyses of Oakland's financing, high-road job development, and scale development plans are not the result of a lack of available information on the program; rather, they reflect WERLP's simplicity in comparison to the more comprehensive programs implemented in Seattle and Portland.



<b>Comparison of Retrofit Programs' Commitment to Low-Income Communities</b>			
	<b>Seattle, WA's Green Building Capital Initiative</b>	<b>Portland, OR's Clean Energy Works Portland</b>	<b>Oakland, CA's Weatherization and Energy Retrofit Loan Program</b>
<b>COMMITMENT TO LOW-INCOME COMMUNITIES</b>	1. Workforce Development Strategy	1. CWA: legally binding document that sets baselines for job quality and access that prioritize low-income workers	1. Program limited to low- and moderate-income homeowners  2. Contractor incentives for hiring employees from local training programs, some of which are from poor, disadvantaged, or minority backgrounds

Table 5

articulate how an individual with no or few skills could climb an energy retrofit job ladder, but its commitment to train low-income might merely amount to an unrealistic hope if the Task Force fails to funnel disadvantaged workers into those programs.

Oakland's WERLP only offers services to low- and moderate-income people. By incentivizing contractors to hire from local training programs like the Ella Baker Center's Oakland Green Jobs Corps, the City indirectly influences workforce development opportunities for Oakland workers – some from poor, disadvantaged, or minority backgrounds. WERLP's targeting policy and support for local job development deserve note, but the program's limited capacity will ultimately hinder the its ability to make large-scale energy retrofit or job creation impacts. In the event that Oakland DHCD decides to expand the program, WERLP represents a good platform to build upon.

The Portland pilot best incorporates policies that promote low-income service delivery and workforce development. In that sense, CEWP is a model hybrid of the Seattle and Oakland programs. The CWA sets baselines for job quality and access; it produces standards for contractors rewarding those that deliver the best value. Community-based outreach, coordinated business and training support services will all help promote and grow CEWP. Portland's synthesis of values and policy gives it an edge over the Seattle and Oakland programs. The model sets the bar high and challenges the SEIC to fulfill the program's pledge of retrofitting 100,000 over the next ten years. Achieving even a fraction of that number would mark a huge success, especially for disadvantaged homeowners and workers prioritized through the program. In time, we will know whether Portland's CWA can prove stronger than the EDA workforce commitments to Oakland in the late 1960s.

**5) The Role of Partnerships**

<b>Comparison of Retrofit Programs' Working Partnerships</b>			
	<b>Seattle, WA's Green Building Capital Initiative</b>	<b>Portland, OR's Clean Energy Works Portland</b>	<b>Oakland, CA's Weatherization and Energy Retrofit Loan Program</b>
<b>PARTNERSHIPS</b>	1. 50 stakeholders assembled to form the program Policy Task Force	1. 12 institutions collaborated to develop the program  2. 29 institutions representing Portland City government, business interests, labor and community signed the CWA. This serves as a checks-and-balances system	1. Program only establishes relationships between contractors and local training programs.

Table 6

The EDA program intended to build community confidence by creating an Employment Plan Review Board that included business, labor, and neighborhood representatives. While the board had to approve all project plans, it did not have power to terminate a project if the contractors failed to meet their hiring quotas. Therefore, it is not enough to simply include partners in the process of developing retrofit programs, they must also have power to influence their implementation. Of the three energy retrofit models presented here, only Oakland launched its program without any business, community, or labor partners. The City of Seattle enlisted 50 stakeholders to assemble GBCI's task force. They represent an array of perspectives and stem from the private sector as well as community-based organizations. These stakeholders make up the New and Existing Buildings Committees that are responsible for program policy design. Their commissions charge them with developing the financing, incentive, and mandate policies that will secure GBCI's role in greenhouse gas emission reductions.

The Seattle program assembled a range of individual stakeholders, representing business and organizational interests, to serve as committee members for one of two task forces. This structure draws upon the expertise of these individuals and provides them with an opportunity to shape program policies that reflect the interests of their respective constituencies. The Seattle Green Building Task Force Charter outlines the role of Task Force committee members stating:

Task Force members will help the City think through policy options for meeting these [greenhouse gas emission reduction] goals and targets by reviewing option packages for feasibility, likelihood of success and compatibility/ synchronization with other state, regional, national, and international efforts; participants will not be debating the pros and cons of the goals or targets.



Information shared during the meetings will inform staff recommendations to the Mayor, which will include near- and long-term milestones for the implementation of improved and/or new regulatory and programmatic measures to support the Mayor's Green Building Capital Initiative (2).

The statement above clarifies that the two task forces will play an advisory role and that formal GBCI decisions will occur at the city level. So, while admirable of the Mayor's Office to incorporate such a heterogeneous group of stakeholders, an alternate program development approach might have involved these stakeholders helping the City to both define goals and design measures to meet them. Without a process that prioritizes constituent input, at least to the extent of granting Task Force recommendations increased weight in the decision-making process, the City of Seattle controls all decisions governing its retrofit program.

Community Workforce Agreements deny any single entity total control of a program, creating the opportunity for community controlled economic development.<sup>16</sup> Portland's CEWP is an example of shared control and responsibility among the various partners. The Program website lists 12 collaborators that joined with the City and the Federal government to bring CEWP to light. The CEWP Program Summary highlights the roles of 11 different stakeholders ranging from building owners and neighborhood groups, to the financial and administrative managers, and the utilities. Even though the City of Portland and Energy Trust administer CEWP, assigning different responsibilities to program partners assures that various constituencies play active roles in the program. Twenty-nine separate parties signed the CWA, and this legally binding document works as a "check and balance" instrument to moderate smart, equitable development of the home energy efficiency retrofit sector in Portland (see Figure 5 on next page).

A number of astute and forward-thinking organizations committed to expanding the energy efficiency retrofit sector in Oakland and larger Alameda County exist in the area. The inability of the City to take full advantage of this resource represents a missed opportunity in WERLP's design and development, but this is not meant to construe that Oakland cannot still modify its retrofit program with input from these available partners. For example, in developing an application for contractors to be added to the pre-screened contractor list, the City has displayed a commitment to promote a particular green energy retrofit work standard. The screening process will allow the City to establish good relationships with quality contractors that will be necessary allies should Oakland pursue a larger retrofit strategy in the future. Additionally, the City will likely capitalize on local workforce development programs like the Oakland Green Jobs Corps. Helping place program graduates in positions in the local energy retrofit field will build confidence in green

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<sup>16</sup> In this case I use "community" to mean collective participation by a number of actors including but not limited to non-profit organizations, the local utility, regional government entities, and the City of Portland.

## CEWP Signees

### Government

- The City of Portland
- Portland Development Commission

### Community Organizations

- Coalition for a Livable Future
- Green For All
- Irvington Covenant CDC
- Metropolitan Alliance for Common Good
- Urban League of Portland
- Native American Youth Family Center
- Oregon Action

### Other Non-Profit Organizations

- Energy Trust of Oregon
- Oregon Apollo Alliance

### Environmental/Energy Organizations

- Eco Tech, LLC
- Home Energy Life Performance Group, Inc.
- Sustainable Solutions Unlimited

### Economic Development

- Neil Kelly Corporation
- Worksystems, Inc.
- Verde

### Labor Organizations

- Carpenters Union Local 247
- Change to Win
- Construction Apprentice & Workshop Solutions
- Evening Trades Apprenticeship Preparation
- Liuna Laborers Local 483
- Metropolitan Contractor Improvement Partnership
- National Association of Minority Contractors of Oregon
- Oregon AFL-CIO
- Pacific Northwest Carpenters Institute
- Portland Youthbuilders
- Oregon & Southern Idaho Laborers-Employers Training Trust
- Oregon Tradeswomen

Figure 5

jobs training programs and strengthen connections with union and non-union labor contractors. Regardless, the activation of WERLP and the partners involved will support the burgeoning retrofit market in Oakland. The following chapter will discuss and analyze Oakland's efforts in greater detail.



## Retrofit Program Comparison Summary

	Seattle, WA's Green Building Capital Initiative	Portland, OR's Clean Energy Works Portland	Oakland, CA's Weatherization and Energy Retrofit Loan Program
<b>MECHANISM TO RECYCLE FUNDS</b>	<ol style="list-style-type: none"> <li>1. Capital Funding for Program: \$3-5 million</li> <li>2. Uses a revolving loan fund (RLF) to extend EE home retrofit loans to program participants</li> <li>3. Loan amounts from \$8,000-\$20,000</li> <li>4. Low-interest rates (2-6% depending on income)</li> <li>5. Loan amortization periods up to 15 years (depending on income)</li> </ol>	<ol style="list-style-type: none"> <li>1. Capital Funding for Program: \$2.5 million</li> <li>2. Uses RLF to extend EE home retrofit loans to program participants</li> <li>3. Loan amount average: \$10,700</li> <li>4. Low-interest rates (2-7% depending on income)</li> <li>5. 20 year amortization period for all loans</li> </ol>	<ol style="list-style-type: none"> <li>1. Capital Funding for Program: \$2 million</li> <li>2. Uses RLF to extend EE home retrofits to program participants</li> <li>3. Loan amounts from \$6,500-30,000</li> <li>4. 0% interest rate and no amortization period. Loans paid back when program participant sells property or transfers the title</li> </ol>
<b>HIGH ROAD JOB DEVELOPMENT</b>	<ol style="list-style-type: none"> <li>1. Tool: Residential Energy Efficiency Pathway (Stratified Training Program)</li> <li>2. Expected Job Creation: 230</li> </ol>	<ol style="list-style-type: none"> <li>1. Tool: Community Workforce Agreement (sets job quality, worker access, and employment standards.</li> <li>2. Expected Job Creation: 30-40 (from Pilot Program)</li> </ol>	<ol style="list-style-type: none"> <li>1. Tool: Qualified Contractor Criteria and Local Hire Incentives</li> <li>2. Expected Job Creation: 108</li> </ol>
<b>CITY AND/OR REGIONAL SCALE</b>	<ol style="list-style-type: none"> <li>1. Building Energy Disclosure Requirement</li> <li>2. City seeking additional RLF capital to offer more loans</li> <li>3. Scale of Pilot: 250-400 homes (given current capital)</li> <li>4. Goal: 20% of City building stock by 2020</li> </ol>	<ol style="list-style-type: none"> <li>1. Building Stock Analysis</li> <li>2. CBO-supported marketing strategy</li> <li>3. Coordinated business &amp; training programs</li> <li>4. (Also investigating) Bundling of properties</li> <li>5. Goal: 100,000 homes in Multnomah County by 2020</li> </ol>	<ol style="list-style-type: none"> <li>1. Marketing strategy to advertise program</li> </ol>
<b>COMMITMENT TO LOW-INCOME COMMUNITIES</b>	<ol style="list-style-type: none"> <li>1. Workforce Development Strategy</li> </ol>	<ol style="list-style-type: none"> <li>1. CWA: legally binding document that sets baselines for job quality and access that prioritize low-income workers</li> </ol>	<ol style="list-style-type: none"> <li>1. Program limited to low- and moderate-income homeowners</li> <li>2. Contractor incentives for hiring employees from local training programs, some of which are from poor, disadvantaged, or minority backgrounds</li> </ol>
<b>PARTNERSHIPS</b>	<ol style="list-style-type: none"> <li>1. 50 stakeholders assembled to form the program Policy Task Force</li> </ol>	<ol style="list-style-type: none"> <li>1. 12 institutions collaborated to develop the program</li> <li>2. 29 institutions representing Portland City government, business interests, labor and community signed the CWA. This serves as a checks-and-balances system</li> </ol>	<ol style="list-style-type: none"> <li>1. Program only establishes relationships between contractors and local training programs.</li> </ol>

Table 7



## **chapter four**

# **a vision of the future: a city-wide oakland retrofit model**

The preceding analysis of three separate city approaches to implementing energy efficiency retrofits highlights a number of best practices and some worth avoiding. One salient fact that should be noted is that the cities themselves assumed a lead role to establish these programs. In Portland and Seattle the mayors led the charge, challenging city departments to craft policies that would ensconce energy efficiency as an environmental boon and an economic driver. Both mayors' offices sought support and input from a wide range of partners and in different ways built those connections into the decision-making process. Those partnerships helped develop program platforms that balanced community benefits and economic growth. Both municipalities believe their respective programs will grow to scale so that thousands of residents beyond the pilot participants will enjoy the rewards of cheaper energy, an improved environment, and increased economic opportunities.

Oakland's WERLP also displays some strengths that point the program in the right direction. As mentioned earlier in this paper, the City's pre-screening criteria for contractors will institute good relations with valuable retrofit contractors, and its support of local training programs places the city in a facilitator role, coupling the local green labor supply with employers. These actions represent a good start, but Oakland could do much more to maximize federal dollars and expand WERLP. It would be unfair to criticize the City without acknowledging other steps Oakland has made to optimize its ARRA funding and advance energy efficiency retrofit practice. In addition to activating WERLP, Oakland submitted a grant proposal to fund its "Green for All Initiative." The City teamed with the Oakland Unified School District, the Oakland Housing Authority, and Enterprise Community Partners (Enterprise), and drafted a plan to retrofit 16 school buildings, 683 multi-family affordable housing units, and 35 Housing Authority buildings. Oakland would greatly benefit if the government awarded the City this Energy Efficiency and Conservation Block Grant. The proposal represents an inventive way to retrofit schools and multi-family housing but the strategy will only be possible if it receives government support. The need for subsidies does not undermine the value of the proposal, but it underlines the demand for an alternate retrofitting model that can sustain itself as it expands. The Portland CEWP provides a comprehensive

example of how this can be achieved, but Oakland can also glean aspects of Seattle's GBCI to upgrade its retrofit plan. The following section will explore what this program would look like in Oakland, the parties that could help bring it to bear, and some of the potential outcomes and barriers. The recommendations that accompany this plan identify actions and roles for the City of Oakland, community-based organizations, labor representatives, and other non-profit actors.

### ***Retrofit Oakland***

On March 10, 2010 Oakland hosted a contingent of federal officials to publicize the local community benefits from Stimulus funds. In an article covering the event, Oakland Tribune correspondent Kelly Rayburn reported that, "[Mayor] Dellums said Oakland set a high standard for itself when asking for Stimulus money. The goal...was not simply to receive money and spend it, but rather to leverage it with local government, non-profit and private-sector programs to help build sustainable economic opportunities." Maybe the City has successfully met this goal in other Stimulus-funded programs, but it appears that WERLP's design affords the government a limited return on investment. Both Seattle and Portland utilized similar amounts of money to seed their individual energy retrofit programs and developed far more ambitious proposals for what those programs could achieve. Oakland certainly deserves credit for the more than \$200 million of Stimulus funds it won from the Recovery Act, and orchestrating such a massive injection of money in a condensed time frame is surely a daunting endeavor. Nevertheless, the tools and partners exist in Oakland to augment WERLP so that Mayor Dellums' vision for Recovery Act funding might be realized.

A city-scale Oakland retrofit model will require that the city office responsible for WERLP, the Community and Economic Development Agency:

- 1) restructures how the RLF recycles program loan payments;**
- 2) improves job opportunities for Oakland workers;**
- 3) involves multiple city agencies and enlists the planning expertise, support, and capacity of local community and non-profit organizations;**
- 4) outlines a policy to prioritize low-income service delivery and job development; and**
- 5) analyzes the local building stock and population demographics to devise a retrofit strategy.**

In these ways Oakland could simultaneously satisfy the Obama Administration's hope for the Stimulus and Mayor Dellums' vision for what government investment could mean for the City.

A redesign of WELRP could also help prove that Oakland has learned from previous Federal investment experiments and seeks a more sustainable form of economic development.

### ***1) Revise the RLF and Find a CDFI Partner to Manage the Fund***

Oakland already established a RLF to recycle WERLP loans, but the payback mechanism cannot reasonably recover loans in a timeframe to scale-up the program. The Portland and Seattle RLFs, with their discrete amortization periods, assure that the funds will be replenished at a faster rate. Oakland must establish a dependable loan amortization schedule that offers low-interest rates to poorer residents but still ensures that the RLF can extend new loans. Additionally, a revised RLF can also leverage private investment to subsidize program growth. Maryann Leshin of Enterprise stressed the importance of dependable financing for city-wide retrofit plans stating, "...scale is all about money." Without additional capital it would be unrealistic to think that any program could grow to city-wide scale, "Unless," adds Leshin, "the utilities and federal government came in and said we can provide that matching resource." Oakland should follow Seattle's example and pursue investment from philanthropic and private sources. The capital boost will certainly help WERLP grow in scale.

The City possesses a partner capable of managing this type of RLF in Enterprise Community Partners. It is a national non-profit committed to affordable housing and community development. The organization already operates a community loan fund, and as a licensed CDFI, the U.S. Treasury backs all loans it extends. Moreover, for six years Enterprise has administered the Enterprise Green Communities Program, which provides financial support and technical assistance to energy efficient developers. Since Enterprise partnered with Oakland in its Energy Efficiency and Conservation Block Grant proposal, the organization is an obvious choice to manage a more dynamic retrofit loan fund. In order to pursue a course that incorporates on-bill financing, the city, the accompanying financial partner, and the local utilities would need to broker a deal. While not an easy process, Portland secured on-bill financing agreements with three utilities that serve CEWP areas. The energy companies accepted a role in which they collect the loan payments and transfer them to ShoreBank, but they collect homeowner utility bills before loan payments in the event that customers do not pay enough to cover both fees. This safety net ultimately protects the utilities from financial losses.

### ***2) Use Policies to Promote Job Growth***

Oakland should adopt similar policies to those initiated in Seattle and Portland that promote

local energy efficiency workforce development. Seattle passed local legislation to spur the growth of its energy retrofit market – the Energy Disclosure requirement will inform property owners of the energy their buildings consume and encourage voluntary upgrades. The City believes that more property owners will invest in energy efficiency retrofits and such activity will promote market growth and therefore boost job development. Conversely, Portland established a CWA to guarantee certain workforce development outcomes, mandating that contractors abide by certain rules in order to participate in the program. Oakland should consider the gains presented by these different approaches, and explore how it could institute comparable policies that encourage job growth but manage job standards.

Oakland's pre-screened contractor list functions similar to the contractor qualifications and requirements policies delineated in CEWP's community workforce agreement. Likewise, Oakland's support of the Green Jobs Corps and the ARRA-financed contractor incentives for hiring trainees from local programs echo analogous job access mandates decreed by Portland's CWA. The legally binding nature of the CWA distinguishes Portland's model from Oakland's program. WERLP can regulate the contractors that participate in the program and stress that they hire locally trained workers, but the plan offers great leeway in terms of job quality and access. Program managers should continue to pre-screen contractors based on their compliance with Alameda County wage standards, hiring of local residents, and recruitment from local green job training centers. These represent good practices that promote certain standards. However, they should not be equated with the standards achieved by Portland's CWA, which set a family-supporting wage, highlight contractors that provide benefits to workers, stipulate a minimum percentage of disadvantaged workers or local trainees that must be hired, or prioritize contracts for businesses owned by people of color and women. In Portland, the collective parties represented in the CWA can deny participation to union and contractor signatories that fail to comply with the practices outlined in the document. This affords the City of Portland and the community great leverage to exact worker benefits and job quality standards from contractors. Conversely, contractors must assume accountability for their hiring and work practices. Critics of CWA regulations might suggest that these restrictions will constrain the energy retrofit market and hinder contractors from participating in the program. Perhaps this outcome could unfold if enough retrofit contractors shied away from the program because of the CWA restrictions, but Portland's analysis of the building stock appropriate for energy retrofits suggests that a huge unmet demand exists. Given this demand and the high numbers of unemployed tradesworkers, it becomes difficult to rationalize how a majority of contractors would not jump at the opportunity to participate in the program. An analysis of Oakland's building stock could incite similar interest from contractors.

### **3) Involve Multiple City Agencies, Community and Non-Profit Organizations**

In all three case studies, city agencies play critical roles supervising their respective retrofit programs. Seattle's Office of Sustainability and Environment takes the lead on GBCI, whereby Portland's Bureau of Planning and Sustainability performs administrative duties for CEWP. In Oakland, the Housing and Community Development office within the City's Community and Economic Development Agency directs WERLP. However, Oakland varies from the other two programs in that it overlooked how a broader retrofit strategy could yield greater economic and community benefits by collaborating with the many potential partners that exist in the city. Green For All helped Portland craft CEWP and the community workforce agreement that supports it. In that city, more than two-dozen external parties endorsed the CWA, with almost half assuming key program duties. Seattle also conscripted individuals from diverse backgrounds for its GBCI Task Forces to help develop the policies guiding its energy retrofit program. In contrast, except for promoting the Green Jobs Corps and defining program participation terms for contractors, Oakland has ignored the wealth of input and support that local organizations could provide. In one instance of collaboration, the Ella Baker Center for Human Rights joined with the Oakland Apollo Alliance, Laney College, Cyprus Mandela Construction Training Program, and Growth Sector, Inc. to establish the Oakland Green Jobs Corps. The program trains workers for careers in Bay Area green industries such as green construction, energy efficiency, and solar. The collective



**Potential WERLP Partners**

- Asian Pacific Environmental Network
- Bay Area Local Initiatives Support Corporation (Bay Area LISC)
- Bay Localize
- East Bay Alliance for a Sustainable Economy (EBASE)
- Enterprise Community Partners
- Green for All
- Greenlining
- Growth Sector
- Oakland Apollo Alliance
- Oakland Community Organizations
- PolicyLink
- The Alameda Building Trades
- The Ella Baker Center for Human Rights
- The Workforce Collaborative
- The Youth Empowerment Partnership
- Tradeswomen
- Urban Strategies

Figure 6



expertise of these institutions could help the City draft job quality and access standards for an Oakland green retrofit CWA. The East Bay Alliance for a Sustainable Economy, a Bay Area non-profit organization committed to economic and social justice, issued a paper in 2007 referencing the gains the City could enjoy from a more developed local green economy. Still, city officials did not involve the organization when developing WERLP. One clearly absent partner is the Alameda Building Trades. In order to design a more ambitious and impactful energy retrofit strategy, Oakland must coordinate with the tradesgroups that would certainly be involved in the work. Also, organizations such as Enterprise Community Partners or Bay Area LISC could assist the City in developing new loan products and RLF management practices.

#### ***4) Prioritize Historically Disadvantaged Groups***

Many energy retrofit program supporters argue that these strategies should focus on low-income job development and service delivery. To reiterate key facts: Oakland's unemployment rate, 18% in January 2010, was more than 1.5 times the national average; almost one-fifth of Oakland residents earn incomes at the federal poverty level; and nearly half of all Oaklanders spend roughly 30% of their earnings on housing costs. These three points plainly underscore why the City must make every effort to increase job growth targeted at less affluent populations, and that an expanded energy retrofit program could ameliorate multiple problems facing low-income Oakland residents. Many of the partner organizations listed in Figure 6 have strong ties to underprivileged city communities and could effectively conduct outreach efforts and market an expanded city retrofit program. Given President Obama's commitment to green job development for disadvantaged workers and Mayor Dellums' claims regarding how Oakland should use Stimulus funds, no other program seems more appropriate for investment and capable of addressing a multitude of city problems than an expanded WERLP.

#### ***5) Consider Means to Increase Program Scale by Analyzing Building Stock and Demographic Data to Shape Program Targeting Policies***

Energy Efficiency retrofit program designers believe that incorporating rental properties and bundling retrofits are two factors that could induce larger contracting companies to enter the field by facilitating the scale development of programs. Including rental properties would greatly expand the total number of units or structures that cities could retrofit and bundling properties streamlines the process creating economies of scale. Profiting from individual retrofits would be nearly impossible for big contracting firms due to their higher operational costs, but bundling a group or groups of buildings to retrofit simultaneously could stimulate interest from bigger companies. Retrofit program designers hope that incorporating rental buildings and bundling

properties will subsequently produce diverse business participation and improve service delivery. These probable gains explain why cities like Portland are already exploring ways to structure practices like bundling and rental retrofits into their programs.

In order to determine where Oakland should target its retrofit efforts, the City must understand which residents could benefit most from the program and the housing stock that is most in need of upgrades. To devise a targeting strategy for CEWP, Portland program managers set participation criteria and then mapped those homes that fulfilled the City's specifications. To qualify for the program homes must be pre-1993 owner-occupied single-family dwellings. In order to best understand which city residences could benefit most from energy retrofits, the City also mapped household income by neighborhood, race distribution by neighborhood, average gas heating energy intensity, and total greater than median energy intensity (revisit Maps 1 and 2 on page 53). Analyzing these metrics will outline the populations of Portland residents that live in the oldest housing stock, pay higher than median costs for energy use, and expend larger proportions of their disposable income for energy. Understanding these facts should assist CEWP managers design an implementation plan that initially focuses service delivery in areas where homeowners in older, less efficient homes pay high than average energy costs.

An examination of Oakland's building stock reveals that the City could devise an energy retrofit strategy based on similar metrics as those used by Portland. Of the 98,862 parcels that fill Oakland's borders, the City Planning and Zoning Department keeps build date records for most properties. The City does not have data for 18% of the total parcel stock, but the remaining information tells a revealing story about the age of Oakland's building stock, how appropriate it is for energy retrofits, and the individuals who could benefit most from an expanded program. Map 3 (page 68) segments Oakland into district zones with the maroon, yellow, light blue, and orange zones comprising the City's flatland neighborhoods (broadly including West Oakland, East Oakland, Fruitvale, Chinatown, and East lake). As Oakland developed, people settled these areas first. Map 4 illustrates all Oakland parcels (parcels with build dates reflect that a building exists at the site) developed prior to 1900, approximately 3,600 lots. By 1940 development in Oakland exploded and builders constructed 49,000 structures as the City's population boomed to fill wartime jobs (Map 5). Another 22,000 buildings originated between 1941 and 1980, while some 6,100 lots were developed over the last 30 years (Maps 6 & 7). The black areas of Map 8 highlight those parcels absent of build dates in the City's records. It should be noted that an area colored black does not denote that the parcel remains empty (as the Oakland port located in the City's northwest corner and airport situated in the southwest corner along the Bay are both fully developed and operational), but rather the City simply lacks data associated with these parcels.



Map 3: City of Oakland

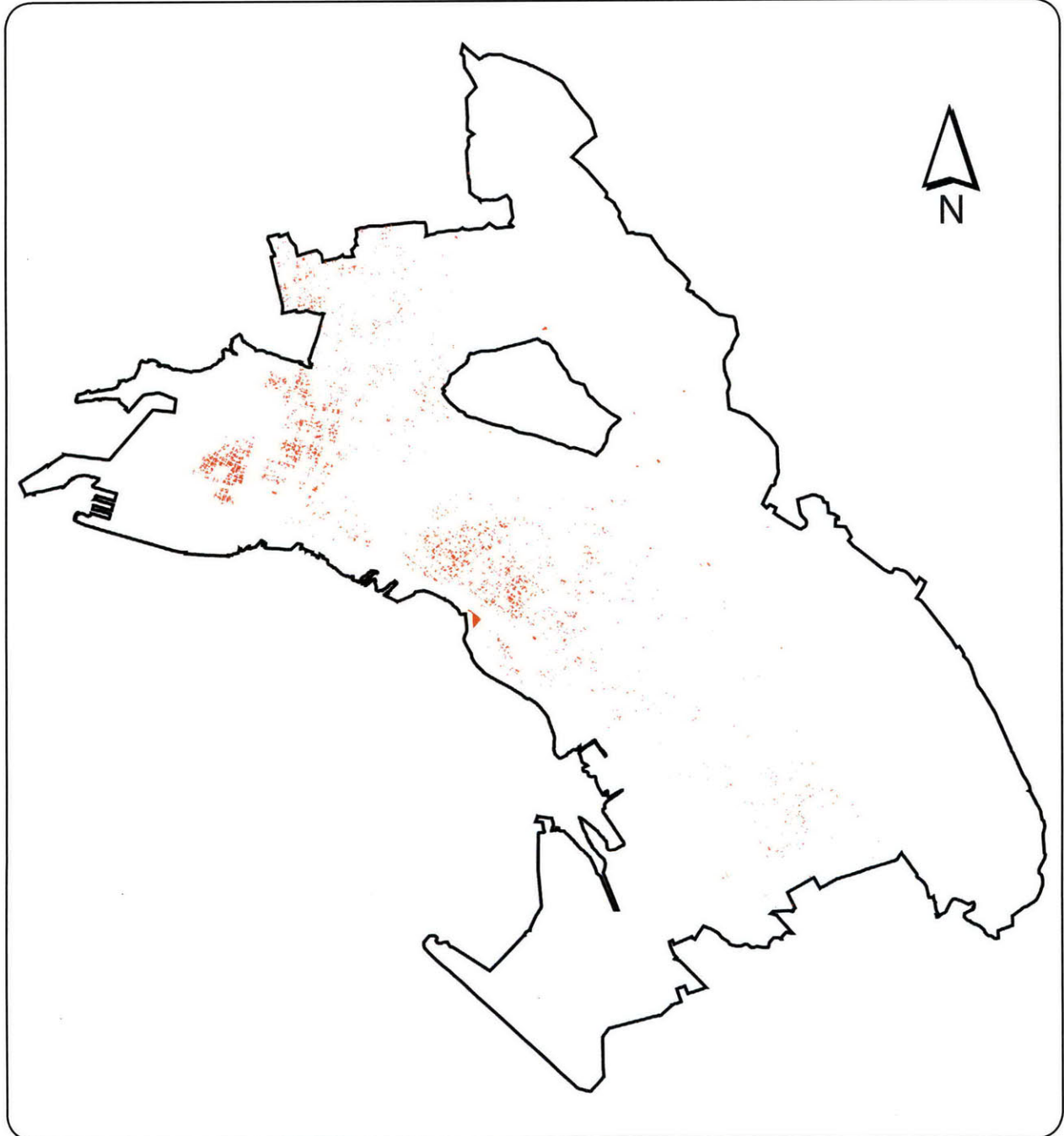
These maps show that even when the “no data” parcels are included, 53% of the City’s structures stood by the time the United States entered World War II. The Oakland Planning and Zoning Department does not maintain data files that distinguish residential homes from commercial and industrial properties, but these maps clearly articulate that some 52,000 structures are at least 70 years old, most of them located in the flatland neighborhoods.<sup>17</sup>

A study of American homes revealed an average age of 40 years. The study also stated that residences in this age group consume about 40% more energy than those built after the millennium.

<sup>17</sup> The Oakland Planning and Zoning Division (PZD) should work to collect build dates for those parcels currently tagged “no data.” Additionally, PZD should follow Portland and distinguish single-family residential units from other parcels zoned for alternate uses. A comprehensive understanding of the City’s building stock would empower Oakland officials to design an optimal retrofit targeting strategy.

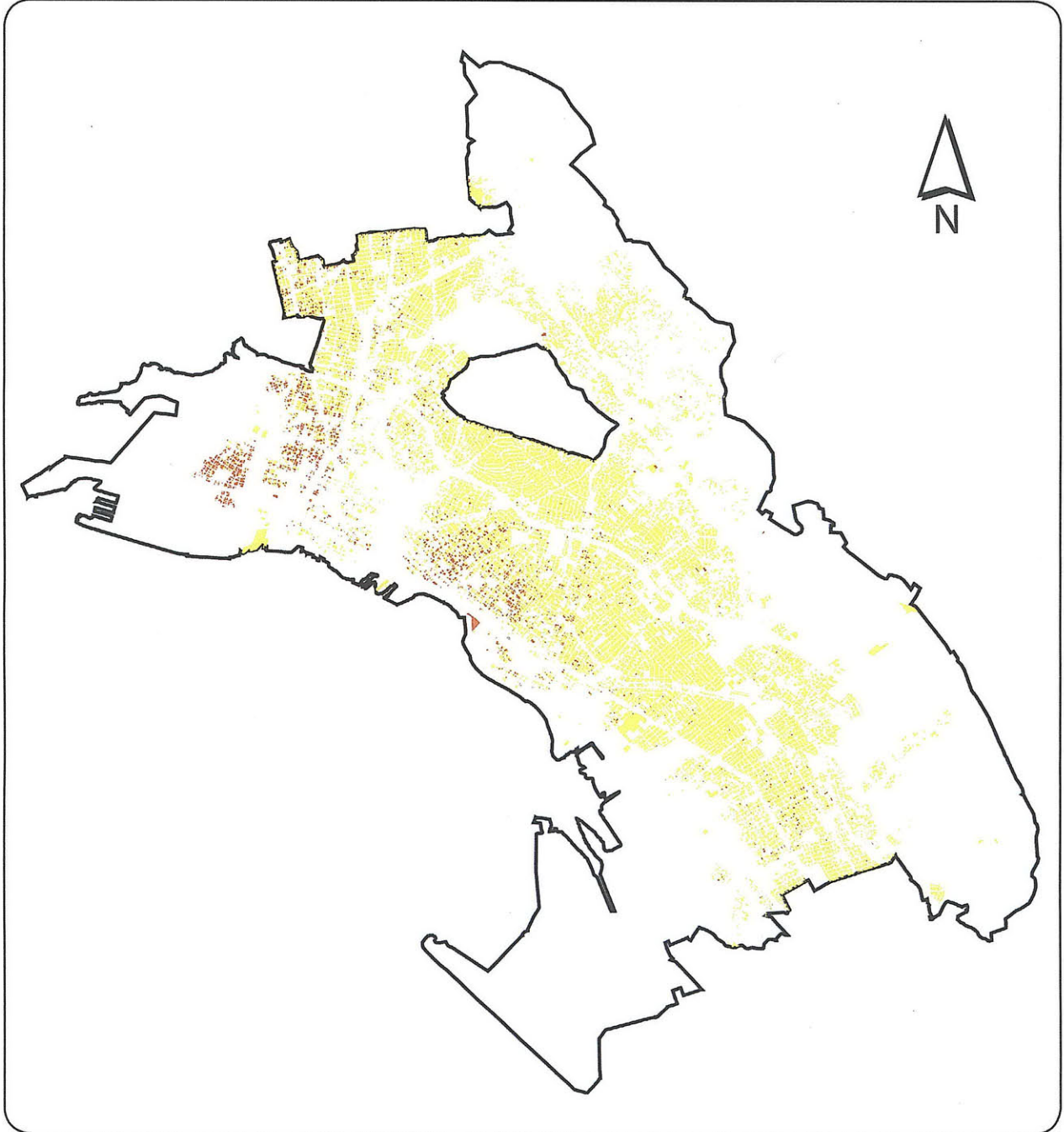


## Pre-1900 Oakland Development



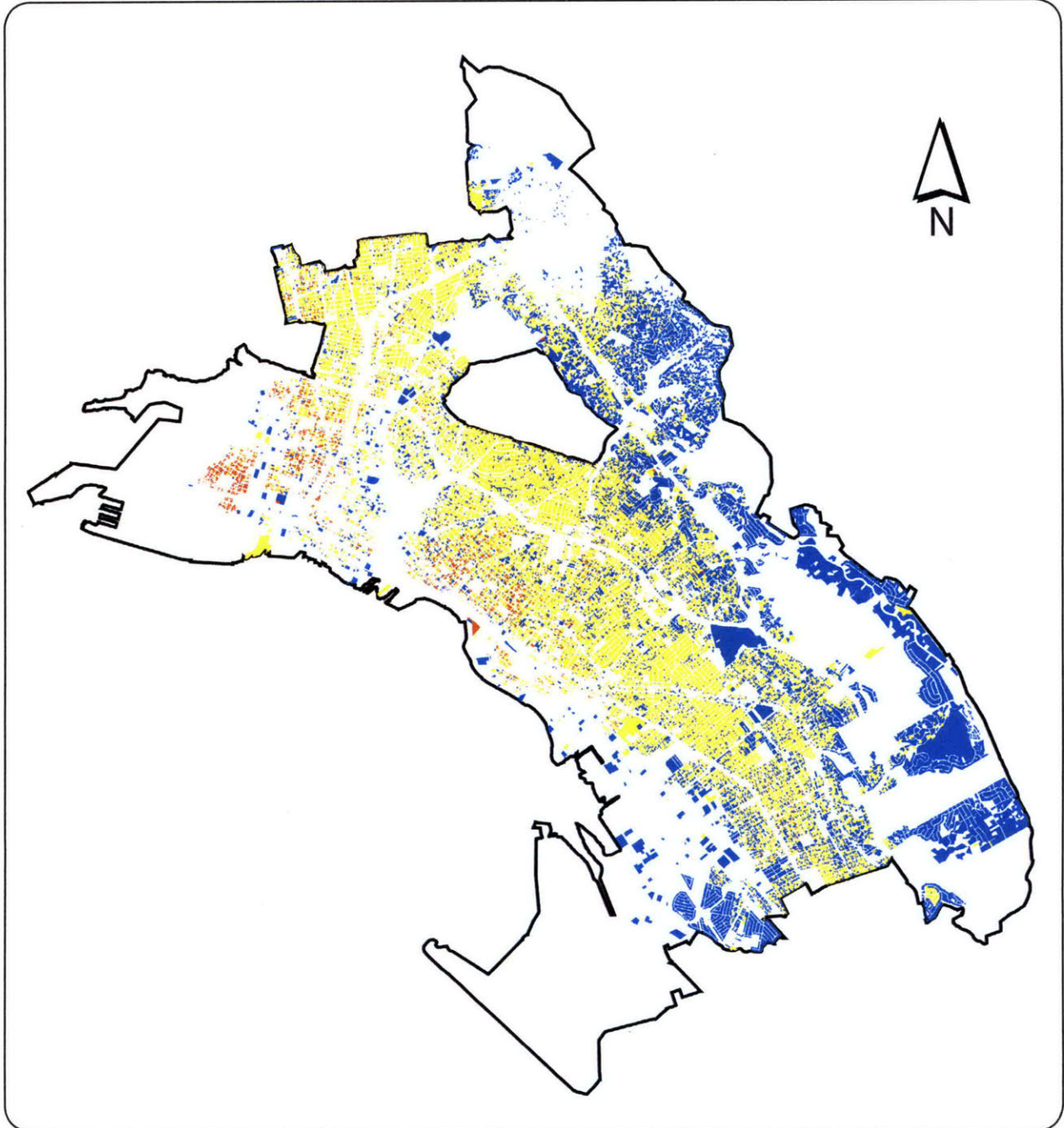
Map 4: Produced by Author

## Oakland Development 1901-1940



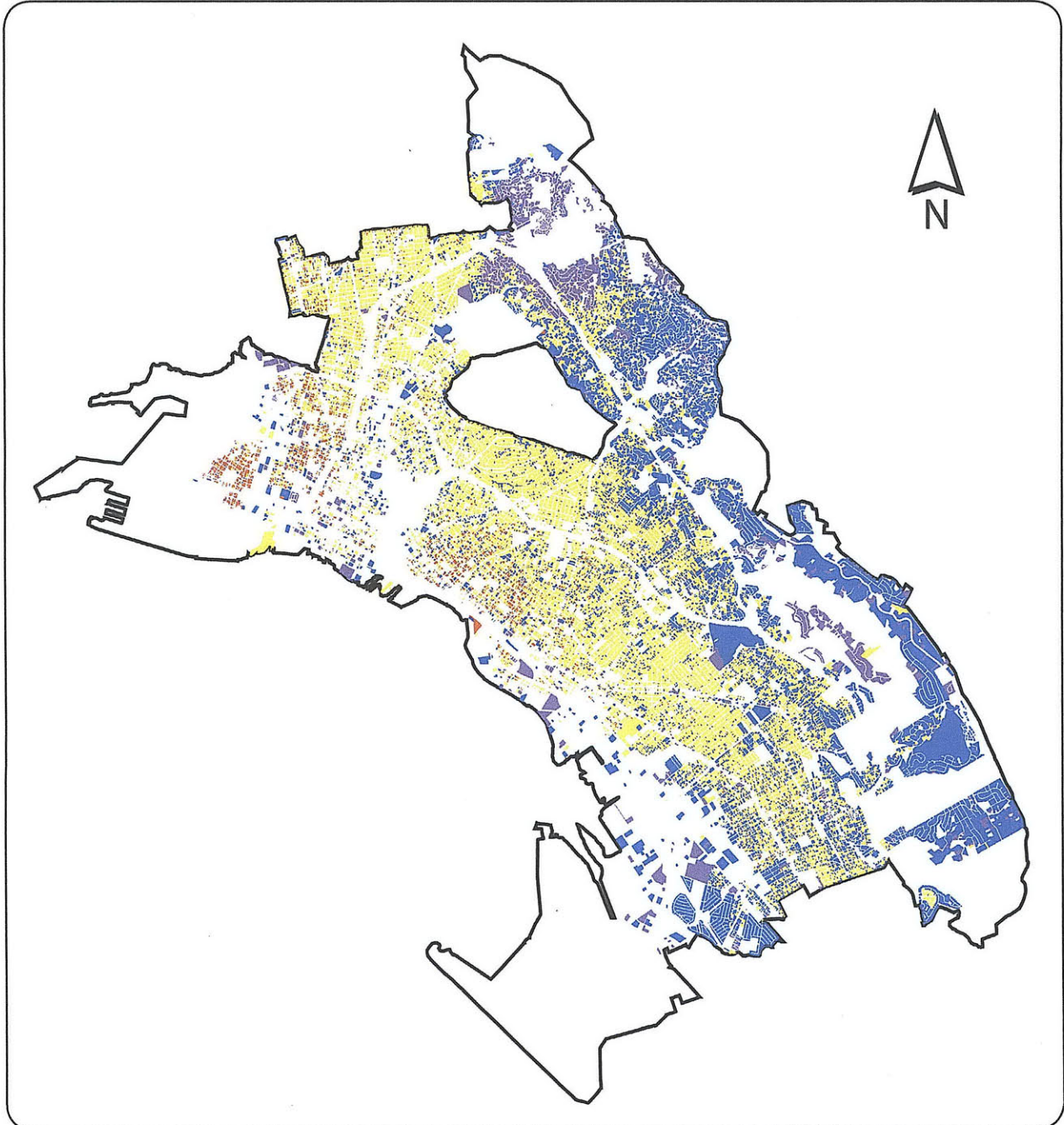
Map 5: Produced by Author

## Oakland Development 1941-1980



Map 6: Produced by Author

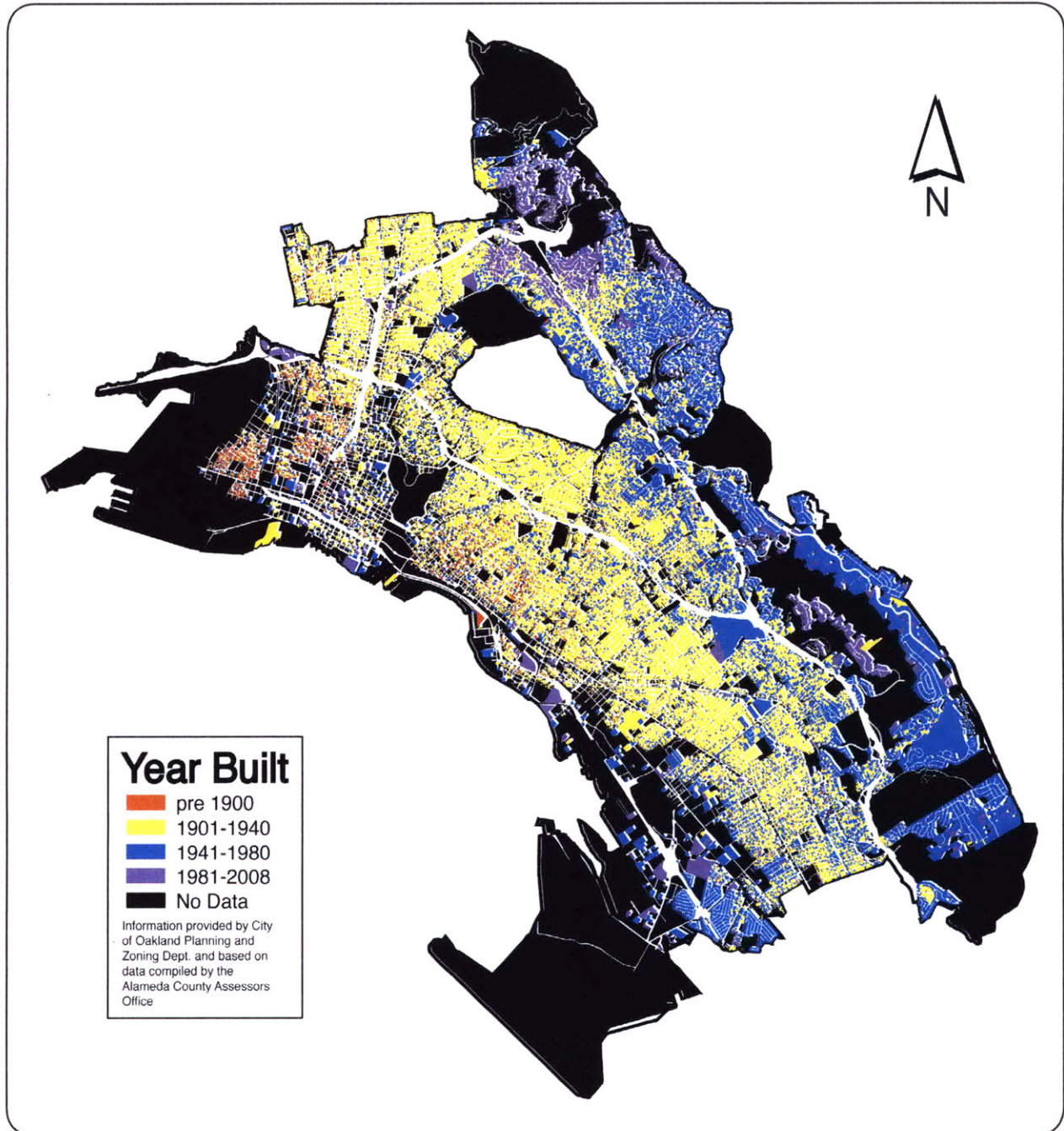
## Oakland Development 1981-Present



Map 7: Produced by Author

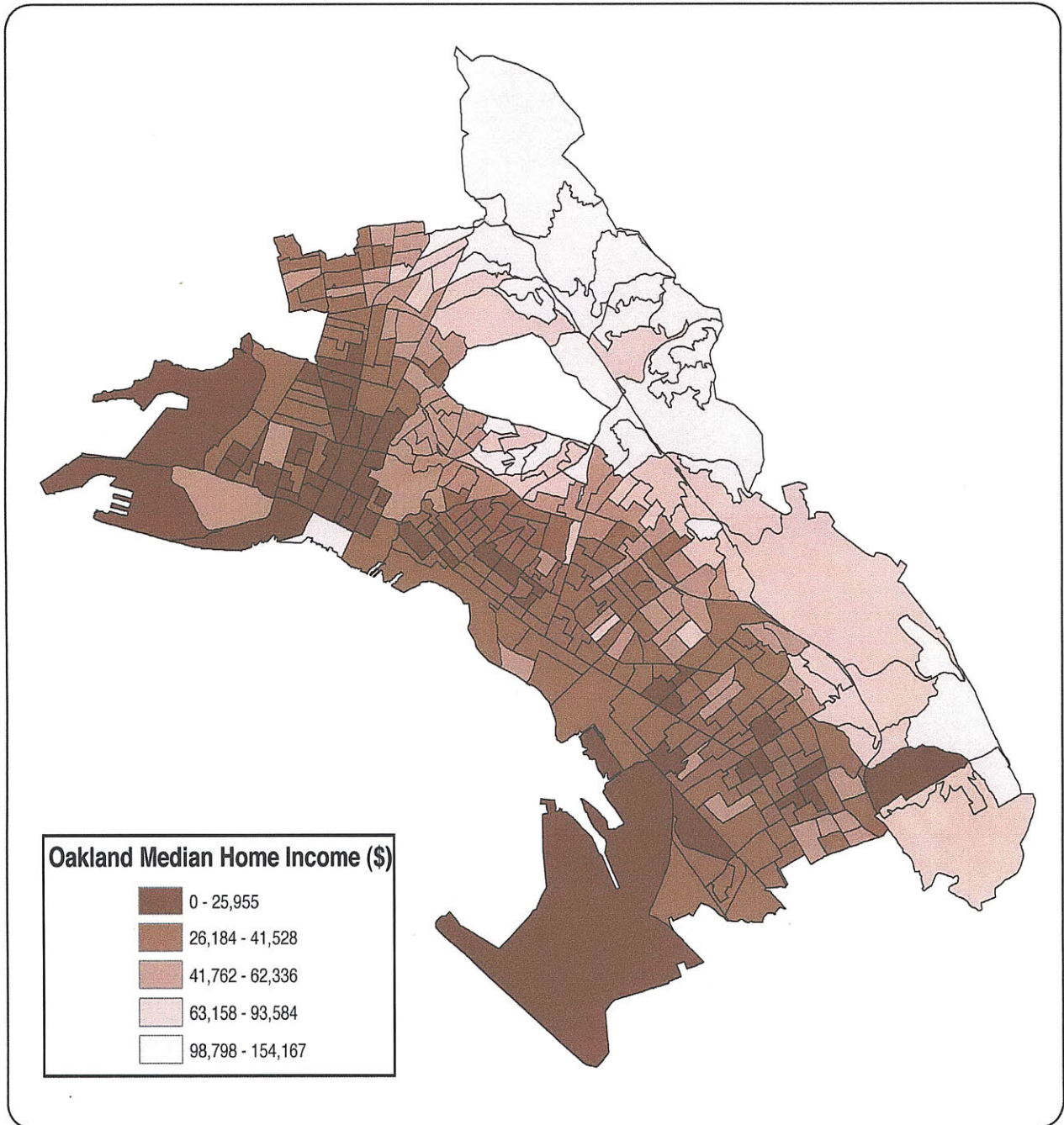


## Oakland Development Showing All Parcels



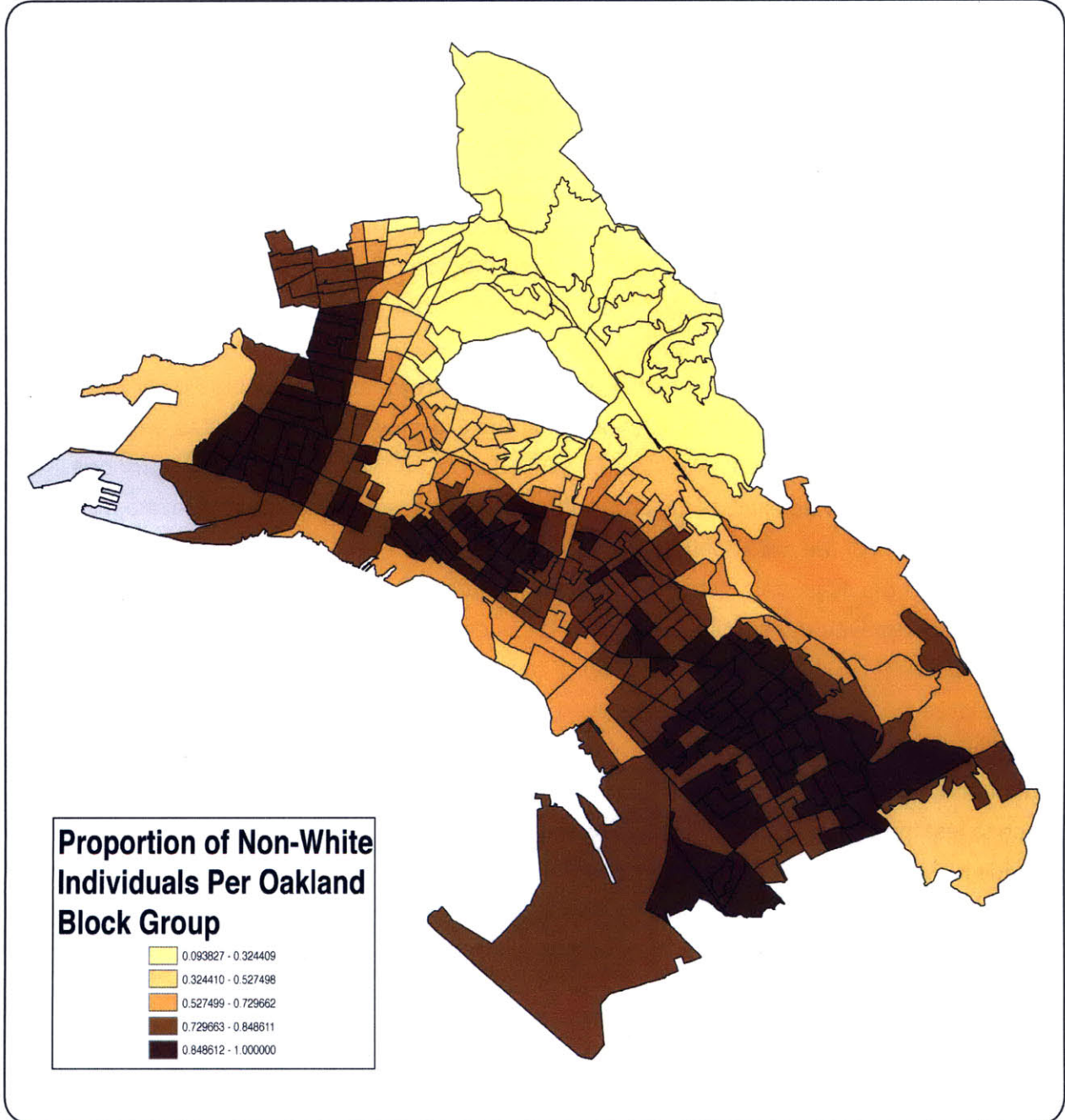
Map 8: Produced by Author

## Oakland Income Distribution by Block Group



Map 9: Produced by Author

## Oakland Minority Distribution by Block Group



Map 10: Produced by Author

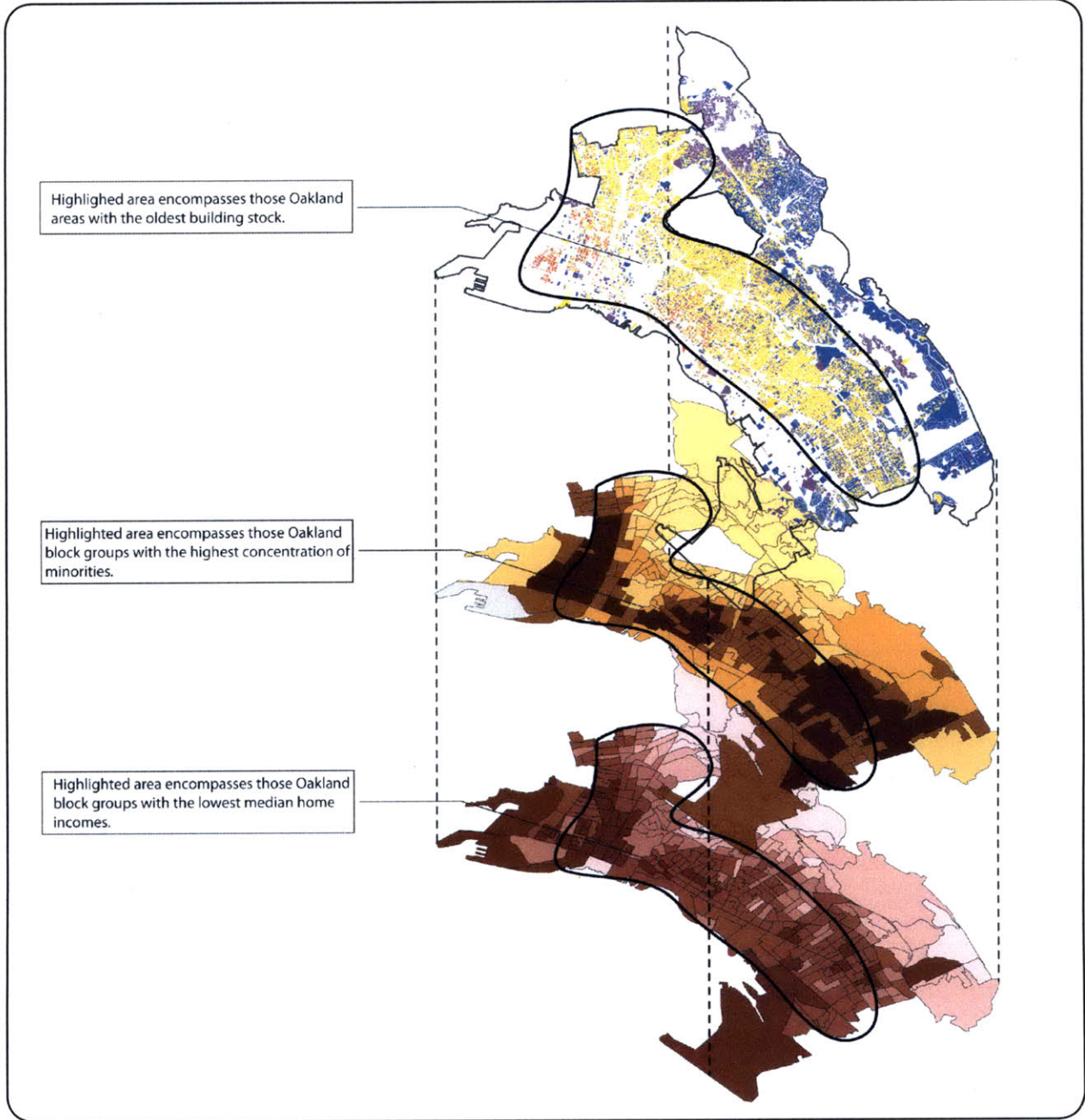


Based on age alone, the above maps show that 76% of Oakland buildings maintain pre-1980 build dates. With more accurate information regarding the near 18,000 properties classified “no data” this percentage might actually spike higher. While these maps fail to highlight the ages of Oakland’s single-family residences, which would help the City comprehend the potential home energy retrofit market, they do make a compelling argument that an untapped building retrofit market exists. If packaged correctly within a broader City retrofit plan, these facts could induce the Alameda Building Trades Council to look closer at the potential job growth and economies of scale that could be achieved from this opportunity.

An analysis of median home incomes and racial distribution in Oakland provides additional detail regarding which areas a city home energy retrofit program would target first. Maps 9 and 10 display the median income and minority distribution by block group in the City. As stated earlier, poor people spend four times more for energy as the average American family, and black and Hispanic families spend markedly higher utility costs than whites (Affordable Power Alliance 4). The median income distribution map shows that the City’s wealth concentrates on the eastern side of the city, with the greatest affluence in Oakland’s northeastern hill neighborhoods. The minority distribution map exhibits the proportion of people in each block group that are minorities. The darkest cells of the map contain the highest percentages of minority residents. The flatland neighborhood block groups distinctly possess the largest proportions of minority inhabitants. When compared with the building stock and racial distribution maps, we can see that some of Oakland’s oldest buildings house a number of the city’s poorer minority residents (See Map 11). To maximize benefits for those most in need of help, a broadened Oakland home retrofit plan would likely target a neighborhood like West Oakland as an optimal place to bundle properties. The high concentration of prewar structures and proportion of poor minorities make it an ideal place to test the possibility of bundling home energy retrofits. Targeting retrofits in this area would provide relief to a portion of the City’s population that, on average, pays a larger proportion of its income on housing costs than middle- or upper-class residents. With a CWA, WERLP could also prioritize the training and hiring of West Oakland workers. In these three ways, Oakland could grow the program to its full potential.

By expanding WERLP in these ways, the City of Oakland could drastically improve its carbon footprint, the lives of residents, and job opportunities for the unemployed. Building out the program as proposed here will require that the City increases internal coordination between city agencies; solicits private, non-profit, and labor partners to participate in new program design and task management; diversifies its workforce development and program delivery strategies; and performs a more detailed analysis of the building stock to identify the build dates for single-

# Oakland Map Comparing Racial and Income Distribution with Oldest Building Stock



Map 11: Produced by Author

family residences. A host of reasons exist to support this cause. Last summer, Oakland Council members unanimously passed an Energy and Climate Action Plan committing the City to slash greenhouse gas emissions to 36% below 2005 figures by 2020. The unemployment rate in the City exceeds the national average by seven points, 18% of residents live in poverty, and the vast majority of the building stock is more than 30 years old and could benefit from energy retrofits. WERLP's expansion is fundamental for achieving the City's environmental mandates and addressing the insidious inequality that has plagued Oakland for decades.

## chapter five

# securing change: implications for oakland's community, non-profit, and other partners

At times of national economic distress the federal government has enacted policies to stimulate growth and development. Oakland, California twice served as either a key or the sole benefactor of the government's economic development policies. The World War II worker recruitment efforts and the EDA urban job program were both workforce development strategies, neither of which produced lasting positive results for the City. The recent recession prompted the federal government to pass the Stimulus bill, which poured over \$20 billion for energy efficiency programs into the U.S. economy. To date, Oakland has received over \$200 million – of which \$70 million was granted for workforce development and energy efficiency programs – representing a third wave of federally-sponsored economic development funding for the City.

Innovative leaders in Portland and Seattle used Stimulus awards to design home energy retrofit loan programs that pledge to create job opportunities for a diverse set of workers and grow to scales that will extend services to residents across their cities. Understanding the strengths and weaknesses of these other programs is critical to designing better strategies for city-scale retrofitting. Oakland, too, initiated a retrofit program, but in its current iteration it lacks the necessary elements to deliver the results envisioned by the Recovery Act – specifically the jobs and financial relief many city residents so desperately need. Oakland's Stimulus success (the city has already secured almost \$206 million in ARRA funds and has another \$217 million of pending grant proposals) could actually hinder its ability to focus adequate attention toward improving its home energy retrofit loan program. The government set a strict time schedule for cities to use ARRA awards, meaning that Oakland must act fast to activate its Stimulus grants. If the City is truly committed to maximizing government dollars to stimulate local job growth, then revising WERLP immediately represents a sound strategy to do so. Considering how inundated the City is managing multiple Stimulus projects, local community and non-profit organizations can provide needed support and help shape the scope of an expanded energy efficiency retrofit program. The recommendations below directly relate to the opportunity to reform WERLP and garner greater job opportunities and services for Oakland residents, but they also stem from tough lessons derived from the City's two previous experiences with government-backed

economic development.

### ***Recommendations for Community-Based Organizations and Local Non-Profits***

#### **CBOs and Non-Profits should define their own CWA terms and present them to the City.**

The strength of CWAs resides in their ability to impose particular standards built on the notion of shared gains for all involved parties. Oakland's preoccupation with its other ARRA responsibilities presents local organizations with a critical opportunity to define their own set of CWA terms. A number of experienced CBOs and non-profits with firm connections to the community exist in Oakland. The meeting described in the Preface – where a number of community and labor interests met to discuss whether Oakland should become an Emerald City – demonstrates that Oakland organizations will explore partnering on common interest issues. Ladan Sobhani of Green for All mentioned that organizations must focus on the fact that Oakland is presently implementing WERLP, suggesting the need for immediate action. However, while I agree that local organizations should address WERLP with the City, it is most important that these groups identify the outcomes a CWA should produce, articulate its benefits, and draft strategies to bring it to fruition. Such a plan would communicate to the City that the community is organized and has developed a formula to promote social equity, economic justice, environmental improvement, and business development.

One issue that could complicate this process is that the Oakland mayoral seat will be contested in November 2010, and many of these local organizations may be reluctant to expend political capital on this agenda at this time. One path around this problem would be to use the organizing capacity of community groups to disseminate information about the underperforming WERLP. If citizens groups called for WERLP reform to improve job opportunities and access to services, community organizations could assume a leadership role and advocate in favor of a public demand. This would establish grounds for CBOs and non-profits to bring WERLP reform and CWA issues to the City, hold the City accountable for how it uses taxpayer dollars, and force public officials to pay attention to highly politicized issues of unemployment, poverty, and environmental degradation.

**CBOs/Non-profits should form a coalition with quality non-union contractors.** A partnership between community organizations and quality non-union contractors affords both groups greater power in a push for an energy retrofit program CWA. Some quality non-union retrofit contractors would likely align with CWA goals, such as diverse hiring practices, paying living wages, and promoting skill development. If the Alameda Building Trades express a desire for inclusion in

any CWA (which they likely will given community promotion of energy efficiency retrofits), the early CBO/non-union contractor partnership would guarantee bargaining power for the partners. In this way Oakland organizations could negotiate equitable terms for both organized and non-union contractors in the CWA.

**CBOs/Non-profits should disseminate information regarding the limitations of WERLP to other organizations.** The Obama Administration has espoused transparency and accountability as essential ARRA values. Sharing information with other organizations can help keep cities honest about the use of Recovery Act funds and program outcomes. In doing so, local organizations advance the democratic engagement of other community actors and contribute to government oversight. Communities should be highly skeptical and critical of government funded economic development policies. This is especially true in Oakland, where previous government programs failed to generate meaningful and lasting economic results in certain city communities. The fact that taxpayers or their descendants will ultimately repay dividends from the Recovery Act justifies citizens' right to demand accountability. The literature criticizing the lack of government support of workers after World War II and the ineffective EDA policies in the cities provides ample support for the need for accountability. The Recovery Act is no different and therefore organizations must spread information regarding the spending of Stimulus funds to empower the community to hold government officials accountable.

### ***A Role for Emerald Cities Collaborative in Advancing a New Oakland Retrofit Program***

Any city seeking to initiate an energy retrofit loan program that promotes worker equity should pursue some standard activities: a CWA to engender a high-road program, partnerships that share program tasks, and a level of scale to maximize service delivery. The unfortunate reality is that many cities lack the capacity, knowledge, and necessary partners to establish these programs. In such cases, Emerald Cities Collaborative can play an important coordinating role. Still, the Oakland situation is somewhat different because the City is endowed with smart, active, innovative, and progressive community and non-profit organizations whose missions dovetail with ECC values. The Alameda Building Trades recently signed on as an Emerald Cities Oakland partner, leaving only the Mayor's office and the business community as the remaining uncommitted stakeholders.

As an umbrella organization, ECC can fill gaps in capacity and perform duties that will support Oakland and its community, labor, and business partners to ensure that WERLP is refined into a

high-road program. **First, ECC can help bring the city and business community to the table.** Developing a more robust retrofit plan like the one presented earlier in this paper represents the best way for Oakland to guarantee that one Stimulus program achieves Mayor Ron Dellums' goal: leveraging federal dollars with local government, non-profit and private-sector initiatives to generate sustainable economic development in the City. Retrofit contractors obviously stand to benefit from an expanded energy retrofit program. Soliciting an ECC commitment from the Mayor's office and local businesses can show Oakland residents that disparate stakeholders believe a new city retrofit strategy can succeed where other economic development initiatives have failed.

**Second, ECC can mediate the CWA development process.** By signing the ECC threshold agreements the City, local businesses, organized labor and community organizations commit to working together for the purpose of advancing ECC goals. While the agreement is not legally binding, it does condition that committing to ECC equates a pledge to collectively draft a community workforce agreement, which is a legally binding document. As an outside party, ECC can facilitate the design and negotiation process. This frees any one stakeholder group from playing the dual roles of administrator and advocate. It empowers each group to support their own agenda knowing that an external body can help negotiate the terms.

**Third, ECC can lobby the city and state to adopt new policies that would incentivize and promote retrofits.** Regulation similar to Seattle's Energy Disclosure Requirement, which mandates that owners of commercial and large multi-unit residential buildings disclose how much energy their properties use, could highlight the benefits of energy efficiency and subsequently contribute to retrofit market growth. ECC could work with Oakland and other California cities to lobby for state legislation changes to remove barriers inhibiting large-scale retrofitting. The growth and success of energy retrofit loan programs depends on creating finance mechanisms that enable program expansion and the ease with which they deliver services. New and amended legislation at the municipal and state levels could advance retrofit activity.

**Fourth ECC can seek additional private investment to grow WERLP.** Even if Oakland upgrades WERLP into a program built on equitable workforce development, positive economic gains, and improved home energy efficiency for program participants, WERLP will still require additional RLF capital to increase program scale. In its work, ECC looks to identify institutional investors to finance retrofits. All Emerald Cities will benefit from this work, and as funding sources surface, ECC supported retrofit programs will certainly grow.



# conclusion

The purpose of this thesis is to provide a snapshot of the effects of ARRA's impact on local job creation as the federal government continues to disburse Stimulus funds to states and cities. It focuses on the energy efficiency sector and examines how Oakland, California uses grant dollars from the Recovery Act to actuate an energy efficiency home retrofit program. The program, WERLP, offers energy retrofit loans to low- and middle-income Oakland homeowners.

Oakland was selected as the primary study site because of its unique history of federal investment and the persistent problems that have plagued the City for decades. In the 1940s and again in the mid-1960s, Oakland experienced significant periods of federally-sponsored economic development. The first period was during World War II, where President Roosevelt's administration dedicated billions of public dollars to finance the wartime industries and the migration of thousands of unemployed Americans to western coastal cities to fill jobs. This brought new minority populations to the cities along the eastern shores of the San Francisco Bay, the location of numerous industrial shipyards that produced many of the naval vessels active in the Pacific war theater. The redlining housing policies, which began towards the end of the war and continued into the subsequent peacetime period, essentially ghettoized minority populations in Oakland and other East Bay cities. These policies contributed to economic and geographic minority isolation in Oakland. By the 1960s, President Johnson's Great Society programs financed the city Rebuilding Program intended to stem poverty, economic decline, and racial unrest in the nation's declining inner city neighborhoods. The Economic Development Administration, the government agency in charge of the Rebuilding Program, decided on Oakland as the test pilot city. Over a five-year period the program failed to produce any meaningful positive change in Oakland, was discontinued, and left the City in much the same position as when the EDA initiated the pilot. After 40 years many of these problems still trouble the City. Oakland currently struggles with high unemployment (18%, twice the national average), deep poverty (42% of residents live at 200% of the federal poverty level or below), growing income disparity and disinvestment. The pervasiveness of these problems has certainly set the stage for extreme dissatisfaction among city residents and could be an incubator for social unrest. This also places equitable development that targets disadvantaged minority populations at the foreground of future investment in Oakland.

Last year, President Obama signed the American Recovery and Reinvestment Act into law with hopes of resuscitating the struggling national economy. An innovative aspect of the legislation

was its promotion of a new green economy that would foster job growth and environmental improvement. The Stimulus awarded \$23.5 billion to state and municipal energy efficiency projects. Thus far, Oakland has received \$77 million in Recovery Act funds for energy efficiency and workforce development programs, and the City set aside \$2 million to seed WERLP. It is important to emphasize that city officials see the program as the first step in developing larger and longer-term retrofit workforce and service sectors.

This thesis analyzes WERLP's structure and evaluates the program's potential for success. The study compares Oakland's retrofit program design with similar strategies recently instated in Portland, Oregon and Seattle, Washington. The comparative case study analysis points out that Oakland's program stems from good intentions and satisfactory - but not excellent - planning. Yet, considering its current structure WERLP can neither achieve the workforce or economic development goals the federal government would like to see generated through such programs, nor significantly impact greenhouse gas emissions in the City. By implementing more successful program elements and legislation culled from Portland's Community Workforce Agreement and Seattle's Energy Disclosure Requirement, Oakland can bolster WERLP's capacity for success. Still, one issue that each of the programs analyzed herein must address is the need for additional capital. In order to grow to levels of scale that will generate more impactful job numbers, boost service delivery, and utilize energy retrofits to seriously contribute to environmental improvement, the program will require additional capital possibly from public and private sources. Considering California's fiscal crisis, which is another challenge that will tighten state financial coffers, program officials should first target private funding sources. Despite the challenges Oakland faces regarding how WERLP can be improved, the City should not waste this opportunity to strengthen a program with so much potential.

The City of Oakland possesses a number of intelligent and able partners that can help it improve WERLP. Numerous community, non-profit, and labor organizations as well as local businesses exist within the City and surrounding area. These institutions can provide the logistical and operational capacity that the City lacks – necessary capacity if the city is to refine and expand WERLP. Incentives abound for many of these institutions to support the City in a campaign to broaden the home energy retrofit market. Community organizations and non-profits maintain close ties with City neighborhoods and particular constituencies that could most benefit from a revised WERLP. Additionally, labor organizations like the Alameda Building Trades continue to post high unemployment numbers due to the construction slowdown resulting from the national financial crisis. Businesses that supply retrofit materials would also benefit from an energy efficiency market expansion.

Like a number of cities that exhibited the vision to use ARRA funds to establish energy retrofit programs, Oakland currently lacks the required capacity to develop a sophisticated retrofit strategy designed to grow. The City should not be faulted for its efforts. In the midst of the Stimulus frenzy, several municipalities, including Oakland, have worked aggressively to secure competitive federal Stimulus grants and initiate new programs with the money. Still, these funding blessings come with a strict timetable and use restrictions that make managing the process a complex challenge outside of a city's traditional workflow. In this way the Stimulus is both a boon and a burden in which cities like Oakland must maximize the opportunities presented by the Recovery Act and adhere to its accompanying restrictions at the same time. Cities are under a federal microscope like never before.

A new non-profit institution, the Emerald Cities Collaborative, could provide cities like Oakland with a different level of capacity that will also facilitate retrofit program growth. Because ECC represents the interests of unions, labor groups, community organizations, social justice advocates, development intermediaries, research and technical assistance providers, socially responsible businesses, and elected officials, the coalition is well positioned to assist cities in brokering partnerships between local contractors, disadvantaged populations, and environmental groups. The Coalition can mediate the development of a Community Workforce Agreement in Oakland and advise the City on policies that would encourage retrofitting. Finally, ECC can work with community development financial institutions to improve how WERLP manages its revolving loan fund and potential investors to attract supplemental capital for the program. As a young organization, ECC first, must address its own issue of limited capacity in order to provide cities with productive support, and second, needs to rely on the vast expertise of its members. Initially, the organization will need to focus its efforts in a handful of pilot cities to refine its practice before extending services to other geographic areas.

Oakland has established a good framework for providing retrofit services through WERLP, but the City needs to take further steps in order to maximize the opportunities created by its own Climate Action Plan, the President's vision for ARRA, and the jarring statistics that highlight the need for a new economic development strategy that prioritizes the City's least advantaged. History reveals that federal investment in two respective economic development strategies failed to produce positive and lasting change in Oakland. However, the Recovery Act is different from previous experiments of government-sponsored development in the City because it grants Oakland the opportunity to initiate a range of projects stimulating local economic growth. The energy efficiency retrofit market is a budding industry with great potential, but cities, partner organizations, and local businesses will have to work together to unlock the promise of the new

green economy.

# appendix I

## ***Limitations to this Study & Recommendations for Future Research***

Due to limitations of time, resources, method, and research design, a number of unanswered questions stem from this thesis. This research inquiry initially focused on Oakland's WERLP: how it was developed, why it exhibits its particular design, and its implications for local workforce and economic development. It soon became clear that, without other retrofit programs to compare to WERLP, this thesis would struggle to elucidate best retrofit program practices and generalize findings. This fact steered the research towards other cities implementing retrofit strategies, but time constraints certainly limited the scope of analysis for all three cases.

The following four questions provide opportunities for future researchers to delve deeper into the development, design, and outcomes of city-scale energy efficiency retrofit programs generated via the Recovery Act. **First, how do politics influence the process of establishing a city-scale retrofit program?** Cities interested in implementing city-scale retrofit programs would certainly benefit from additional research outlining how Seattle, Portland, and Oakland's programs came to be. What were the decisions that led to the development of the programs? Who were the actors that pushed the ideas to the fore: city officials, labor, community, or business leaders? A critical study of Portland's Community Workforce Agreement would greatly benefit organizations interested in brokering similar contracts in their own cities. Eric Makres' M.I.T. Urban Planning Master's thesis, *Collaborative and Action-based Framing Processes for Social Movement Building*, analyzes how a similar process is unfolding in Boston, Massachusetts. His piece represents a good starting place for information on the topic of collaborative planning.

**Second, how do cities determine whether retrofit programs should target particular places (a neighborhood or a city) or specific populations (low- to middle-income populations or disadvantaged minority groups)?** Seattle, Portland, and Oakland based their service delivery targeting strategies on population criteria and do not (currently) focus efforts in designated city areas. However in Kansas City, Missouri, the city has taken a place-based approach and directed all Stimulus funds to one area of the City, appropriately named the Green Impact Zone. Great value can be gleaned from research explaining why and when cities should pursue place- or population- based retrofit strategies. M.I.T. Urban Planning Master's candidate, Leila Bozorg, explores the implications of Kansas City's decision follow a place-based approach in *Spatializing Social Justice Through Place-Based Initiatives*.



**Third, how do we compare the application of Stimulus grants across different cities?** A frustrating aspect of this thesis was the inability to contextualize how Oakland's Stimulus awards compare to other cities, and while the federal government demands strict accountability for tracking funds, it also provides cities with different use options. Therefore it is difficult to compare the total stimulus awards for multiple cities given the variability regarding how cities spend ARRA grants and when they report information to federal government. In time the federal government will release the data to make these comparisons, enabling researchers to examine which cities realized the greatest gains in workforce and economic development and their contrasting levels of efficiency.

Finally, **how should we measure the success of the three retrofit programs analyzed herein?** The timing of this thesis precluded the possibility of evaluating the outcomes of the three retrofit programs, but those outcomes will have critical implications for how urban planners design future retrofit strategies. This thesis aimed to compare how three cities respectively designed energy retrofit programs and distill the characteristics most likely to produce positive results. Still, as these programs take hold, the retrofit field would gain from a summary of how Seattle, Portland, and Oakland performed relative to the retrofit program criteria discussed in Chapter 2.

## appendix II

### ***Opinion-Editorial of Oakland's Stimulus Activity (written in response to a host of articles recently published in the San Francisco Chronicle criticizing Oakland's use of Recovery Act funds)***

Over the past week, much has been made over California Inspector General Laura Chick's report highlighting Oakland's misuse of stimulus funds, and in particular, Mayor Dellums' callous response. It is critical that we hold our public officials accountable, but in this case we should be judging Mayor Dellums more for his poor tact in acknowledging the problem and less for his administration's ability to procure and actuate stimulus funds.

Americans have placed great optimism in the American Recovery and Reinvestment Act, but such optimism should not overshadow the fact that the legislation has its problems. For many cities, the Stimulus is both a blessing and a curse. It provides them with the opportunity to offer a cadre of services to citizens that would have otherwise been impossible without the funds, but it forces cities to spend Stimulus awards within a three-year period. While government oversight is a good thing, for cities lacking internal capacity it presents another layer of complexity, which can hinder the activation of ARRA dollars. For this reason it is important to look to history for perspective.

There is a history of misusing federal government dollars in Oakland, but it begins in the 1960s when the federal Economic Development Administration (EDA) used Oakland as the pilot city for its Rebuilding Program. The program was a product of President Lyndon Johnson's Great Society, and aimed to stimulate job growth in the nation's declining inner cities. In that effort the EDA inefficiently spent \$23 million (\$130.5 million in today's dollars when adjusted for inflation) and failed to generate less than half of the 3,000 local jobs the program projected. Historians highlight the difficulty of holding contracting firms and agencies responsible for their actions when huge amounts of government monies are involved as the root cause of the EDA failure.

So while Oakland's recent Stimulus transgression is certainly inexcusable, it should be noted that the City is performing markedly better than the EDA did in the 1960s with a much larger pool of money. The Inspector General's report explains that Oakland misspent \$830,000 and Mayor Dellums quickly responded (and the Inspector General affirmed) that the City is working aggressively to fix these problems. Let's pray it does. Oakland's stimulus website claims that it has been awarded \$77 million through the Recovery Act for workforce development, training,

and energy efficiency. I hope that years down the line the evidence will show that, whether Mayor Dellums was at the helm or not, Oakland truly capitalized on this recovery opportunity. With a 17% unemployment rate and an 18% poverty rate, far too much is on the line.

It is much easier to criticize a public official than it is to address the systemic problems posed by activating massive amounts of federal funding at the local level. We saw a similar set of circumstances in the 1960s, but the present situation suggests that with appropriate oversight and technical assistance, cities do not face an insurmountable problem. We would be better served by exploring ways to affect changes when these issues occur rather than scapegoat a mayor.

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