

TRAINING FOR THE FUTURE

WORKFORCE DEVELOPMENT FOR A 21ST CENTURY UTILITY
LOS ANGELES'S UTILITY PRE-CRAFT TRAINEE PROGRAM

ELLEN AVIS
CAROL ZABIN

2013



ACKNOWLEDGMENTS

The authors of this report would like to thank the following people for their assistance and contribution to this work:

Leticia Barajas, *Los Angeles Trade Technical College*
 Elsa Barboza, *Strategic Concepts in Organizing and Policy Education*
 Aram Benyamin, *Los Angeles Department of Water and Power*
 Dan Braun, *Los Angeles Alliance for a New Economy*
 Jourdan Card, *Los Angeles Alliance for a New Economy*
 Mike Coia, *Los Angeles Department of Water and Power*
 Brian D'Arcy, *International Brotherhood of Electrical Workers, Local 18*
 Larry Frank, *Los Angeles City Deputy Mayor*
 Casey Garland, *Utility Pre-Craft Trainee Program*
 Evan Gillespie, *Sierra Club*
 Jessica Goodheart, *Los Angeles Alliance for a New Economy*
 Jessica Halpern-Finnerty, *University of California, Berkeley*
 Jose Hernandez, *Low Income Oversight Board of the California Public Utilities Commission*
 Kokayi Kwa Jitahidi, *Los Angeles Alliance for a New Economy*
 Nelson Liu, *Los Angeles Department of Water and Power*
 Jenifer MacGillvary, *University of California, Berkeley*
 Humberto Martinez, *Utility Pre-Craft Trainee Program*
 Shawn McCloud, *International Brotherhood of Electrical Workers, Local 18*
 Mareta Papu, *South East Los Angeles County WorkSource Center*
 Samantha Quintero, *UCLA Labor Occupational Safety and Health Program*
 Ricardo De Los Santos, *Utility Pre-Craft Trainee Program*
 Cynthia Strathmann, *Los Angeles Alliance for a New Economy*

Funding for this report was provided by the William and Flora Hewlett Foundation.

ABOUT THE LABOR CENTER

The Center for Labor Research and Education (Labor Center) is a public service and outreach program of the UC Berkeley Institute for Research on Labor and Employment (formerly the Institute of Industrial Relations). Founded in 1964, the Labor Center conducts research and education on issues related to labor and employment. The Labor Center's curricula and leadership trainings serve to educate a diverse new generation of labor leaders. The Labor Center carries out research on topics such as job quality and workforce development issues, and we work with unions, government, and employers to develop innovative policy perspectives and programs. We also provide an important source of research and information on unions and the changing workforce for students, scholars, policymakers and the public.

TRAINING FOR THE FUTURE

WORKFORCE DEVELOPMENT FOR A 21ST CENTURY UTILITY LOS ANGELES'S UTILITY PRE-CRAFT TRAINEE PROGRAM

California has been a national leader in promoting energy efficiency and clean energy for decades, and since the passage of AB 32, the Global Warming Solutions Act, the state has stepped up its efforts to reduce energy use and greenhouse gas emissions even further. Including private dollars leveraged through incentive programs, California currently invests over \$6 billion a year in energy efficiency and clean energy. Much of this is ratepayer investment controlled by public and private utilities.¹ This energy investment also constitutes a workforce investment, creating and transforming jobs in the construction and utility industries. Utilities and their regulating agencies are now in the position of being drivers of economic development and implementers of environmental policy, as well as fulfilling their traditional mission of supplying affordable and reliable power. Utilities and energy agencies will increasingly be held accountable for achieving economic development goals, which include goals concerning the kinds of jobs being created, who is getting the jobs, and how workers are being trained.

¹ This estimate is for demand side investments only and does not include large scale renewable energy projects. It also includes the private contributions leveraged through rebates and incentives. Zabin, C. et al. (2011). *California Workforce Education and Training Needs Assessment for Energy Efficiency, Distributed Generation, and Demand Response*. UC Berkeley, Donald Vial Center on Employment in the Green Economy. p. 45. Available online at: <http://www.irl.berkeley.edu/vial/>

These questions are critical in determining the achievement of both energy- and job-related policy goals. Energy savings targets are increasing; the quality of energy efficiency work is vitally important to whether or not those deeper savings targets will be reached. High-quality worker training and competency among the energy efficiency workforce are key to the proper installation, operation, and maintenance of energy efficient equipment and building systems. In addition, ratepayer funded energy efficiency work constitutes a public investment in job creation. From a policy perspective, it is important that the jobs being created pay decent wages and provide entry into real career paths.

One innovative training program that makes strides in addressing these important goals is the Utility Pre-Craft Trainee (UPCT) program, developed by the Los Angeles Department of Water and Power (LADWP) and the utility electrical workers' union, the International Brotherhood of Electrical Workers (IBEW) Local 18. The UPCT program provides a model of a successful program that provides pathways into real careers, while helping the largest municipal utility in the country decrease the city's dependence on fossil fuels.

The UPCT program provides pre-apprenticeship training for entry-level workers who are interested in long-term

careers with the utility, but may not have previous construction experience or the background needed to pass the civil service examinations required for employment at the municipally-owned utility. The program provides trainees with the opportunity to work full-time weatherizing the homes of low-income utility customers, while also learning a variety of skills, exploring career options within the utility, and preparing for the civil service examinations.

The structure and content of the program, the process by which it has developed, and the partnerships it has leveraged have all been crucial to the program's success. The program provides a solution to the complex and sometimes competing interests of multiple stakeholders. These interests include the utility's need for trained workers to implement energy efficiency programs and other essential work; the community's need for quality jobs and energy savings; the union's need to recruit young workers and expand their capacity to undertake energy efficiency work, and environmental stakeholders' goals of replacing fossil fuels with clean energy. Each of these stakeholders has been at the table during both the development of the UPCT program and the development of policy that made the program possible.

This paper offers background on the development of Los Angeles's UPCT program, and highlights the features of the program that make it a best practice model for workforce training for entry-level workers. First, we provide an overview of the statewide and local policy landscape regarding energy and jobs that led to the development of the UPCT program. This is followed by a description of the basic structure and mechanics of the program, including the multiple partnerships that have been developed in its implementation. Next, we take a look at the benefits of the program from the perspective of stakeholders. We conclude with a discussion of the lessons learned from UPCT for other utilities or unions interested in implementing similar workforce programs.

POLICY CONTEXT

ENERGY AND WORKFORCE CHALLENGE

The UPCT program has developed in response to significant challenges in preparing a workforce that can help transition the economy to cleaner and more efficient energy sources. California has ambitious goals and robust policies for reducing energy use and greenhouse gas emissions. AB 32, the 2006 Global Warming Solutions Act, sets the goal of reducing greenhouse gas emissions to 1990 levels by 2020. Subsequent legislation sets more specific goals for the energy and utility sectors, including reducing energy use by at least 10 percent at all utilities by 2020. At the same time, the state is still facing a slow economic recovery, with an unemployment rate around 11 percent statewide.² Increasing investment in clean energy and energy efficiency will create some new jobs and transform many others. However, the fact that many unemployed workers have been out of the labor force for some time, or are switching into new careers, means that targeted job training and programs that increase access to jobs are critical components of any policy that spurs job creation. This is particularly true in green and greening industries, where advances in technology and policy driving investment are both helping put people back to work in jobs that often require additional skill sets.

As both the distributors of energy and as the state's primary administrators of energy efficiency incentive programs, utility companies have a central role to play in achieving energy savings goals. The California Long Term Energy Efficiency Strategic Plan, adopted in 2008, also recognizes the need for utilities to pay attention to workforce training as the state upgrades its power system. While training programs targeting "green" skills have proliferated in California, many of

² Employment Development Department, State of California. Labor Market Information Division. Retrieved August 22, 2012 from: [http://www.calmis.ca.gov/file/1fmonth/cal\\$spds.pdf](http://www.calmis.ca.gov/file/1fmonth/cal$spds.pdf). This rate does not include discouraged workers who have dropped out of the labor force.

these programs provide only short-term training that is not connected to longer-term career pathways or employment opportunities.³ Most of the jobs being created through investment in energy efficiency and renewable energy, on the other hand, are in traditional construction and utility industries such as electrical and sheet metal work, rather than in niche green specialties.⁴

Since the majority of “green” skills needed to upgrade energy systems are actually incorporated into traditional utility and construction occupations, apprenticeship programs are a valuable and often overlooked resource for workforce training in this area. Apprenticeship programs are long-established, self-funding, and provide comprehensive occupational training. They also have the capacity to adapt quickly to provide skills upgrade training for new technologies. Apprenticeships in the energy sector are often run by utilities, building trades unions or labor-management cooperation committees, so curriculum changes respond directly to market and employer demands.

CHALLENGES IN LOS ANGELES

Los Angeles faces particular hurdles when it comes to achieving emissions reductions goals. The Los Angeles Department of Water and Power (LADWP), the largest municipal utility in the country, has historically under-invested in energy efficiency and relied heavily on coal and other fossil fuel sources to supply the City of Los Angeles’s energy needs. The 2010-2011 Los Angeles Department of Water and Power (LADWP) Energy Efficiency Potential Study showed that the utility was not on track to meet the statewide goal of 10 percent energy savings by 2020.⁵ A 2011 report by the Natural Resources Defense Council

(NRDC) showed that LADWP’s energy savings actually decreased from 2009 to 2010.⁶

Efforts to ramp up local investment in energy efficiency have started to gain ground in Los Angeles due in large part to the advocacy of the RePower LA coalition. Convened by the non-profit Los Angeles Alliance for a New Economy (LAANE), IBEW Local 18, and Strategic Concepts in Organizing and Policy Education (SCOPE) in 2010, the coalition includes scores of small businesses, as well as more than 40 community and environmental stakeholders. RePower LA launched its campaign to increase investment in energy efficiency programs with a series of town hall style meetings that brought together LADWP and city leadership, the union, and community members around a demand for increased investment in energy efficiency programs that lead to good, career path jobs and that include programs to help struggling customers. The campaign used door knocking, surveys, and media outreach to mobilize a constituency for energy efficiency goals, more equitable access to energy efficiency services, and the creation of high-quality, entry-level job opportunities and workforce training. RePower LA gained strong support from the Mayor’s office, LADWP Board members, and City Council leaders, all of whom have oversight responsibility over DWP.

In May 2012, the LADWP Board voted to nearly double the utility’s energy efficiency investment—increasing the budget from \$55 million to \$128 million per year—and increased their savings target from 8.6 percent to 10 percent by 2020, with a stretch goal of 15 percent savings, pending a revision of the Department’s energy efficiency potential study.⁷

3 Zabin, et al. (2011), p. 214

4 Ibid.

5 Los Angeles Department of Water and Power (2011). 2010-11 Energy Efficiency Potential Study. Board Presentation (Dec. 6, 2011). Retrieved from: http://www.ladwpnews.com/external/content/document/1475/1252663/1/EE_PRESENTATION-12-06-11-2pm%20+.pdf

6 Martinez, S., Ettenson, L., Long, N., & Wang, D. (2011). Public Power’s Energy Efficiency Progress: An Evaluation of California’s Publicly Owned Utility Energy Efficiency Achievements and Targets. NRDC. Retrieved from: http://switchboard.nrdc.org/blogs/lettenson/NRDC%20Assessment%20of%20POU%20EE%20Achievements%20and%20Targets_August%202011.pdf

7 LADWP Board Approval Letter. May 22, 2012. Subject: Revised Fiscal Years 2012-2013 and 2013-2014 Energy Efficiency Savings Plan with a 2020 Target of 15 Percent Savings.

A KEY PIECE OF THE SOLUTION

The UPCT program is an important part of LADWP's new energy efficiency commitment and also makes strides toward fulfilling the RePower LA coalition's goals of bringing good jobs and energy efficiency to low-income communities. Trainees constitute a lower-cost workforce that provides no-cost weatherization services to low-income residents. To date, they have weatherized more than 5,500 homes, including many multi-family units. Although initially funded through an \$8.5 million federal weatherization grant, LADWP is continuing to fund the program through its general training and energy efficiency budgets. The utility plans to expand the UPCTs' work into direct installation of energy efficiency measures for 40,000 small businesses over the next four years and to schools that are part of the Los Angeles Unified School District, the LADWP's largest customer, as well as into clean energy projects and water efficiency measures.

The California Long Term Energy Efficiency Strategic Plan, adopted in 2008, recognized the need for utilities to pay attention to workforce training as the state transitions to cleaner more efficient energy systems. The Strategic Plan called for a comprehensive study to inform workforce policy in the energy efficiency arena. The result was the 2011 California Workforce Education and Training Needs Assessment for Energy Efficiency, Distributed Generation, and Demand Response (Needs Assessment).⁸ The Needs Assessment noted that training programs targeting 'green skills' have proliferated in California, in part due to funding through the American Recovery and Reinvestment Act (ARRA), but that many of these programs provide only short-term training that is not connected to longer-term career pathways or employment opportunities. The report found that most of the jobs being created through investment in energy efficiency and renewable energy are in traditional construction and utility industries such as electrical and sheet metal work,

rather than in niche green specialties. "What you call 'green jobs' are often in traditional trades," says Brian D'Arcy, Business Manager for IBEW Local 18 and a chief architect of the UPCT program. "There is an existing infrastructure that can be leveraged to provide high-quality training for these new skills. That's what we're doing with the Utility Pre-Craft Trainee program." In many ways, the UPCT program epitomizes a best practice workforce development model. The program has the full support of the LADWP training infrastructure, it provides employment opportunities while participants are in training, and it provides a pipeline into existing utility jobs.

PROGRAM BASICS

MECHANICS AND PARTNERSHIPS

The Utility Pre-Craft Trainee program is a pre-apprenticeship training program that offers participants the chance to work full-time as weatherization installers while receiving substantial career-oriented training and preparing for civil service examinations that would qualify them for permanent employment and further training with LADWP. The Department of Water and Power and IBEW Local 18 have taken the lead on coordinating and delivering training for UPCTs, but they also worked with the Mayor's office to develop and leverage a number of important partnerships in implementation of the program. The South East Los Angeles County (SELAC) WorkSource Center, one of the state's one-stop career centers, has provided initial intake and work readiness screening for prospective trainees along with the UCLA Labor Occupational Safety and Health Program. Los Angeles Trade Technical College, a local community college with a large and well-established construction department, provided the initial weatherization training. In addition, the RePower LA Coalition assists with outreach and coordination. This section gives an overview of the main components of the program and describes these partnerships in more detail.

⁸ Zabin, et al. (2011).



The structure and content of the program, the process by which it has developed, and the partnerships it has leveraged have all been crucial to the program's success.

RECRUITMENT AND SCREENING

One of the important goals of the UPCT program is the broad inclusion of workers from low-income and minority communities that have had less access to high-quality careers in the past or that lack the resources to qualify for civil service examinations directly. Recruits for the UPCT program are dispatched from IBEW Local 18's book of applicants and referred to the SELAC WorkSource Center for orientation and pre-screening. SELAC was chosen because of their record of successful intake and work readiness screening and their previous experience working with both the utility and construction trades, as well as with community partners.

The WorkSource Center runs a regular one-day construction orientation to introduce prospective workers to the requirements of the field. This provides basic information about the work conditions and physical requirements of construction occupations and ensures that applicants have a

genuine interest in this type of work and the physical ability to complete the requirements of the job.

After the initial orientation, WorkSource provides a three-day work readiness training that is tailored to the UPCT position and was developed in partnership with IBEW Local 18 and the LADWP. The training is followed by a full day of interviews and assessment. This process is rigorous and applicants are assessed on multiple criteria, including punctuality, attitude, participation, and ability to follow directions. Of the first 50 applicants that were referred to the Center, 35 made it through this initial screening process and entered the program.

The WorkSource Center also provides additional supportive services for candidates throughout their tenure in the program. These services may include bus tokens and gas money to ensure participants can attend trainings, case management and follow-up to address barriers that could lead them to drop out of the program, and additional career placement assistance for those candidates that do not make it through the UPCT screening.

For the first round of 35 trainees, applicants already on IBEW Local 18's waiting list for an entry-level position with similar requirements were transferred over to the UPCT list. For the second class of 25, the list included more applicants who were recruited from the community and will sign up for the UPCT program directly. This enables partners involved in outreach and recruitment to target disadvantaged communities for greater inclusion in the program. SELAC's ability to partner effectively with community organizations, the utility, and the union, as well as their high-quality orientation and screening process have been integral to the success of the program.

TECHNICAL TRAINING

Los Angeles Trade Technical College (LATTC) is the main technical training partner for the UPCT program. At the beginning of the program, LATTC provides 40 hours of training in technical skills, such as the use of hand tools, basic construction, and safety, as well as the specific weatherization training demanded by the federal Weatherization Assistance Program. Once they complete this training, UPCTs are eligible to become certified in weatherization through the California Department of Community Services and Development (CSD). Trainees can also earn college credit for the training they receive through LATTC.

There is an existing infrastructure that can be leveraged to provide high quality training for these new skills. That's what we're doing with the Utility Pre-Craft Trainee program.

—Brian D'Arcy, IBEW Local 18



Humberto Martinez,
Utility Pre-Craft Trainee Program

LATTC was a natural choice for a training partner as the college has been designated by the Mayor's Office as an intermediary for Los Angeles's regional utility sector strategy, has a tradition of training in the utility and construction fields, and is one of only three accredited national Weatherization Assistance Training Centers in the state. The college was involved in discussions and planning regarding the

UPCT position from very early stages and worked closely with LADWP and Local 18 to develop training that suits the needs of the program and is accessible to trainees from Los Angeles's low-income and diverse communities.

CORE PROGRAM

After initial screening and orientation, followed by four weeks of training in basic skills and weatherization, trainees begin full-time work weatherizing the homes of low-income Los Angeles residents. This work involves weather-stripping and replacing doors and windows, installing insulation, changing faucets, showerheads, and light bulbs, and conducting blower-door tests and safety tests, among other measures. This work reduces homeowners' reliance on air-conditioning and reduces energy and water use, ultimately saving them money on their utility bills. The work also increases residents' comfort and safety in their homes.

On a bi-weekly basis, trainees spend a full day participating in classroom sessions in which they are introduced to the basics of various career options at the utility and build relevant skills. These sessions also provide trainees with directed preparation for the various civil service examinations. The program aims to qualify trainees for as many civil service exams as possible, giving them the greatest possible options for getting hired as permanent employees in jobs where their skills could be fully utilized. After their regular workday, trainees are expected to do additional online study. The Joint Training Institute, a labor-management cooperation committee, has developed self-study modules in a variety of topics, from basic math and reading comprehension, to the Hayden Electricity course, which specifically prepares trainees for the Electrical Helper Class position at LADWP. Online courses are self-paced, but trainees receive a great deal of encouragement and support from trainers, supervisors, and Local 18 representatives, and are expected to make consistent progress.

OUTREACH, ADVOCACY, AND COORDINATION

The RePower LA Coalition has served an important role in the development and implementation of the UPCT program. In particular, LAANE, a co-convenor of the coalition, has taken on a variety of roles in the development of the UPCT program, including outreach to potential trainees in low-income communities and identification of low-income customers who are eligible for services through the weatherization program. LAANE has also served as a liaison between the utility, union, environmental, and workforce development partners. According to several organizations and agencies involved in the program, this role of translating and coordinating between program actors has been vital to the establishment and strengthening of working relationships between partners, some of which had been on opposite sides of debates in the past.

The outreach, advocacy, and coordination that RePower LA members contribute to the UPCT program are especially important in overcoming the barriers that would prevent community members from becoming trainees. The groups in the coalition have intentionally reached out to low-income communities of color and have been responsive to the needs of potential trainees with past convictions or criminal records, as well as those with family obligations, limited education or English ability, and other potential barriers to employment. Elsa Barboza, Campaign Director at Strategic Concepts in Organizing and Policy Education (SCOPE), a co-convenor of the RePower LA coalition, also points out that in communities with high levels of unemployment, such as South Los Angeles, social networks that lead to employment opportunities may not exist, or may be weak. She posits that “[the UPCT program] represents a new network for unemployed community members from low-income communities of color, that didn’t previously exist.”

FUNDING AND SUSTAINABILITY

The UPCT program was initially proposed several years ago as a general utility pre-apprenticeship program. However the program really got its start when LADWP was asked by the City of Los Angeles to take responsibility for a Weatherization Assistance Program (WAP) grant through the American Recovery and Reinvestment Act (ARRA). The federal grant funded the initial round of weatherization work and catalyzed development of the UPCT program. This initial funding provided the impetus needed to start the program, in part because it provided the opportunity for the utility and the union to expand their capacity to do energy efficiency work.

RePower LA coalition members have been instrumental in advocating for expanded energy efficiency budgets and strong workforce provisions within utility programs. As a result, LADWP has committed to viewing energy efficiency as a procurement strategy—meaning they will invest in energy efficiency in lieu of purchasing energy produced at power plants. The Department’s recently adopted guiding principles also include a commitment to leverage increasing energy efficiency investments to create high-quality jobs for the local workforce.⁹

As LADWP continues to transition away from fossil fuel-powered energy, energy efficiency and clean energy investments will grow. These investments will help to expand the UPCT program, creating more entry-level career opportunities for Los Angeles residents. This transition has required increasing rates for consumers, but expanding energy efficiency programs will also help customers reduce energy use, thereby maintaining or reducing their total energy costs. Going forward, the utility has committed to sustaining the program through its general training and energy

⁹ Los Angeles Department of Water and Power. LADWP News, August 22, 2012. Guiding Principles Adopted by the Board of Water and Power Commissioners. Retrieved from: <http://www.ladwpnews.com/go/doc/1475/1521155/Guiding-Principles-for-the-Local-Water-Supply-Program-and-Energy-Efficiency-Portfolio>

efficiency budgets. Advocates of the program estimate that if the program continues to be funded and expanded over the next five years, it could create about 750 UPCT positions as well as a number of new permanent jobs for journeymen and supervisors.¹⁰

STAKEHOLDER PERSPECTIVES

WHO BENEFITS?

The UPCT program is a model of best practices for an entry-level workforce development program from a variety of stakeholder perspectives. It serves the short-term and long-term needs of the utility, the trainees, and the union, while also furthering environmental and economic policy goals. Trainees are guaranteed a paycheck, provided with valuable skills training and mentorship, and have access to long-term career paths. The utility cultivates a pool of pre-screened, trained, and motivated entry-level workers that can feed into critical job classes. The union builds capacity to take on more energy efficiency work that might otherwise be contracted out to non-union providers, and environmental and community stakeholders also see a reduction in the reliance on fossil fuels. This section provides more detail on the advantages of the program from the perspective of these diverse stakeholders.

UTILITY

LADWP is the largest municipal utility in the country, with over 9,400 employees providing critical electrical and water services to the city. This utility workforce is highly skilled; after passing the civil service examinations, workers go through at least three years of apprenticeship training. The majority of the training is paid for by the utility, with a small amount coordinated and funded through the Joint Training

Institute, a labor-management cooperation committee. This occupational training constitutes a considerable investment in utility workers—as much as \$300,000 per employee for the three-year lineman apprenticeship program.

The utility workforce is also aging, resulting in what Aram Benyamin, head of the Power side of the utility, describes as a “vacuum in the well-trained workforce.” Over 40 percent of workers at the utility are over 50 years old, with 20 percent due to retire within the next five years.¹¹ In some critical job categories, which are essential to the day-to-day operations of the utility, imminent retirement rates are even higher. For example, 50 percent of Instrument Mechanic Supervisors and 67 percent of Steam Plant Maintenance Supervisors will retire before 2017. These are well-compensated positions and the civil service examinations for entry into these career tracks often draw thousands of applicants. However, the training for these positions is rigorous and the attrition rate from classes can reach 50 percent. In some cases, this means the utility may invest as much as \$100,000 to train and pay the salary of someone for a year, only to have the worker drop out when they realize that the work is too demanding or not to their liking.

The UPCT program benefits the utility by creating a pool of qualified candidates for entry-level utility positions and by screening applicants for motivation and commitment. The program exposes trainees to the realities of various career options available within the utility through bi-weekly training sessions. This allows trainees to experience different types of work before they choose a specific job classification or commit to a longer-term training track. The 18-month program also serves, in some respects, as a probationary period during which instructors can assess trainees’ motivation, aptitude, and commitment. By the end of the training period, trainees have demonstrated whether they will make good permanent employees and which jobs they are most

10 Strathmann, Cynthia. Memo to Roxana Tynan, Los Angeles Alliance for a New Economy, Los Angeles, CA. July 19, 2012

11 Strathmann, Cynthia, (2012). Clean Power, Good Jobs: Realizing the Power of Energy Efficiency in Los Angeles. Prepared by Los Angeles Alliance for a New Economy for RePower LA.

suited for. As Aram Benyamin states, “This way you see a lot more of their aptitudes, you can screen them, you’ve seen a lot more how they work and what their strengths and weaknesses are. We try to shore up the weaknesses and put them in the right fit up front.” The utility hopes that this will cut down on costly attrition rates in the apprenticeship programs.

Finally, the utility benefits from the fact that the UPCT position assists them in implementing energy efficiency programs affordably and effectively. The position has been negotiated as a pre-civil service job classification with lower wages than the entry-level helper class of permanent employees. Trainees are provided with high-quality training and the work they do is supervised by journey-level utility workers. This allows a high level of quality control and ensures that the utility actually meets its energy savings goals. LADWP’s experience with this cost-effective way to implement the low-income residential weatherization program has led it to plan to expand the model into energy efficiency programs for small businesses, as well as other clean energy and energy efficiency programs.

Finally, one of the great advantages of the program is that it enables the utility to interface directly with customers and improve customer services, which builds support for the utility generally and for expanding energy efficiency programs. Aram Benyamin puts it this way: “This is not about just efficiency, it’s more customer service, and reliability and all those things that come out of the relationship with the customers. We haven’t done a good job on this in the past, but it’s an opportunity for us.”

TRAINEES

The UPCT program provides on-the-job training, along with classroom instruction and online learning. This earn-while-you-learn program enables trainees to gain valuable work experience and earn a living while being introduced to the various career opportunities within the utility. It also

gives trainees a chance to prepare for and qualify for the civil service examinations that lead into long-term career paths with the utility. The program includes basic skills training and mentorship, enabling those without a construction background to gain the skills needed for success in the entry-level helper classifications.

“[The UPCT program] represents a new network for unemployed community members from low-income communities of color, that didn’t previously exist.”



L.J. Davis, participant in the first class of Utility Pre-Craft Trainees

—Elsa Barboza, SCOPE

Providing trainees with a paycheck while they prepare for the civil service exams is a key way in which the UPCT program opens the door for young people and workers who might not otherwise have had access to a utility career. Trainees report that earning a steady paycheck is one of the big advantages of the program. One trainee, who was previously working in sales, reported that he could “sleep better at night” knowing that he was earning a steady wage, while another mentioned that the job provided the security he needed to feel ready to start a family. Many other trainees also reported greater peace of mind because they are able to support themselves and their families.

Trainees’ wages are lower than those of permanent utility employees, but at \$16 an hour plus health benefits, trainees are making considerably more than most workers doing

residential weatherization through other providers. The federal Weatherization Assistance Program, which funded the initial round of work by UPCTs, requires contractors to pay prevailing wages, but because this work is in the low-cost residential construction sector, the prevailing wage for weatherization workers is lower than for other trades. In contrast with the UPCT program, in which energy efficiency measures are installed by the utility employees, low-income weatherization programs implemented through California's investor-owned utilities are contracted out and many components are further subcontracted through a variety of vendors. These programs have no wage standards and training opportunities for installers are less comprehensive. Some contractors pay piece rate for measures installed or customers enrolled, resulting in wages as low as \$50 to \$70 per day.¹²

Another benefit that the UPCT program provides to workers is a sense of satisfaction in the work they are doing. Trainees report a sense of pride in their work because of the new skills they are learning, but also because they are contributing to their community and to protecting the environment. Trainee Casey Garland comments, "You always want to do something in life to help other people and this, in all honesty, is saving people money and helping them live more comfortably...it makes you feel good." Another trainee, Ricardo De Los Santos states, "You hear everything in the news about global warming and how we need to be more energy efficient. This means helping out the customer and helping out the power company by not using so much power. Also, for me it's just helping out the customer and the community in the long run." Weatherization workers get a chance to personally connect with the customers they are serving and they are rewarded by the gratitude of the homeowners receiving weatherization services.

UNION

An obvious advantage of the UPCT program is that it enables the utility to expand its work in weatherization and other energy efficiency programs. However, the program has other important benefits to the union, including strengthening its ties with the communities it serves and ensuring a trained workforce for the future. The program also sets training and job quality standards in an emerging sector of the economy. The LADWP's energy efficiency portfolio is extensive and not all of the work is appropriate for entry-level Department employees, nor does the Department expect to have the capacity to carry out more than a portion of the energy efficiency work. However, UPCT and IBEW Local 18 participation in energy efficiency work means that job quality and training standards shape expectations for private contractors who might otherwise take a low-road approach, particularly in the residential and small business segment of the market.

Journey-level workers are involved in supervising the weatherization work done by UPCTs, but are also involved in the training and mentoring of program participants. Although the utility apprenticeship programs are traditionally based on teaching and learning on the job, the UPCT program demands a greater degree of mentorship from journey-level workers, as many UPCT recruits have little or no experience working in construction. This is a new role for many utility workers, but Brian D'Arcy sees this as a positive change that is easing a path into utility trades for a new generation of young workers. "We are slowly changing our culture. Now we're encouraging journey-level workers to act as teachers and mentors and support trainees through learning the basics."

12 Zabin et al. (2011), p. 107

COMMUNITY AND ENVIRONMENTAL GROUPS

The RePower LA coalition partners aim to increase investment in efficiency in order to reduce Los Angeles’s dependence on dirty energy and also to help struggling residents, schools, and small businesses save money by reducing their energy use. They also want to ensure that this investment will create jobs and economic opportunities for low-income residents. The UPCT program has proven to be a key component of realizing the RePower LA coalition’s goals as it provides high-quality entry-level jobs for disadvantaged workers and also helps expand energy efficiency programs in Los Angeles.

RESPONDENTS RATING EACH A HIGH PRIORITY FOR LA	%
Reduced smog and air pollution	82
Career path job opportunities	80
Help people save money on electric bills	80
Reduce traffic congestion	78

The coalition’s aims have broad support from Los Angeles residents across the political spectrum. A recent poll conducted by Goodwin Simon Strategic Research found that 86 percent of residents believe that RePower LA’s efforts to support programs like the UPCT program are good for Los Angeles. This is likely because the program aligns with many voters’ highest priorities.¹³

The poll results underscore the importance of the utility investing in a balanced portfolio of programs that focus not only on large energy users, but also help smaller customers who really benefit from reduced energy costs. The coalition’s hope is that in addition to reducing Los Angeles’s dependence on fossil fuels and lowering utility bills for low-income customers and small businesses, increasing investment in

efficiency will also create jobs and economic opportunities for residents. Jessica Goodheart, Director of the RePower LA Project at the Los Angeles Alliance for a New Economy, noted that, “The polling results confirmed what we’ve found in our organizing. People in every part of the city want energy efficiency programs, not just on the Westside or in the Hollywood Hills—and they are particularly excited to know that these programs will be creating good jobs for local residents.” The UPCT program has proven to be a key component of realizing the RePower LA coalition’s goals as it provides high-quality entry-level jobs for disadvantaged workers and also helps expand energy efficiency programs in Los Angeles.

The UPCT program has been successful in reaching workers from disadvantaged and low-income communities, which is a major goal of community advocacy groups involved in the coalition, such as SCOPE, Venice Youth Build, Communities for a Better Environment, A New Way of Life Reentry Project, Koreatown Immigrant Workers Alliance, Strategic Actions for a Just Economy, and Concerned Citizens of South Central Los Angeles. Among initial recruits, 65 percent of trainees came from communities with rates of unemployment at least 50 percent above the average in Los Angeles County.¹⁴ As the program expands, the coalition intends to do further outreach in target communities.

In the past, LADWP’s energy efficiency efforts have focused on providing rebates to customers who install more efficient equipment. Evan Gillespie, of the Sierra Club, points out that historically these programs have been undersubscribed and thus failed to achieve the intended energy savings. Rebates for equipment also leave open the question of whether that equipment was installed and maintained properly. The benefits of such programs are also inequitably distributed, as only customers who are able to invest a great deal of their own resources are able to take advantage of the

13 Goodwin, P. (2012). Key Findings from Survey of L.A. City Voters on RePower LA. Memorandum, May 18, 2012. Goodwin Simon Strategic Research.

14 LAANE. Utility Pre-Craft Trainee Recruitment and Demographic Patterns at the Los Angeles Department of Water and Power. February 16, 2012.

programs. Environmental partners in the RePower Coalition, including the Sierra Club, have focused not only on increasing the total energy efficiency budget at LADWP, but also on making sure that more of the programs provide direct installation of energy efficiency measures, making them more accessible to low-income customers and small businesses. Keeping a portion of energy efficiency work within the purview of utility workers means that installers are well-trained and the quality of work can be carefully monitored to ensure full realization of energy savings. The UPCT program is an important component of implementing these new direct install programs.

A critical aspect for residents is that RePower LA is going to help “people struggling the most in this economy—small businesses and low income families who cannot afford energy conservation on their own.” Two out of three residents said this was “very important” to them in deciding how they feel about the plan.

(Source: Goodwin Simon Strategic Research; see footnote 13)

CONCLUSIONS

IMPLICATIONS FOR STATE POLICY AND REPLICATION

The UPCT program provides a model of an entry-level training program that serves the needs of the utility employer and the worker-trainees, as well as furthering the goals of labor, community, and environmental stakeholders. It is an example of a program that leverages existing workforce development infrastructure to provide solid career-oriented training that is accessible to participants from diverse backgrounds. The program is also an innovative means of affordably in-sourcing energy efficiency work, allowing the utility and union to expand their capacity in this area and better control the quality of service provided through ratepayer investment. All these factors make the UPCT program an important example that could be replicated in whole or in part at other utilities and unions around the state.

The Los Angeles Department of Water and Power is not the only utility that faces the issues of an aging workforce and the need to update energy systems and expand energy efficiency services. In fact, these are national concerns. In 2008, over half the utility workforce nationwide was over the age of 45.¹⁵ When these workers retire, utilities will experience a huge loss of knowledge and experience. Therefore, in order to ensure a smooth transition to a new generation of workers and ensure that new workers have the skill sets they need for 21st Century energy systems, it is important that strong programs, like the UPCT model, be put in place as soon as possible to provide high-quality training for entry-level workers.

Some keys to the UPCT program’s success include: the structure and content of the program, the involvement of the utility workers’ union, the commitment of the employer

¹⁵ Bureau of Labor Statistics, U.S. Department of Labor, Career Guide to Industries, 2010-11 Edition, Utilities, on the Internet at <http://www.bls.gov/oco/cg/cgs018.htm> (cited in LAANE, Clean Power Good Jobs, Feb 2012).

to open up long-term career options and continue funding the program, and the inclusive process by which the program was developed. The program enables participants to earn a paycheck and provides training beyond the narrow skills needed to do weatherization work, setting participants up for long-term success. The fact that IBEW Local 18 took the lead on developing and implementing the program means that the training is high-quality and specifically prepares workers for longer-term apprenticeship training.

Perhaps most importantly, the UPCT program was developed through a multi-stakeholder process that forged meaningful connections between diverse organizations and makes great strides toward achieving the multiple goals of the various stakeholders. As a result, the program has support and buy-in from the wider community as well as a strong network of partners participating in program implementation and advocacy. Forging ongoing working relationships allowed all partners to see beyond their own interests and embrace a larger vision and set of goals.

The UPCT program arose in Los Angeles in a unique context that brought together the largest municipal utility in the nation, a strong utility union, and a highly engaged community of environmental, community, and workforce stakeholders. However, utilities and unions that face the questions of how best to train entry-level workers and how to implement cost-effective, high-quality direct installation energy efficiency programs have much to learn by using the UPCT program as a model.



UC Berkeley Center for Labor Research and Education

*Institute for Research on Labor and Employment
University of California, Berkeley
2521 Channing Way, #5555
Berkeley, CA 94720-5555
510.642.6432
<http://laborcenter.berkeley.edu>*

The Center for Labor Research and Education (Labor Center) is a public service project of the UC Berkeley Institute for Research on Labor and Employment that links academic resources with working people. Since 1964, the Labor Center has produced research, trainings, and curricula that deepen understanding of employment conditions and develop diverse new generations of leaders.



UC BERKELEY
**LABOR
CENTER**

The views expressed in this report are those of the authors and do not necessarily represent the Regents of the University of California, the UC Berkeley Institute for Research on Labor and Employment, The Hewlett Foundation, or collaborating organizations or funders. Copyright © 2013 by the Regents of the University of California. All rights reserved.