

***Regenerating Local Economies: Environment, Equity and
Entrepreneurship in America's Post Industrial Cities***

A publication series produced by the MIT Community Innovators Lab
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***City Scale Retrofits:
Learning from
Portland and Oakland***

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About CoLab

The Community Innovators Lab (CoLab) is a center for research, teaching, and practice within the MIT Department of Urban Studies and Planning (DUSP). CoLab supports the development and use of knowledge from excluded communities to deepen civic engagement, improve community practice, inform policy, mobilize community assets, and generate shared wealth.

We believe that community knowledge can drive powerful innovation and can help make markets an arena for supporting social justice. CoLab facilitates the interchange of knowledge and resources between MIT and community organizations. We engage students to be practitioners of this approach to community change and sustainability. For more information, visit our website at: <http://web.mit.edu/colab/>.

About this series

This guide is part in a series of publications on equitable economic development strategies for America's post-industrial cities, funded in part by the Barr Foundation. Other titles in this series include:

Strengthening Local Economies and Civic Life: The Untapped Power of Small Businesses

Sustainable Economic Democracy: Worker Cooperatives for the 21st Century

Network Power: Building Collaborative Partnerships for Energy Efficiency and Equity

This series is written for community partners and urban planners who are working to build a more equitable and sustainable economy.



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City Scale Retrofits: Learning from Portland and Oakland

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Research Model

Using teaching and research to inform practice: From academia to action

This series is one product flowing from a year-long collaboration among students, staff at the Community Innovators Lab, and Professor Lorlene Hoyt, all of whom participated in the pedagogical experiment called, “The Collaborative Thesis Project.”

The Collaborative Thesis Project was initiated by Professor Hoyt and emerged from her observation that many students find the thesis process harrowing and, to some extent, unsatisfying, in part because theses usually meet their end on the library shelves. In hopes of making the process less isolating and more rewarding, and of making the products more useful, Hoyt invited six students to pursue their research as a collaborative unit under her supervision.

Each student researched a different post-industrial American city or set of cities and their use or potential use of stimulus funds for regenerating local economies. The group met regularly throughout the academic year to share discoveries, learn across cases, and co-develop recommendations for action.

Beyond the required thesis document, the students agreed to create media products and practice-oriented guides that could be broadly distributed to community partners, policy-advocates, and policy-makers.

CoLab faculty, staff, and affiliates supported the project by brokering relationships with community partners, hosting reflective meetings, co-advising students, co-authoring and editing written products, providing media support, and co-organizing public presentations.

The Collaborative Thesis Project has been a great vehicle for directing institutional research capacity toward a deeper understanding of equity, environment, and entrepreneurship and their connection to democratic engagement. Through this project we’ve tried to mobilize academia for action and expand our range of impact. For more information visit our blog feed at: <http://colabradio.mit.edu/?cat=317>.

Energy efficiency and jobs

Buildings are the largest source of energy consumption in the United States, accounting for 39% of primary energy use and 38% of national carbon emissions (1). If we were to retrofit our entire building stock, the U.S. could achieve efficiency gains up to 50% and reduce green house gas emissions by 25% (2). Given these figures, environmentalists state that retrofits are the “low hanging fruit” in a wider climate mitigation strategy.

Yet, beyond environmental benefits, retrofits can also potentially bring massive economic gains through energy bill savings and a new green job market. Right now, cities across the country are testing the potential of this market. They aim to answer the question: Can greater energy efficiency and job growth be complementary goals?

Context: ARRA, energy efficiency, and cities

On February 17, 2009, President Barack Obama signed the American Recovery and Reinvestment Act (ARRA) into law, injecting \$787 billion into the failing U.S. economy. According to the ARRA website, this stimulus was meant to:

- 1) Create new jobs and save existing ones,
- 2) Spur economic activity and invest in long-term growth, and
- 3) Foster accountability and transparency in government spending.

The ARRA allocated over \$20 billion to energy efficiency programs (3). This represents the largest single federal investment in energy efficiency in the nation's history. Of the \$20 billion, more than half of the funds went to the U.S. Department of Energy (DOE) for programs that are managed by cities and states.

- \$5 billion went to the low-income Weatherization Assistance Program,
- \$3.2 billion went to the Energy Efficiency and Conservation Block Grant Program, and
- \$3.1 billion funded the State Energy Program.

In addition, the U.S. Department of Housing and Urban Development (HUD) was allocated \$4 billion for public housing renovations, which included green retrofits. Lastly, the U.S. Department of Labor (DOL) was allocated another \$250 million for training

dislocated and underemployed workers in emergent green industries like weatherization.

The Obama Administration stated that ARRA money for energy efficiency could weatherize 75% of all federal buildings and one million private homes. In this way, ARRA would help jumpstart the retrofit market. However, the question of how to sustain this market remains unanswered.

After ARRA, how will we sustain the momentum around energy efficiency?

The purpose of this guide is to explore how municipal agencies and neighborhood institutions can work together to build a robust, sustainable retrofit market that delivers on the promises of lower carbon emissions, energy cost savings, and job creation. We present two city-scale retrofits programs, one in Portland, Oregon, the other in Oakland, California, outlining the basic components of each program and how it deals with the issues of financial sustainability, scalability, and equity.

At the end of the guide, we discuss how decisions about program structure and process lead to different outcomes in terms of which buildings get retrofitted, how they are retrofitted, and by whom.

The promise (and challenge) of energy efficiency

Increasing building energy efficiency is a key step for securing a sustainable energy future. Energy efficiency retrofits can cut fuel costs, reduce the need to construct new power plants, and reduce the nation's dependence on foreign oil. Energy efficiency can also offer environmental benefits through fewer greenhouse gas emissions and improved air quality.

Right now, economic development specialists, environmentalists, labor unions, and social justice advocates eagerly await the creation of a new retrofit job market. But, what are the costs and benefits of creating this market?

What are the costs and benefits of creating a new retrofit job market?

The Center for American Progress has estimated that it would cost \$500 billion over ten years to retrofit 40% of the nation's building stock. They estimate that such an effort could generate 625,000 permanent full-time jobs and save \$32 billion to \$64 billion a year in energy costs (4).

To reap these forecasted economic and employment gains, the U.S. would have to invest \$50 billion a year, on average. Given that ARRA's unprecedented \$20 billion investment in energy efficiency is not likely to recur, the private sector must play a vital role in this market if we are to see benefits at scale. At present, cities across the country are launching and implementing pilot retrofit programs that will demonstrate the true costs and benefits of energy efficiency investment.

Components of a city-scale retrofit program

Stimulus dollars in the ARRA were meant to seed the energy efficiency retrofit sector of the new green economy. Looking forward, state and municipal leaders are examining how to sustain market momentum in the wake of ARRA's one-shot investment. Cities have a key role to play (5).

- Cities contain 65 percent of our nation's population and account for 75% of national carbon emissions.
- Cities are of a manageable programmatic scale in terms of size and density.
- Cities have elected leaders who are accountable to their constituents and must stand by their economic and environmental policy decisions.

Prior to ARRA, some city governments were already creating sustainability plans. The latest surge in public investment in energy efficiency has simply quickened the pace of implementation. DOE's Energy Efficiency Conservation Block Grant (EECBG) programs forced cities to draft Energy Efficiency Conservation Strategies (EECS) for formula funds. The competitive EECBG "Retrofit Ramp Up" awards are now challenging 25 cities to launch large-scale retrofit programs that will test the true promise of energy efficiency.

Large-scale retrofit programs have three main components:

- 1) A mechanism to recycle the savings produced through the completion of energy-efficiency retrofits that can fund additional retrofits;
- 2) A means to creating and expanding access to quality jobs that can sustain middle-class families (high-road jobs); and
- 3) Targeted service delivery to a specific geographical area (city or region) where impact can be measured.

In addition, a number of social, environmental, and economic justice organizations have also emphasized two additional components for these programs.

- 4) Prioritization of low-income residents in service delivery and jobs.
- 5) Democratic partnerships between local governments, community, business, and labor institutions.

Cities contain 65% of our nation's population and account for 75% of national carbon emissions.

Equity, partnerships, and participation

For the past year and a half, MIT's CoLab has been exploring how to best deal with the two components listed above. We believe equity must be at the forefront of any retrofit program, as broad community buy-in is the key to reaching scale. One way to achieve buy-in is to proactively recruit program participants at the community level who have the most to gain in terms of jobs and utility-bill savings.

We also believe partnerships are essential for broad participation, buy-in, and reaching scale. However, multi-stakeholder partnerships can be challenging to create and manage. Beyond technical concerns, partners must maintain good working relationships with one another. This is challenging, as partners represent different, often divergent, interests and have varying levels of social, human, economic, and political capacity. In the next section we will look at how the City of Portland dealt with this issue.

Key Steps to Achieving Equity in Retrofit Programs

- 1. Broad Participation** in retrofit programs, including low-income and minority residents;
- 2. Widespread Community Buy-in**, achieved by recruiting participants with the most to gain through jobs and utility-bill savings; and
- 3. Reaching Scale** so that the economic and environmental benefits of retrofits are realized by the entire city.

Effective, democratic partnerships are important for reaching these objectives in retrofit programs.

Case Study: Portland, Oregon

CLEAN ENERGY WORKS PORTLAND

Mechanism to Recycle Funds	High-Road Job Development	City and/or Regional Scale	Commitment to Low-Income Communities	Partnerships
<ol style="list-style-type: none"> 1. Capital Funding for Program: \$2.5 million from ARRA and City 2. Financial Mechanism: Revolving Loan Fund with On-Bill Financing 3. Loan range: \$4,000 to \$20,000 4. Interest Rate: 3.99% - 5.99% depending on income 5. 20-year amortization period 	<ol style="list-style-type: none"> 1. Community Workforce Agreement (CWA) regulates job quality, job access, and contractor standards 2. Expected Job Creation: 30-40 from pilot 	<ol style="list-style-type: none"> 1. Pilot goal: 500 homes by 2010 2. Pilot focuses on City, but program will expand to county and state 3. 20% of pilot concentrated in Cully neighborhood 	<ol style="list-style-type: none"> 1. CWA is a legally binding document that sets baselines for hiring low-income workers and minority contractors 2. Retrofits do not explicitly target low-income homeowners 	<ol style="list-style-type: none"> 1. 12 institutions collaborated to develop the program 2. 29 partners signed the CWA 3. Stakeholder committee evaluates and implements 4. City partners w/ community orgs for outreach

In September 2009, the City of Portland, Oregon, initiated Clean Energy Works Portland (CEWP). The strategy uses ARRA funds both to promote near-term economic growth and outfit the city for sustained social, environmental, and economic health. Two innovative components – on-bill financing and a Community Workforce Agreement (CWA) – distinguish CEWP from other retrofit programs.

During the pilot phase, CEWP intends to retrofit 500 homes in the City by the end of 2010. Originally, the pilot phase was to act as proof of concept that would later lead to the retrofit of 100,000 homes in Multnomah County (6). However, in April 2010, DOE awarded the City of Portland another \$20 million to expand the program statewide (7),

and Clean Energy Works Oregon is now under development. For the purposes of this guide, we focus on CEWP, the city-scale program.

Financial Model: Revolving Loan Fund and On-Bill Financing

Portland's CEWP program uses a Revolving Loan Fund (RLF) to finance retrofits. An RLF is an unregulated pool of capital used to provide loans to small businesses or development projects where loan repayments are recycled over time. In Portland, the RLF was created with seed capital from ARRA and other City sources.

In order to reach the ultimate goal of retrofitting 100,000 homes, CEWP would need several hundred million dollars, which means that the RLF will need to expand exponentially after the pilot phase. Meanwhile, on-bill financing enables Portland's CEWP to replenish loan capital reserves through the following steps:

- 1) Participating homeowners enter into a borrowing agreement with a bank managing the RLF. The deed of trust serves as collateral. Homeowners do not get cash in hand. Instead, the bank pays retrofit contractors directly out of the RLF.
- 2) The utility pays the aggregate costs of all energy efficiency retrofits to the bank and replenishes the RLF, enabling the bank to issue new loans.
- 3) Once retrofit work is completed, the utility charges the property owner an additional fee on his or her monthly bill. This fee equals the monthly payment plus interest that will pay back the loan.
- 4) The reduction in energy costs offsets some of the cost for the retrofits. However, the utility now sells less overall energy to the homeowner. The interest collected from borrowers helps maintain the utility's profit margin.

This combined RLF and on-bill financing model allows property owners to invest in energy efficiency retrofits without spending

money up-front. This is an important feature for low- to moderate-income owners who lack adequate personal savings to invest in retrofits.

Financing terms (8):

- RLF interest rates: 3.99% - 5.99% depending on income
- RLF amortization term: 20 years
- Loan Amount: \$4,000 to \$20,000 (\$11,000 average)
- Average monthly fee: \$57 as of January 2010 (9).

CEWP Summary

Financial Mechanism:
Revolving Loan Fund

Total Seed Funds: \$2.5 million

Immediate Goal:
500 homes retrofitted in first year

Ultimate Goal:
100,000 homes by 2020.

Case Study: Portland, Oregon

High-road Jobs: Community Workforce Agreement

CEWP relies on a legally binding Community Workforce Agreement (CWA) to ensure that the program delivers positive workforce development outcomes. The CWA is between the City of Portland, the Energy Trust of Oregon, and a multi-stakeholder evaluation committee that includes labor unions, private businesses, contractors, and faith-based and environmental justice groups.

The agreement is meant to ensure that retrofitting jobs are high quality jobs with career pathways for low-income and minority residents. The CWA addresses six issues: job quality, job access, contractor standards, legal enforceability, democracy, and accountability. Below are highlights from the agreement (10).

Job Quality

- **Wages:** Contractors must pay prevailing wages or 180% of Oregon's minimum wage, whichever is higher.
- **Benefits:** CEWP rewards "points" to contractors that provide workers with benefits, such as health insurance, a pension plan, vacation time, or sick days. Higher points lead to more contract opportunities.

Job Access

- **Local Hiring:** 80% of energy efficiency retrofit workers must live in Portland.
- **Diverse Workforce:** Historically disadvantaged or underrepresented employees (people of color, women, or low-income workers) must perform 30% of the work generated through CEWP.
- **Minority Contractors:** A minimum of 20% of all contracts must be granted to minority contractors.
- **Qualifying Training Programs:** All new contractor hires must come from a qualified training program until graduates account for 50% of the contractor's work. To qualify, training programs must have at least three partnerships with organizations that represent and serve minority and disadvantaged populations.

Contractor Standards

- **Certification:** Contractors must be Building Performance Institute (BPI) Certified.
- **Point System:** Contractors are evaluated through a point system based on retrofit experience, service record, hiring of local and disadvantaged and underrepresented workers, and offering of health insurance and other benefits.

Enforceability, Democracy, and Accountability

- **Enforceability:** Contractors must sign legal documents that mandate they uphold standards dictated in the CWA. Contractors who fail to abide by terms in CWA are excluded from participating in CEWP.
- **Stakeholder Participation:** The City, the Energy Trust of Oregon, and Stakeholder Evaluation and Implementation Committee (SEIC) created the CWA together. Together they must enforce, evaluate, and amend the CWA. The SEIC makes sure that all targets are met.

Targeted Area of Impact: City first, later County and State

CEWP is to pilot in 500 homes in the city before scaling up to the county level. The pilot program does not programmatically target retrofits within certain neighborhoods or districts. It instead targets specific building and occupancy types. According to the program website, participation is limited to:

- Owner occupied single-family homes in the City of Portland,
- Homes constructed before 1993, and
- Homes less than 4,500 square feet in area.

However, CEWP understands the value of geographical targeting approaches and is starting to partner with selected organized neighborhoods on initiatives. In the summer they released a Request for Proposals on community-based strategies. A group of partners from the Cully neighborhood was selected to pilot a community-based outreach program. Cully residents are now going door-to-door and hosting house parties to convince homeowners to sign up for the retrofit program. The “Changing Climate in Cully” initiative aims to retrofit 100 homes by December 2010, concluding the pilot phase of CEWP. This kind of neighborhood approach will be important for expanding CEWP to the county and state.

Prioritizing Low-Income Workers but Not Neighborhoods

The CWA is a mechanism for ensuring disadvantaged workers and minorities get jobs through CEWP. However, in terms of service delivery, the program has no explicit mechanisms for targeting low-income neighborhoods in terms of retrofit service delivery. In fact, the program’s owner-occupied single-family home requirement could prevent some neighborhoods from participating.

Case Study: Portland, Oregon

Partnerships

The CWA ensures that a broad set of partners share the responsibility for driving the program. The number of partners continues to grow as the program expands in scale.

Currently partners include:

- 12 public, non-profit, and private collaborators that joined with the City to create the program;
- 29 parties who signed the Community Workforce Agreement; and
- 8 partners that are part of the Climate Action in Cully community-based outreach initiative.

Successes and Challenges

Portland's CWA is a landmark piece of work in terms of developing enforceable workforce development standards for energy efficiency retrofits. However, while the CWA is a good regulating tool, it is not an economic development tool. In other words, the CWA cannot drive market expansion. The limits of capital funds in the RLF will ultimately limit the jobs created, so the CWA may have limited jurisdiction in the end.

The use of the RLF and On-Bill Financing allows retrofit customers to sign up for services with no upfront costs. This benefits low- and moderate-income people who do not have substantial savings. However, On-Bill Financing requires a mortgage as collateral, so renters are excluded from the program. Also, landlords whose tenants are responsible for their own utility bills cannot participate because they have no mechanism for repaying loans.

Case Study: Oakland, California

OAKLAND WEATHERIZATION & ENERGY RETROFIT LOAN PROGRAM

Mechanism to Recycle Funds	High-Road Job Development	City and/or Regional Scale	Commitment to Low-Income Communities	Partnerships
<ol style="list-style-type: none"> Capital Funding for Program: \$2 million from CDBG-R Financial Mechanism: Revolving Loan Fund Loan Range: \$6,500 to \$30,0000 0% interest rate and no amortization period; loan paid back when participant sells property or transfers the title 	<ol style="list-style-type: none"> Qualified contractor list mandates certain labor standards. City encourages local hiring from training programs by offering contractors rebate incentives. Expected Job Creation: 108 	<ol style="list-style-type: none"> Targets City Could retrofit up to 300 homes depending on loan amounts 	<ol style="list-style-type: none"> Retrofits limited to low- and moderate-income homeowners (80% or less AMI) Contractor incentives for hiring graduates from local training programs, some of which focus on disadvantaged or minority populations 	<ol style="list-style-type: none"> City works directly with qualified contractors City partners with three community based organizations for outreach

In January 2010, Oakland launched the Weatherization and Energy Retrofit Loan Program (WERLP), which uses ARRA funds to finance energy-efficiency retrofits for Oakland residents. The Oakland program differs from Portland's in that it specifically targets low- to moderate- income residents. The program offers zero interest loans to homeowners that require no repayment until the owner sells their property. This puts the burden of investment on the City and not the individual.

In May 2010, the California Energy Commission awarded the Association of Bay Area Governments \$10.7 million in ARRA funds to implement a regional retrofit program in nine counties, including Oakland's Alameda County. The total grant will fund retrofits of 15,000 single-family homes and 2,000 multi-family dwellings; however the effects of this

regional program on Oakland are difficult to predict at this time.

Financial Model: Revolving Loan Fund with 0% interest

Oakland's program is funded through a RLF that was created with seed capital from ARRA's Community Development Block Grant funds. The 0% interest rate protects low- and moderate-income owners from having to pay another monthly bill.

The RLF allows owners to borrow varying amounts depending on the scope of work required for their retrofits. The flexible terms are meant to incentivize deeper retrofits that go beyond basic weatherization. As in Portland, OR, the deed of trust acts as collateral.

Case Study: Oakland, California

Financing terms (11):

- RLF interest rates: 0% with \$350 fee upon sale of home
- RLF amortization term: Indeterminate
- Loan amount: \$6,500 - \$30,000
- Monthly payment: None - Repaid upon sale of home.

WERLP Summary

Financial Mechanism:
Revolving Loan Fund

Total Seed Funds: \$2 million

Immediate Goal: 70-300 homes,
depending on scope of work.

High-road Jobs: Qualified Contractor List

Oakland does not, at this time, have a community workforce agreement. Instead, the City is creating a qualified contractor list to deal with issues of job quality, job access, and contractor standards. To appear on the list, contractors must meet several criteria.

Job Quality

- Wages: Contractors must pay Alameda wage standards.

Job Access

- Local Hiring: Contractors must hire Oakland residents.
- Qualified Training Programs: Contractors who recruit workers from local green jobs training programs are reimbursed 80% of wages through Fall 2010.

Contractor Standards

- Contractors must be licensed and insured.
- Contractors must be trained in energy retrofit standards.

Targeted Area of Impact: City

Oakland's WERLP will retrofit up to 300 homes in the city. According to the City's website, the WERLP is restricted to homeowners. Participants must:

- Reside in a 1 to 4 unit dwelling in the City of Oakland, and
- Earn no more than 80% average median income.

The WERLP does not target any one neighborhood for retrofits. It has instead subcontracted with three community-based organizations to do outreach in specific districts. This past June, Oakland Citizens Committee for Urban Renewal (OCCUR), Regional Technical Training Center (RTTC), and Allen Temple Housing & Economic Development Corporation (ATHEDCO) were granted a total sum of \$160,000 through an open Request for Qualifications (RFQ) process. Each organization received \$50,000 to work in the neighborhood where it has the closest ties. The organizations' responsibilities include:

- Providing outreach services to low- and moderate-income homeowners,
- Facilitating employment for local residents who have gone through job training, and
- Referring homeowners to related home stabilization programs.

Prioritizing Low-Income Workers and Neighborhoods

Oakland's WERLP is serious about prioritizing low- and moderate-income households in terms of service delivery. By limiting participation to homeowners that make 80% or less area median income, they have targeted the benefits to those who would benefit most from a reduction in energy bills but can least afford it. In terms of promoting jobs for low-income people, they have incentivized contractors to hire graduates of local green jobs training programs by offering wage reimbursements. If the graduates of such programs are disadvantaged, then the city has indirectly promoted the hiring of low-income workers.

Case Study: Oakland, California

Partnerships – A Small Few with Room to Grow

The City of Oakland Community and Economic Development Agency runs the City's Housing Repair and Rehabilitation Programs, one of which is the WERLP. In this case, WERLP is a City effort that is implemented in-house by lending administrators from the Housing Repair and Rehabilitation Program.

Though the City must work with contractors and training agencies, it has no official partners in the effort aside from the three community-outreach subcontractors listed above. However, these three outreach organizations have all partnered with the Pacific Gas and Electric Company. They are also connected to a host of other partners.

- OCCUR leads a partnership network of over 150 nonprofits and 200 faith-based organizations.
- RTTC founded the fifteen-member West Oakland Community Collaborative.
- ATEHDCO is a faith-based non-profit has a 2500 congregation and partnerships with several training centers, colleges, and other community based organizations.

Successes and Challenges

The most notable thing about WERLP is its commitment to low-and moderate-income service delivery. The 0% interest loan and the 80% cap on participant's average median income show that WERLP is meant to serve low-income earners. However, the program may be short-lived since it provides no way to recycle energy savings back into the fund. Also, homeowners may not sell their properties often enough to keep a pool of money in the fund. After the first \$2 million is spent, it is difficult to predict what will happen.

By qualifying contractors through an application review process, WERLP filters the contractor pool so that only high-road employers get WERLP work. The contractor qualifying process also promotes local hiring and incentivizes hiring disadvantaged workers. However, this is not a long-term mechanism for ensuring that retrofit jobs are good jobs, since it does not guarantee contractor compliance with the qualifying criteria.

Lastly, the WERLP has only a few local partners. This means that the City is tasked with most of the implementation. This is a lot of responsibility to bear and might ultimately limit the scalability of the program.

Learning from Portland and Oakland

Federal Program Goals

Both Portland and Oakland's city scale retrofit programs have multiple, sometimes conflicting goals. As products of the ARRA, both programs must strive to:

- Create jobs,
- Generate economic activity that invests in long-term economic growth, and
- Foster government transparency and accountability.

And, as products of federal agency community block grants, the two programs also must meet goals of the granting program.

- Portland's CEWP is a product of the DOE's EECBG Program. The program has four primary goals (12):
 1. Reduce fossil fuel emissions,
 2. Reduce energy use,
 3. Improve energy efficiency, and
 4. Create and retain jobs.
- Oakland's WERLP is a product of the HUD's CDBG-R program, which strongly encouraged cities to invest in:
 1. Infrastructure activities that provide services to urban communities.
 2. Rehabilitation and retrofit activities that promote energy efficiency and conservation.

In looking at the original funding sources of the two programs, we can begin to understand why they differ. Though both programs are focused on increasing energy efficiency and generating jobs, they prioritize different outcomes. Factors that affect the shape of the program include:

WHO IMPLEMENTS

- Portland's program is housed in the City's Office of Sustainable Development. However a stakeholder body of 29 partners helps with implementation and evaluation.
- Oakland's program is housed in the City's Community and Economic Development Agency. The office in charge of Repair & Rehabilitation Programs runs the program, dealing directly with contractors and a few community-based organizations.

WHO PARTNERS

- Portland's primary CEWP partner is the Energy Trust of Oregon, a non-profit dedicated to helping Oregonians benefit from saving energy and tapping renewable resources. However, there are 29 other partners on the community workforce agreement, and almost half are labor organizations.
- Oakland's WERLP has only three formal partnerships, and they are with community-based organizations subcontracted to do outreach in low-income neighborhoods.

Learning from Portland and Oakland

WHO IS SERVED

- Portland's program is for homeowners with moderate size houses built before 1993. They must be able to afford a \$57 monthly payment. These stipulations will limit the participation of many low- and moderate-income residents. Homes in the Cully neighborhood will account for 20% of all retrofits.
- Oakland's program is for homeowners of 1-4 unit dwellings who make 80% or less than area median income. Outreach has been targeted specifically in such neighborhoods.

WHAT IS THE WORK

- Portland's CEWP pilot limits scope of work to key weatherization efforts like insulation, air sealing and duct sealing, as well as space heating (furnaces and heat pumps) and hot water upgrades.
- Oakland's WERLP allows for base energy efficiency package of improvements include all those listed above, plus appliances, light fixtures, and upgrades to roof, furnace, windows, doors. Since WERLP is run out of the office in charge of all Repair & Rehabilitation Programs, residents also have the option of signing up for additional improvements that deal with seismic, lead or other code issues.

WHO DOES THE WORK

- In Portland, a CWA mandates that certified contractors do the retrofits. These contractors must meet thresholds for wages, local hiring and hiring of disadvantaged and under-represented employees. Contractors must also meet thresholds for hiring graduates of qualified training programs. Minority contractors will do 20% of all program retrofits.
- In Oakland, the City approves qualified contractors who are licensed, insured, and trained in retrofit standards. Contractors must meet wage standards. Through wage reimbursements, the City also incentivizes contractors to hire from local green jobs training programs.

SCALABILITY AND SUSTAINABILITY

- Portland's CEWP is explicitly a pilot program. It was designed as a proof of concept that would allow the energy efficiency market to expand to county and state levels. This is probably why DOE funded the program for an additional \$20 million.
- Oakland's WERLP program faces challenges in scalability. It is not clear how the city will grow the \$2 million revolving loan fund, especially given the zero interest loans. The program is also not tied to any partners at the county, state, or regional level.

Learning from Portland and Oakland

	Portland, OR's Clean Energy Works Portland	Oakland, CA's Weatherization and Energy Retrofit Loan Program
MECHANISM TO RECYCLE FUNDS	<ol style="list-style-type: none"> 1. Capital Funding for Program: \$2.5 million from EECBG and City 2. Financial Mechanism: Revolving Loan Fund with On-Bill Financing 3. Loan range: \$4,000 to \$20,000 4. Interest Rate: 3.99% - 5.99% depending on income 5. 20-year amortization period 	<ol style="list-style-type: none"> 1. Capital Funding for Program: \$2 million from CDBG-R 2. Financial Mechanism: Revolving Loan Fund 3. Loan range: \$6,500 to \$30,000 4. 0% interest rate and no amortization period; loan paid back when participant sells property or transfers the title
HIGH ROAD JOB DEVELOPMENT	<ol style="list-style-type: none"> 1. Community Workforce Agreement (CWA) regulates job quality, job access, and contractor standards 2. Expected Job Creation: 30-40 from pilot 	<ol style="list-style-type: none"> 1. Qualified contractor list mandates certain labor standards. 2. City encourages local hiring from training programs by offering contractors rebate incentives. 3. Expected Job Creation: 108
CITY/REGIONAL SCALE	<ol style="list-style-type: none"> 1. Pilot goal: 500 homes by 2010 2. Pilot targets City, but program will soon expand to county and state 3. 20% of pilot concentrated in Cully neighborhood 	<ol style="list-style-type: none"> 1. Could retrofit up to 300 homes depending on loan amounts 2. Targets City
COMMITMENT TO LOW-INCOME COMMUNITIES	<ol style="list-style-type: none"> 1. CWA is a legally binding document that sets baselines for hiring low-income workers and minority contractors 2. Retrofits do not explicitly target low-income homeowners 	<ol style="list-style-type: none"> 1. Retrofits limited to low- and moderate-income homeowners (earning 80% or less AMI) 2. Contractor incentives for hiring graduates from local training programs, some of which focus on disadvantaged or minority populations
PARTNERSHIPS	<ol style="list-style-type: none"> 1. 12 institutions collaborated to develop the program 2. 29 partners signed the CWA 3. Stakeholder committee evaluates and implements 4. City partners w/community orgs for outreach 	<ol style="list-style-type: none"> 1. City works directly with qualified contractors 2. City partners with three community based organizations for outreach

Summary of Differences

Both Portland's and Oakland's programs aspire to the goals of the ARRA in terms of job creation and overall energy reduction. Portland's program focuses more directly on the task of creating a new energy efficiency retrofit market, as the program is forward-looking and scalable in its design. The Portland program's CWA is also a solid mechanism for guaranteeing that retrofit jobs are good jobs that are accessed by disadvantaged workers.

While Oakland's program appears to lack scalability and takes a lighter touch on regulating labor standards, the program is much more focused on delivering services to those who can least afford the investment. The variation between these programs is due to many factors including leadership, city capacity, relationships, funding sources, and local culture. While we do not address those issues, this guide illustrates how decisions about program structure directly affect the kinds of benefits that retrofits can deliver in a city.

Notes

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