

# Creating Green Career Pathways: Sustainable Careers and Economic Development

## Lessons from the Field

Hop Hopkins – LA Conservation Corps

Dorsey Moore – Sustainability for All



LA CONSERVATION CORPS

3 February 2012

# Los Angeles Conservation Corps

- Founded in 1986, the primary mission of the LA Conservation Corps (LA Corps) is to provide at-risk young adults and school-aged youth with opportunities for success by providing them with job skills training, education, and work experiences with an emphasis on conservation and service projects that benefit the community.



LA CONSERVATION CORPS

# Vocational Services

- The Vocational Services Department of the Los Angeles Conservation Corps is a bridge between high school graduation and living wage employment.
- Our goal is to primarily train at-risk young adults in emerging green fields through classroom and on the job training opportunities.



LA CONSERVATION CORPS

# Green Job Training Plan

Develop advanced career technical education programs that build on the existing LA Corps programs

- Energy Auditing
- Water Efficiency Job Training
- Solar and Weatherization
- Wildlands Firefighting Recovery Team
- Brownfields/Environmental Remediation



LA CONSERVATION CORPS

# Green Strategy Criteria

- Mission alignment
- Build on “corps” model:
  - Academic education
  - Career technical education
  - Paid on-the-job-training community service projects
- Sustainable
  - Industry driven demand
  - funding
- Initial focus on:
  - Weatherization/energy efficiency
  - Solar photovoltaic
  - Water conservation



LA CONSERVATION CORPS

# Green Strategy – Approach

1. Plug into existing state-funded programs
2. Collaborate with local professional providers
3. Develop new local programs



LA CONSERVATION CORPS

# SWOT Analysis

	Positives	Negatives
Internal	<p><b>Strengths</b></p> <ol style="list-style-type: none"> <li>1. Strong project experience</li> <li>2. Licensed General Contractor</li> <li>3. Access to funders</li> <li>4. Existing Infrastructure (assets)</li> <li>5. Relationships with partners</li> <li>6. Corps training model</li> <li>7. Ability to adapt</li> <li>8. Knowledgeable &amp; innovative staff and programs</li> </ol>	<p><b>Weaknesses</b></p> <ol style="list-style-type: none"> <li>1. Limited training and project experience in solar, WX/EE and water conservation</li> <li>2. Limited unrestricted funds for new program development</li> <li>3. Not well known in industries</li> <li>4. Limited collaboration with private sector firms</li> </ol>
External	<p><b>Opportunities</b></p> <ol style="list-style-type: none"> <li>1. Grant funding (public &amp; private)</li> <li>2. Funding donations</li> <li>3. Jobs for corpsmembers in emerging industries</li> <li>4. Collaboration with existing partners</li> <li>5. ARRA funding</li> </ol>	<p><b>Threats</b></p> <ol style="list-style-type: none"> <li>1. Competition (private industry)</li> <li>2. Economy</li> <li>3. ARRA funding</li> <li>4. LA Department of Water &amp; Power</li> <li>5. Prevailing wage</li> <li>6. Labor/unions</li> </ol>

# Solar Photovoltaic - Intro

- The Solar Training Program was established through the generous grants of Southern California Edison, RoseHills Foundation, and the Los Angeles Community College District. The program focus is to train 18-24 year olds in the theory of photovoltaic and solar thermal systems, allow them to practice hands-on installation techniques, and then pair them with industry professionals to install residential and commercial systems for on-the-job training.
- LA Corps has partnered with Los Angeles Trade Tech College for classroom and laboratory training. Additionally,
- LA Corps is participating in installations with Solar Industry partners PermaCity, Grid Alternatives, and SolarCity.



LA CONSERVATION CORPS



# Solar Photovoltaic – Program Model Overview



LA CONSERVATION CORPS

# Solar Photovoltaic - Successes

## Program model graphic with successes

- Training (classroom: LATTC, SfA; OJT: GRID Alternatives, SfA)
- Project Partners (GRID Alternatives, County Parks, CBS Television, LA Housing Partnership)
- Private Sector Collaborator (PermaCity, SolarCity, CA PowerSave)
- Funding (grants, earned income): Edison, Rose Hills Foundation, AmeriCorps California Energy Service Corps
- Funding: Private grants: \$300K; AmeriCorps: \$50K; earned income \$120,000 = \$470K



LA CONSERVATION CORPS

# Solar PV – Lessons Learned

- Takes time to develop a quality program given the technical nature of the industry; quality assurance
- Training
  - Need to develop corpsmember appropriate accelerated classroom training;
  - Low-income residential training projects;
  - Helpful to have OJT technical trainer on roof to help support supervisor and CMs
- Projects
  - Establish well-defined roles
- Private Sector Collaborator
  - Need to bring something to the table: money or projects
  - Stay in regular communication and ask for their input every step of the way
  - Not all PV integrators are good partners
- Funding
  - “Slack” funding is important to develop new projects and programs
  - If possible, beneficial to be General Contractor on project



LA CONSERVATION CORPS

# Solar PV – Next Steps

- Continue to develop in-house technical expertise
- Continue relationship development with PV integrators
- Position corps to be ongoing source of “community labor” for projects
- New solar project development
- Develop a regional conservation corps collaboration to achieve “scale”



LA CONSERVATION CORPS

# LA Corps – Solar Strategy Overview

2010	2011	2012
Developed solar installation training program	Developed business plan for regional solar training program	Continue regional solar training program (& expand to other local corps state-wide)
Individual Solar Projects -Low-income residential (single-family) -Municipal (Obregon Park) -Commercial (CBS)	Individual Solar Projects -Low-income residential (single-family) -Low-income multi-family (Hojas)	Develop additional fee-for-service solar installation projects (partnering w/ firms) -Create niche market in low-income market



LA CONSERVATION CORPS

# Weatherization/Energy Efficiency – Program Model



LA CONSERVATION CORPS

# WX/EE - Successes

- **Program model graphic with successes**
- Training (DOE standardized training – 3 weeks)
- Project Partners (Long Beach Community Action Partnership & CCC)
- Private Sector Collaborator (HVAC subcontractors & PECCI)
- Funding (State contracts/earned income, CEC, AmeriCorps & foundation grants)
- 



LA CONSERVATION CORPS

# WX/EE – Lessons Learned

- Be careful what you wish for
- Weatherization/Energy Efficiency is very technical
- Low-income WX/EE programs are very administratively complicated
- Private Sector Collaborator
  - Conservation corps brand is of value
  - Having a General Contractors license is of great value
  - Just because it sounds cool in a proposal doesn't mean that it will work
  - Be ready to learn quickly and adapt program quickly
- Funding
  - Having “slack” funding and a line of credit is critical to cash flow
  - Understand the level of financial risk ahead of time



LA CONSERVATION CORPS



# WX/EE – Next Steps

- Learn - Continue to develop in-house technical expertise and experience
- Diversify - Position corps to be a contractor for other WX/EE programs
- Continue to develop internship and apprenticeship opportunities for corpsmembers
- Develop service related marketing tools



LA CONSERVATION CORPS

# LA Corps – WX/EE Strategy Overview

2010	2011	2012
Individual WE/EE Projects	Become proficient at DOE/LIHEAP WX Program	Continue DOE/LIHEAP WX Program
Develop DOE/LIHEAP Weatherization Program	Research becoming utility low-income contractor to maximize: <ul style="list-style-type: none"> <li>-Services to residents</li> <li>-Funding diversity &amp; revenue</li> </ul>	Become utility low-income contractor
	Researched & evaluated Energy Upgrade CA Program <ul style="list-style-type: none"> <li>-Subcontractor</li> <li>-Contractor</li> </ul>	



# Water Conservation – Program Model



LA CONSERVATION CORPS

# Water Conservation - Successes

- Training (classroom: Generation Water, Atlas Green Works, CA Tree Academy, SEIU 720 (Worker Education Research & Training), ARCOSA, Terrasophia SfA; OJT: ARCOSA, G3)
- Project Partners (Northeast Trees, Council for Watershed Health, LBCAP, Shippley Nature Center, LA Housing Partnership)
- Private Sector Collaborator (Terrasophia, GIC, G3 )
- Funding (public and private grants)



LA CONSERVATION CORPS

# Water Conservation – Lessons Learned

- Water Conservation is a very diverse industry sector
- Training
  - Need to develop skill-based corpsmember appropriate accelerated classroom training;
  - Helpful to have OJT technical trainer on site to help support supervisor and CMs
- Projects
- Private Sector Collaborator – Not many existing firms since new industry
- Funding
  - “Slack” funding is important to develop new projects and programs



# Water Conservation – Next Steps

- Continue to develop in-house technical expertise
- Continue to develop fee-for-service opportunities
- Continue to develop internship and apprenticeship opportunities for corpsmembers
- Develop service related marketing tools



LA CONSERVATION CORPS

# LA Corps – Water Conservation Strategy Overview

2010	2011	2012
Research water conservation training programs	Develop rainwater harvesting (RWH) training program	Expand RWH training program to other local corps
Secured funding for training program development	Complete demonstration RWH grant projects -LBCAP -Shippley Nature Center	Develop fee-for-service RWH program (residential & non-residential)
Completed individual water conservation projects (RWH, grey water, xeriscaping)	Research & develop other water conservation projects	



LA CONSERVATION CORPS

# Thank You

Hop Hopkins – [hhopkins@lacorp.org](mailto:hhopkins@lacorp.org)



LA CONSERVATION CORPS