

# CALIFORNIA EMERGING TECHNOLOGY FUND

Please email your organization profile to [info@cetfund.org](mailto:info@cetfund.org).

## ORGANIZATION PROFILE: LOS ANGELES INFRASTRUCTURE ACADEMY JUNE 29, 2007

### – ORGANIZATION AND PROJECT OVERVIEWS –

Name of Organization	<b>LOS ANGELES INFRASTRUCTURE ACADEMY</b>	
Name(s) of Principal(s) and Complete Titles	Marcus Castain, Associate Director for Education, Youth, and Families, Office of Mayor Antonio Villaraigosa Pamela Porter, Assistant General Manager for Workforce Development, Los Angeles Department of Water and Power	
Contact Information (complete)	Marcus Castain Office of Mayor Antonio Villaraigosa 200 North Spring Street, Room 303 Los Angeles, CA 90012 <a href="mailto:marcus.castain@lacity.org">marcus.castain@lacity.org</a> (213) 978-0756 fax (213) 978-0775	Pamela Porter Department of Water and Power 261 S. Figueroa Street, Suite 120 Los Angeles, CA 90012 <a href="mailto:Pamela.porter@ladwp.com">Pamela.porter@ladwp.com</a> (213)367-8603 fax (213)367-8602
Name of Program or Project (if different from organization)		
Geographic Location or Focus of Program or Project	Eventual goal will be to be multi-site in urban areas in California including Greater Los Angeles, San Diego, and San Francisco Bay Area Year 1 launch will consist of four sites in Los Angeles including South Los Angeles (sited at LA Trade Tech College), Boyle Heights/Eastside (Roosevelt High School), East San Fernando Valley, and either Watts or Hollywood/Central Los Angeles.	
Demographic Overview of Focus Community or Population	Los Angeles is home to some of the most at-need communities in the state. We will target high school juniors and seniors from LA's neediest high schools. We will also engage their families and communities. Across the entire Los Angeles Unified School District (LAUSD), LAUSD's demographics are sobering: <ul style="list-style-type: none"> <li>• High School Drop-out Rate: ~50%</li> <li>• Percent on Free &amp; Reduced Lunch: 76%</li> <li>• Ethnic Enrollment: Latino 73%, Black 11%, White 9%, Asian 4%, Filipino 2%</li> <li>• Percent of Students in a Year 5, Program Improvement School: 45%</li> </ul>	

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<p>Description of Program or Project named above</p> <ul style="list-style-type: none"> <li>o Goals</li> </ul>	<p>The mission of the LA Infrastructure Academy is to build a pipeline of diverse, well-qualified, young people to enter the civil infrastructure field and place them into careers. Utilizing an extended day/summer/Saturday model, the Academy will prepare high school students for careers with the employers and unions who build and maintain our infrastructure including the utilities (focus for year 1), telecommunications (likely to be the first industry expansion beyond utilities), civil construction, and transportation.</p> <p>In focusing on this workforce development issue we will simultaneously address several other important challenges facing Los Angeles (and priorities of Mayor Antonio Villaraigosa):</p> <ul style="list-style-type: none"> <li>• <i>Education Reform:</i> Creation of “multiple pathways” to success that do not require a student to immediately go to college will increase student motivation. A survey of high school drop-outs funded by the Gates Foundation found that 81% of drop-outs said that they wanted to see a connection between school and work. Our program will illustrate that connection and require ongoing performance and graduation from school in order to finish the program and begin a job.</li> <li>• <i>Economic Development:</i> Jobs in the utilities pay well. Entry-level employees in the “skilled trades” make \$30,000 per year and, after completing a two to four year apprenticeship, a journeyman-level employee can make \$50,000 and above. With overtime, experienced skilled tradespeople can make well over \$100,000 annually. Through this program, we will channel high-paying jobs towards communities that have traditionally had limited access to these jobs. This will help develop middle class communities in Los Angeles.</li> <li>• <i>Digital Inclusion:</i> The Academy will use start-of-the-art technologies including a Learning Management System to deliver content and monitor student progress, online games such as SimCity, podcasting, interactive communications with mentors across the region and nationally, and, of course, e-mail and productivity tools. We will equip every student with a laptop and broadband access.</li> <li>• <i>Gang Prevention:</i> As Father Greg Boyle of Homeboy Industries often says “Nothing stops a bullet like a job.” Engaged young people are far less likely to participate in illegal and unproductive behavior. We will locate some of our sites in the City’s “Gang Reduction Zones” (such as Hollenbeck/Boyle Heights) which will provide meaningful extended day, Saturday, and summer activities for high school juniors and seniors.</li> <li>• <i>Environmental Awareness:</i> In the future energy, water, and transit systems will all have to be “greener.” Infrastructure strategies will have to include renewable resources, lower emissions, less waste, and mass transit. The generational changeover of this workforce provides a unique opportunity to inculcate a strong sense of environmental responsibility and stewardship in the next generation of the workforce.</li> </ul>
<ul style="list-style-type: none"> <li>o Objectives</li> </ul>	<p>The objective is to place young people into careers in civil infrastructure (or college studying a related discipline such as power engineering or water management). We anticipate program completion rates of 80% (of those who start) and placement rates of 80% (of those who finish the program).</p>
<ul style="list-style-type: none"> <li>o Strategies</li> </ul>	<p>We will offer a two-year program targeting high school juniors and seniors and preparing them for entry into careers. Following placement, we will support them on an ongoing basis. Following is the program model:</p>

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<p>○ Actions</p>	<p>Specific actions will occur within the two-year program itself. These Academies will offer (and require) a range of activities including project-based learning activities, academic courses in the utilities (offered by LA Trade Tech), community service projects, paid internships, technology simulations, and so on.</p>																				
<p>○ Outcomes</p>	<p>We anticipate significant increases in student engagement, motivation, and performance across multiple dimensions:</p> <ul style="list-style-type: none"> <li>• Career placements into well-paying jobs which offer living wages and benefits</li> <li>• Entry into Higher Education and participation in the employers' tuition reimbursement program</li> <li>• Student engagement and participation in school</li> <li>• Student and family engagement in the lives of their communities (primarily through structured community service)</li> <li>• Closing the "digital divide" by creating tech-savvy and equipped students and families</li> <li>• Development of life and social skills including interviewing, personal management, getting a job, developing a resume, public speaking, financial management, etc.</li> <li>• Improvements in student achievement, school participation, behavior</li> </ul>																				
<p>○ Brief History (when was the organization founded or</p>	<p>The LA Infrastructure Academy was founded by Marcus Castain and Pamela Porter. Marcus, as Associate Director of Education, Youth, and Families for Mayor Antonio Villaraigosa, was focused on the creation of career opportunities for young people. Pamela, as Assistant General Manager for Workforce Development for the Department of Water and Power (DWP), was concerned with a retiring baby boom workforce and the need to develop and train a new workforce to deliver electricity and water to LA's 4 million residents. We</p>																				

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<p>when was the program launched?)</p>	<p>quickly realized that we were working on different sides of the same problem as young people from underserved areas in Los Angeles could be trained to fill the high-wage career opportunities that DWP and the other utilities offer. We also realized that this solution could easily be adapted into other industry areas including telecommunications, civil construction, transit construction, and international trade and logistics and into other geographies. We began building the partnerships in March and Mayor Villaraigosa will formally launch this program in September.</p>																																																
<p>o Size and Magnitude of Program or Project</p> <ul style="list-style-type: none"> <li>▪ Number of People Served, Involved, Impacted</li> </ul>	<p>We will grow the program as rapidly as possible while ensuring a high level of program quality. Following are the assumptions for program growth (note that a full cycle consists of two years):</p> <table border="1" data-bbox="415 477 1997 813"> <thead> <tr> <th></th> <th>Pilot</th> <th>Summer</th> <th>Academic Year</th> <th>Summer</th> <th>Academic Year</th> <th>Summer</th> <th>Academic Year</th> <th>Summer</th> <th>Academic Year</th> <th>Summer</th> <th>Academic Year</th> </tr> <tr> <th></th> <th>Jan - May 08</th> <th>2008</th> <th>2008-09</th> <th>2009</th> <th>2009-10</th> <th>2010</th> <th>2010-11</th> <th>2011</th> <th>2011-12</th> <th>2012</th> <th>2012-13</th> </tr> </thead> <tbody> <tr> <td><b>Total: Enrolled Seats</b></td> <td>150</td> <td>300</td> <td>440</td> <td>925</td> <td>820</td> <td>1,450</td> <td>1,300</td> <td>1,975</td> <td>1,780</td> <td>2,425</td> <td>2,200</td> </tr> <tr> <td><b>Total: Program Completers (each term)</b></td> <td>120</td> <td>258</td> <td>308</td> <td>806</td> <td>574</td> <td>1,268</td> <td>910</td> <td>1,729</td> <td>1,246</td> <td>2,126</td> <td>1,540</td> </tr> </tbody> </table>		Pilot	Summer	Academic Year	Summer	Academic Year	Summer	Academic Year	Summer	Academic Year	Summer	Academic Year		Jan - May 08	2008	2008-09	2009	2009-10	2010	2010-11	2011	2011-12	2012	2012-13	<b>Total: Enrolled Seats</b>	150	300	440	925	820	1,450	1,300	1,975	1,780	2,425	2,200	<b>Total: Program Completers (each term)</b>	120	258	308	806	574	1,268	910	1,729	1,246	2,126	1,540
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<ul style="list-style-type: none"> <li>▪ Annual Budget, Percentage of Earned Income and Staff</li> </ul>	<p>This is a new organization.</p> <p>Our pro forma budget anticipates costs of \$1.5 million in FY 2007-08 and \$2.7 million in FY 2008-09.</p> <p>In the beginning the Academy will depend on grants from employers, labor, foundation, and city, state, and federal grants. After the first few years, the business model will shift to earned income by charging a fee for every individual that the employer hires.</p>																																																
<ul style="list-style-type: none"> <li>▪ Funding Sources and Partners</li> </ul>	<p>We anticipate significant funding from the "Founding Partners": Los Angeles Department of Water and Power, Metropolitan Water District, and Southern California Gas Company. In addition to funding, we have discussed Board participation, union engagement, curriculum sharing, mentorships, internships, and job placements with each of these major employers. In future years, we will add major industry partner as we move into telecommunications and other industries. We are also applying to other philanthropic funders including the Durfee Foundation, Irvine Foundation and New Schools Venture Fund as well as California state funding for Career &amp; Technical Education.</p>																																																
<p>o Results and Evidence of Success</p> <ul style="list-style-type: none"> <li>• Metrics for Evaluation</li> </ul>	<p>This is a start-up organization so we do not yet have results. We will gather extensive data and continually track student progress through the program and afterwards as they become alumni and employees.</p> <p>See the outcomes section for the kind of metrics we will track.</p>																																																

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<p><b>Progress</b></p> <ul style="list-style-type: none"> <li>• Change in Outcomes or Metrics Over Time</li> <li>• How long does it take to secure results for the program above?</li> </ul>	<p>We expect to continually improve the metrics as we learn more about the students and improve the program.</p> <p>The program is a two-year cycle which we will run in cohorts. After each term, we will incorporate new program design changes to improve the results for the following year's cohort.</p>
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Note: By submitting the Organization Profile you are agree that the:

- Your Organization expressly grants permission to post the submitted information in a public area of the CETF website,
- Statements and representations made about your non-profit are true and contain falsehoods, and
- Your Organization will keep the information updated either on its own or at the prompting of CETF to ensure that it remains true and accurate reflects the current status and historical operating results of your organization.

You also give CETF the right to share the information with its Board, officers, employees and agents in printed documents as the Fund seeks to share examples.

Please email your organization profile to [info@cetfund.org](mailto:info@cetfund.org).