Creating Green Career Pathways: Sustainable Careers and Economic Development

Lessons from the Field

Hop Hopkins – LA Conservation Corps
Dorsey Moore – Sustainability for All

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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.
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.
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
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
Green Strategy – Approach

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

<table>
<thead>
<tr>
<th>Internal</th>
<th>Positives</th>
<th>Negatives</th>
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</table>
| **Strengths** | 1. Strong project experience  
2. Licensed General Contractor  
3. Access to funders  
4. Existing Infrastructure (assets)  
5. Relationships with partners  
6. Corps training model  
7. Ability to adapt  
8. Knowledgeable & innovative staff and programs | **Weaknesses** | 1. Limited training and project experience in solar, WX/EE and water conservation  
2. Limited unrestricted funds for new program development  
3. Not well known in industries  
4. Limited collaboration with private sector firms |

<table>
<thead>
<tr>
<th>External</th>
<th>Opportunities</th>
<th>Threats</th>
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</table>
| **Opportunities** | 1. Grant funding (public & private)  
2. Funding donations  
3. Jobs for corpsmembers in emerging industries  
4. Collaboration with existing partners  
5. ARRA funding | **Threats** | 1. Competition (private industry)  
2. Economy  
3. ARRA funding  
4. LA Department of Water & Power  
5. Prevailing wage  
6. Labor/unions |
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.
Solar Photovoltaic – Program Model Overview
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
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
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 Corps – Solar Strategy Overview

<table>
<thead>
<tr>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developed solar installation training program</td>
<td>Developed business plan for regional solar training program</td>
<td>Continue regional solar training program (&amp; expand to other local corps state-wide)</td>
</tr>
</tbody>
</table>
| **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
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 & PECI)
- Funding (State contracts/earned income, CEC, AmeriCorps & foundation grants)
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
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 Corps – WX/EE Strategy Overview

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<th>2012</th>
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<tr>
<td>Individual WE/EE Projects</td>
<td>Become proficient at DOE/LIHEAP WX Program</td>
<td>Continue DOE/LIHEAP WX Program</td>
</tr>
</tbody>
</table>
| Develop DOE/LIHEAP Weatherization Program | Research becoming utility low-income contractor to maximize:  
- Services to residents  
- Funding diversity & revenue | Become utility low-income contractor |
|                                           | Researched & evaluated Energy Upgrade CA Program  
- Subcontractor  
- Contractor |                                      |
Water Conservation – Program Model
Water Conservation - Successes

- Training (classroom: Generation Water, Atlas Green Works, CA Tree Academy, SEIU 720 (Worker Education Research & Training), ARCSA, Terrasophia SfA; OJT: ARCSA, 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)
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 Corps – Water Conservation Strategy Overview

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<td>Research water conservation training programs</td>
<td>Develop rainwater harvesting (RWH) training program</td>
<td>Expand RWH training program to other local corps</td>
</tr>
<tr>
<td>Secured funding for training program development</td>
<td>Complete demonstration RWH grant projects -LBCAP -Shippley Nature Center</td>
<td>Develop fee-for-service RWH program (residential &amp; non-residential)</td>
</tr>
<tr>
<td>Completed individual water conservation projects (RWH, grey water, xeriscaping)</td>
<td>Research &amp; develop other water conservation projects</td>
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*LA Conservation Corps*
Thank You
Hop Hopkins – hhopkins@lacorp.org