

GREEN ZONES AND GRASSROOTS

How California's Climate Investments Benefit Los Angeles County's Disadvantaged Communities



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Executive Summary

Green Zones and Grassroots analyzes how California's investments to fight global warming have impacted low-income communities of color—or environmental justice communities—in Los Angeles County during the first few years of implementation. We find that most (but not all) of the California Climate Investment (CCI) programs have come close to meeting their goals by targeting expenditures and related economic and health benefits to legally defined “disadvantaged” communities. However, there is even greater potential if program administrators work closely with grassroots community-based groups to expand the participation of low-income residents in these groundbreaking programs to help transform toxic hotspot neighborhoods into sustainable, healthy, and “green” communities.

This report provides information for California environmental agencies to help them meet legislative mandates to provide additional benefits to disadvantaged communities such as resident cost savings, improved public health (through reduced air pollution), public safety, and related job growth. It also highlights best practices

in community outreach and how to effectively evaluate and prioritize community participation in projects awarded cap-and-trade funding. We hope that community advocates will find the report a valuable resource that provides detailed analyses of how programs can be further strengthened to advance social equity priorities (e.g., including better job training and career pathways; reducing language, cost, and application barriers; and addressing tenant needs).

Green Zones and Grassroots also identifies the threat of direct and indirect displacement of low-income people from Los Angeles' neighborhoods as investments in transit-oriented neighborhoods increase real estate values. We urge consideration of proactive measures such as targeted community economic development, increased spending on affordable housing for very low-income families, and the need to prioritize program investments in municipalities with strong protections for tenants.



Section 1: California Climate Investments (CCI) in Los Angeles County

This section presents “dashboards”—or visual snapshots of 13 CCI programs that include investment maps, key program elements, and funding information. The dashboards identify where investments are distributed in L.A. County and how significant the co-benefits are in disadvantaged communities. There are two broad types of programs and related recommendations:

1. Direct services and rebates directly accessible to low-income households.

Examples: Solar panel installations and clean vehicle rebates.

Recommendations include:

- Remove barriers to low-income markets with targeted disadvantaged community outreach strategies;
- Improve productivity of labor-intensive outreach through improved coordination across programs; and
- Seek direct community input to improve targeted recipients’ access to program benefits.

2. Project developments awarded funding through competitive programs.

Examples: Affordable housing development, transit infrastructure and operations, and urban greening.

Recommendations include:

- Improve incentives to stimulate the creation of economic and public health benefits in communities facing the greatest toxic exposure;
- Enhance program evaluation through increased transparency and improved tracking of program goals and intended benefits;
- Focus transit investment in transit-poor communities on lines with high rates of low-income ridership; and
- Adopt metrics that identify and reward increasing levels of community participation in the design and implementation of equitable and sustainable projects.



Section 2: Building Community Partnerships

In Section 2, we identify the capacities of grassroots community-based organizations (CBOs) operating in Los Angeles County that can improve the distribution of climate investments and help to ensure their transformative power. Some of these grassroots capacities and resources include:

- Strong networks to facilitate the extensive community outreach sought by program administrators;
- Expertise in building community leadership and establishing vibrant community partnerships for disadvantaged community stakeholders; and
- Experience developing crosscutting strategies that reduce carbon emissions, stimulate jobs, improve public health, save costs, and protect residents and businesses against displacement.



This section also features a set of best practices for community outreach informed by the experience of several L.A.-based environmental justice and grassroots organizations:

Communities for a Better Environment (CBE)
East Yard Communities for Environmental Justice (EYCEJ)
Pacoima Beautiful
Redeemer Community Partnership (RCP)
Strategic Concepts in Organizing and Policy Education (SCOPE)
Tenemos que Reclamar y Unidos Salvar la Tierra-South LA (T.R.U.S.T. South LA)
Union de Vecinos



- **Door knocking, although time-intensive, is the most effective method for program uptake**
- **Climate-themed events are effective at promoting multiple programs**
- **Discussions facilitated by CBOs between administrators and community members can build trust and help evaluate programs**
- **Focus groups can uncover strengths and obstacles in specific programs**
- **Connect services and incentives to important needs of the community**
- **A trusted organization opens many doors that would otherwise remain closed**
- **Provide people with a range of options to build interest and optimize door-to-door efforts**
- **Enable outreach staff to determine eligibility, provide application assistance, and approve on-site**
- **More time and repetitive visits are necessary for successful business outreach**

BEST PRACTICES FOR COMMUNITY OUTREACH

Section 2 also identifies exemplary community-led developments that serve as instructive models for the State’s new Transformational Climate Communities program, including an integrated design case study that illustrates community input and involvement strategies.

Section 3: Maximizing Equity— Discussion and Recommendations

The report culminates with a discussion of how to match the valuable expertise and experience of grassroots CBOs to improve upon the important benefits already achieved by California Climate Investment programs. We provide specific, actionable recommendations on how to:

- **Increase Community Benefits** by improving evaluation of programs, strengthening low-income stakeholders involvement in program design, and tracking progress towards equity goals.
- **Improve Program Outreach** through specific strategies learned by the extensive experience of grassroots CBOs.
- **Maximize Community Participation** through clearly defined partnerships with CBOs that can engage community networks and facilitate the creation of an informed and holistic community vision.



Community Participation Metric

Section 3 also recommends a **Community Participation Metric** to help state agencies identify and award progressive levels of community inclusion and suggests concrete examples of activities that can confirm authentic community consultation, collaboration, partnership and leadership.

<p>Community Consultation 25%</p> 	<p>Activity Examples Workshops, roundtable discussions, focus groups, surveys</p>
	<p>Requirements Documented record of activities and detailed notes of communication Evidence of how consultation influenced the final proposal</p>
<p>Community Collaboration 50%</p> 	<p>Activity Examples Design charrettes, groundtruthing, crowdsourcing, community mapmaking, participatory budgeting, participatory research, workshops, collective wayfinding</p>
	<p>Requirements Must occur prior to a fully envisioned project Evidence of mutual learning between the community and technical advisors A final design that is representative of the created collective vision</p>
<p>Community Partnerships 75%</p> 	<p>Activity Examples Community Benefits Agreements (CBA), advisory groups, citizen advisory committees, participatory budgeting, delegated actions and authority</p>
	<p>Requirements Decision-making authority must be shared with community stakeholders Occurs over multiple phases of project development or implementation Targeted activities directly related to equitable outcomes Contracted agreements, not stated intentions Reporting requirements and clawback provisions for agreed-upon benefits</p>
<p>Community Leadership 100%</p> 	<p>Activity Examples Any activities resulting in the creation of a project, provided they occur with a community-driven participatory development model</p>
	<p>Requirements Final decision-making authority in the hands of the community Support for a community-owned plan (e.g., assistance with funding grassroots participation, provision of technical assistance, aid in project implementation)</p>

Green Zones and Grassroots: Summary of Recommendations

Require applicants to provide documentation substantiating projected benefits and avoidance of harms.

Award points for project elements that create co-benefits exceeding program requirements, with strong emphasis on quality job creation accessible to disadvantaged workers and mandated reporting on achievement of targets.

Transit program administrators should require disadvantaged community investments to improve transit lines with heavy low-income ridership, such as local bus services.

Low-Carbon Transit Operations Program (LCTOP) administrators should prioritize funding for service and operations improvements on transit lines with fewer funding sources.

Increase transparency of projects and administrative decision making in all CCI programs, especially when public agencies directly receive funding.

Require open and accessible public meetings and letters of cross-sector support for all projects to qualify for disadvantaged community investments.

INCREASE COMMUNITY BENEFITS

Coordinate community outreach efforts of multiple programs to maximize productivity of time-intensive activities.

Create, fund, and implement targeted disadvantaged community outreach strategies with community-based organization (CBO) partners.

Provide people with a range of program options and provide on-site prequalification and application assistance.

Provide line item “use it or lose it” funds for outreach services rather than a percentage of the administrative budget.

IMPROVE PROGRAM OUTREACH

Sign MOUs between public agencies or developers and CBOs to provide community outreach, participatory input, holistic analysis, and/or crosscutting intervention design.

MOUs should clearly define the roles, responsibilities, compensation, and decision-making authority of each partner and establish how residents will be empowered to shape policies.

Adopt a community participation metric that recognizes and rewards increasing levels of community consultation, collaboration, partnership, and leadership.

Require all Transformative Climate Communities (TCC) applications to provide MOUs establishing community partnerships with CBOs with a comprehensive approach to economic, environmental, public health, and displacement impacts.

MAXIMIZE PARTICIPATION

Prioritize partnerships with organization(s) possessing expertise in conducting participatory activities and experience in designing multi-benefit projects.

Establish partnerships with CBOs that demonstrate a history of community organizing, ongoing membership activities, leadership development, and a staff/volunteer base of local residents who bring experience with:

- Door-to-door residential and business outreach;
- Facilitating discussions between administrators, technical experts, and community members;
- Conducting focus groups; and
- Connecting services and incentives to important needs of the community.

IDENTIFY COMMUNITY PARTNERS



Introduction

In Green Zones and Grassroots, we analyze California Climate Investment (CCI) programs in Los Angeles County and how they impact local disadvantaged communities. We look at what is working, key areas for improvement, and where greater results are needed. We also identify strategies, techniques, and opportunities for improving CCI outcomes—many of them resulting from the experience of seven LA-based environmental justice (EJ) organizations: Communities for a Better Environment (CBE), East Yard Communities for Environmental Justice (EYCEJ), Pacoima Beautiful; Redeemer Community Partnership (RCP), Strategic Concepts in Organizing and Policy Education (SCOPE), Tenemos que Reclamar y Unidos Salvar la Tierra-South L.A. (T.R.U.S.T. South LA), and Union de Vecinos.

We propose recommendations to increase the equitable outcomes and inclusive practices of CCI programs in four areas: guideline improvements, maximizing community participation, improving outreach methods, and identifying community partners. Our findings indicate that leveraging the resources and expertise of established grassroots organizations provides a major opportunity for CCI programs to improve the distribution of benefits, increase community representation at the decision-making table, and ensure that the benefits are meaningful to disadvantaged community residents.

Regardless of whether revenue results from regulatory fees, a direct carbon tax, or market mechanisms, what should not be forgotten is the need for polluting industries to bear the global and local costs of the harms they create. This requires not only strong methodologies to determine the effectiveness of strategies to reduce greenhouse gas (GHG) emissions, but equally strong measures to maximize the benefits that investments create in EJ communities.

Climate Change and Climate Justice: Global and Local Effects

In California, climate threats faced by EJ communities include urban heat island effects, fire susceptibility, power outages, and exposure to pollutants due to residential proximity to toxic industries and transportation corridors. Climate resilience and adaptability is constrained by limited access to healthcare services, a lack of information in languages other than English, and high rates of poverty that make it difficult to relocate or rebuild in response to climate impacts.

In Los Angeles, the magnitude of industrial and transportation infrastructure is matched by few places in the world. Driven by global trade, the physical landscape of road, rail, aircraft, and marine goods movement corridors serving the twin ports of Los Angeles and Long Beach is compounded by the presence of oil refineries, natural gas production facilities, chemical and metal manufacturers, and many other energy-intensive industries. This infrastructure combined with one of the densest populations in the nation, a car-dependent culture, and scorching summer heat present a monumental challenge for economic, environmental, and social sustainability.

The GHGs produced by industrial and transportation sectors are not only significant contributors to climate change, but also cause profound impacts to the health of populations exposed to their emissions at ground level. Some GHGs, such as methane and chlorofluorocarbons, pose threats to both global warming and local public health. “Co-pollutants” are criteria air pollutants,

volatile organic compounds (VOCs), and other toxic substances that are produced alongside GHGs in industrial and agricultural activities and the combustion of fossil fuels. Some have indirect effects on global warming which may be significant (e.g., those that produce smog), while others, such as dioxins and heavy metals, have little effect on climate change, but are extremely hazardous to public health (Table 1).

Table 1. GHGs and Co-Pollutants: Local & Global Effects

GHGs Global Threat	Water Vapor, Carbon Dioxide
GHGs Global Threat & Local Threat	Methane, Chlorofluorocarbons
Co-Pollutants Local Threat and Global Effect	Carbon Monoxide, Ground-Level Ozone, Nitrogen and Sulfur Oxides, Particulate Matter
Co-Pollutants Local Threat	Dioxins, Heavy Metals (e.g. Chromium, Lead, Mercury)

California Climate Legislation

The California Global Warming Solutions Act of 2006 (AB 32, Nuñez and Pavley) set 2020 carbon-reduction goals for the State, necessitating the development, administration, and implementation of an unprecedented scale and scope of programs. It also mandated that other economic, environmental, and public health “co-benefits” be achieved—especially for the State’s most vulnerable populations. Under the act’s direction, the California Air Resources Board (ARB) and other state agencies drafted a Scoping Plan proposing a suite of measures to achieve these goals. These strategies included regulations, compliance mechanisms, incentives, voluntary actions, and market-based solutions.

Legislators approved the current cap-and-trade auctions from these recommendations and established the Greenhouse Gas Reduction Fund (GGRF) to distribute the proceeds to a variety of GHG-reduction programs, collectively called California Climate Investments (CCI). The strategies employed by these programs include development of rail infrastructure, improvements in transit operations, and building affordable housing near transit. Others, such as residential energy retrofits and clean vehicle pilot incentives, specifically target low-income populations to fulfill the mandates of SB 535 (de León, 2012) that requires at least 25% of all GGRF proceeds benefit “disadvantaged communities” (DACs) and that at least 10% be spent within disadvantaged census tracts qualified by the CalEnviroScreen screening methodology.

Over the past three years, the State has appropriated over \$4.7 billion in auction revenues to over 30 programs (Table 2) under the direction of the ARB. The agency is tasked not only with administering the overall guidelines for CCI programs, but also setting baselines for what may establish a disadvantaged community benefit. This has created quite a challenge for ARB’s Climate Investment Branch, whose staff has shown responsiveness to equity advocates by adopting strategies and language to better prioritize equitable outcomes and procedures.

In spite of the dedicated work of ARB and other State agencies administering CCI programs, the problems facing EJ communities remain immense. While \$4.7 billion in investments may seem a significant sum, 60% of it is automatically allocated to transit and housing, which is intended to eventually reduce vehicle miles traveled and demand for fossil fuel production. While a necessary part of an overall climate investment strategy, this investment has little short-term effect on the direct emissions threatening the health of EJ communities.

Table 2. California Climate Investment Funding (\$ in millions)

Agency	Program	FY13/14	FY14/15	FY15/16	FY16/17**	TOTAL	
High-Speed Rail Authority	High-Speed Rail Project*		\$250	\$600	\$500	\$1,350	
Strategic Growth Council	Affordable Housing & Sustainable Communities*		\$130	\$480	\$400	\$1,010	
Caltrans	Transit & Intercity Rail Capital Program*^		\$25	\$240	\$335	\$600	
CalSTA	Low-Carbon Transit Operations Program*		\$25	\$120	\$100	\$245	
Air Resources Board	Low-Carbon Transportation (LCT)	\$30	\$200	\$95	\$363	\$688	
	LCT Sub-Allocations	Clean Vehicle Rebate Program	\$20	\$111	\$75	\$133	
		Enhanced Fleet Modernization Plus-Up		\$1	\$10	\$60	
		Public Fleets in DACs		\$3		\$3	
		Financing Pilots in DACs		\$1		\$6	
		Electric Vehicle Carsharing Pilots in DACs		\$2		\$8	
		Ag Worker Vanpools in San Joaquin Valley				\$3	
		Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project	\$10	\$10	\$5	\$18	
		Advanced Technology Freight Demonstration		\$47		\$34	
		Zero-Emission Truck/Bus Pilots in DACs		\$25		\$60	
		Zero-Emission Freight Pilots in DACs				\$5	
		Rural School Bus Pilots				\$10	
		Low NOx Engines with Renewable Fuel				\$23	
CSD		Low-Income Weatherization Program		\$75	\$79	\$20	\$174
Cal Recycle	Waste Diversion		\$25	\$6	\$40	\$71	
Dept of Food & Agriculture	Healthy Soils, Dairy Digesters, Livestock	\$10	\$25	\$40	\$58	\$133	
Dept of Water Resources	Water & Energy Efficiency	\$30	\$20	\$20	\$8	\$78	
Dept of Fish and Wildlife	Wetlands and Watershed Restoration		\$25	\$2		\$27	
CAL FIRE	Healthy Forests		\$24		\$25	\$49	
CAL FIRE	Urban Forestry		\$18		\$15	\$33	
Natural Resources Agency	Urban Greening				\$80	\$80	
Caltrans	Active Transportation Program				\$10	\$10	
Strategic Growth Council	Transformative Climate Communities				\$140	\$140	
Strategic Growth Council	Community Outreach to DACs				\$2	\$2	
Air Resources Board	Woodstove Replacement				\$5	\$5	
Dept of General Services	Energy Efficiency for Public Buildings		\$20			\$20	
		\$70	\$862	\$1,682	\$2,100	\$4,714	

Data Sources: SB 862 (2014); LCT-AQIP Funding Plans (FY14-15 – FY16-17); ARB 2016 Annual Report to the Legislature on Cap-and-Trade Auction Proceeds, AB 1613 Budget Act of 2016.

* Automatic appropriations equivalent to 60% of the GGRF (HSR: 25%; AHSC: 20%; TIRCP: 10%; LCTOP: 5%)

^ TIRCP total allocation includes \$135 million in additional FY15/16 appropriations.

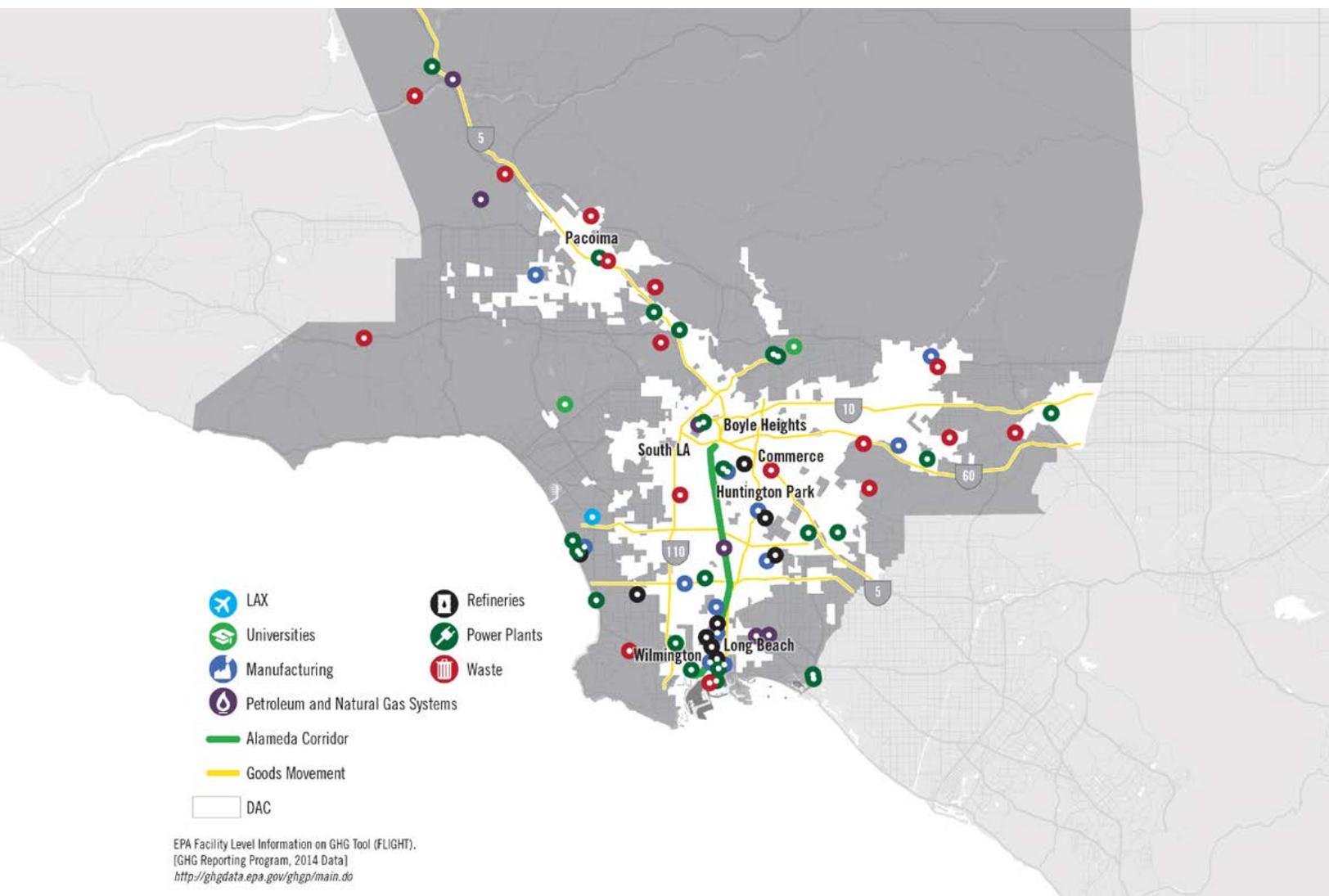
**FY16/17 revenues not fully determined. Automatic appropriations are based on preliminary figures in the enacted budget.

In fact, many advocates have questioned the ability of cap-and-trade, as mechanism, to reduce emissions in EJ communities. This was first articulated by the Environmental Justice Advisory Committee (EJAC), which was established by AB 32. Its members feared that major GHG emitters would use trading options to avoid direct emissions reductions, increasing the toxic emissions breathed by nearby residents who are most often low-income people of color. A recent study found that the most significant GHG-producing industrial sectors are the largest

purchasers of carbon credits and have used offsets the most, which are the two options to avoid directly reducing emissions.¹ Looking at the largest GHG emitters in Los Angeles County (Figure 1), we see that most industries subject to cap-and-trade, which pose some of the greatest risks to public health, are near low-income communities.

Perhaps the most important piece of climate legislation passed in 2016, AB 197 (Garcia), has the potential to directly address these issues. The legislation requires ARB to maintain a primary focus on direct emission regulations and requires annual reporting of GHG, criteria pollutant, and toxic air contaminant emissions at local and sub-county levels for stationary sources. By requiring more localized reporting of pollutants, AB 197 will be able to identify areas that are not experiencing emissions reductions and better target the mechanisms used to protect those communities.

Figure 1. Large GHG Reporting Facilities in L.A. County





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California Climate Investments in Los Angeles County

Project Overview

Methodology
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Program Investment Snapshots

Direct Services and Rebates

Low-Income Weatherization Program (LIWP)

Clean Vehicle Rebate Program (CVRP) and
Enhanced Fleet Modernization Program (EFMP)
Plus-Up

Public Fleet Disadvantaged Community Pilot

Hybrid and Zero-Emission Truck and Bus
Vouchers Incentive Project (HVIP)

Project-Based Programs

Carsharing and Mobility Pilots

Advanced Technology Freight Demonstration
(ATFD) Pilots

Affordable Housing and Sustainable
Communities (AHSC)

Transit and Intercity Rail Capital Program
(TIRCP)

Low-Carbon Transit Operations Program (LCTOP)

Urban and Community Forestry Program (UCF)

Data Sources

Los Angeles County Investment Findings and Recommendations

Distribution of Resources
Co-Benefit Significance
Participatory Development

California Climate Investments in L.A. County

This section provides dashboards—or visual snapshots—of where California Climate Investment (CCI) programs have invested cap-and-trade proceeds in Los Angeles’ disadvantaged communities. The two-page spreads highlight what is working in programs, the occurring or expected co-benefits, the current equity priorities of advocates, and key takeaways indicated from our research to help guide programs moving forward.

Project Overview

Methodology

The California Air Resources Board (ARB), in their role as regulator of CCI programs, has already presented some of the data shown in this report.² However, in contrast to ARB’s high-level summaries of statewide investments, this report analyzes specific projects and their equitable outcomes in Los Angeles County. In addition to more localized analysis, data are included from urban forestry and clean freight projects that were not made ready at the time of ARB’s year-end report to the legislature.

We accessed investment data through official reports and administrative documents provided by state agencies, project applications, and information provided by project applicants online and by request. We also conducted interviews with program administrators, contracted service providers, and recipients of CCI funding. We determined equity priorities through public comment letters, interviews with members of EJ and environmental organizations active in SB 535 advocacy, and our own experiences over the last two years of participating in program committees, workshops, roundtable discussions, conferences, and working groups dedicated to maximizing equitable outcomes relating to how California targets investments to reach its GHG-reduction goals. In addition, we conducted an online survey in the summer of 2016, which received responses from 16 individuals actively involved in climate investment advocacy.

Our analysis anticipates that equity outcomes will rise in response to new legislation and administrative changes. All awarded funding presented in this report was subject to more relaxed interim funding guidelines; however, our findings may recognize problematic areas against which future improvements in the quality and quantity of disadvantaged community benefits may be measured. Some of these promising developments include:

- AB 1550 (Gomez, 2016) no longer allows state agencies to qualify investments as benefiting disadvantaged communities when they are near, but not within, a qualifying census tract.
- ARB, in its interim funding guidelines (relevant to the FY2014/15 auction proceeds), required all qualified disadvantaged community investments to provide “direct, meaningful, and assured” benefits.³ The final funding guidelines, applicable to FY2015/16 and onward, also require funding recipients claiming benefits to substantiate how an “important community need” is provided.⁴ Examples of acceptable methods⁵ to determine what constitutes this need include mitigation of adverse CalEnviroScreen factors specific to the community; getting local input and support through community meetings or public correspondence; or through a list of common advocate-identified needs.⁶

All of the programs we feature in our analysis of California Climate Investments in Los Angeles County have potentially significant implications for disadvantaged communities. Programs were omitted from our analysis⁷ for four primary reasons:

- Little or no funding for urban communities, such as agricultural and woodland programs;
- Pilots providing investments in areas outside of Los Angeles County;
- Programs without guidelines or allocated funding; and
- Newly established programs receiving FY16/17 appropriations such as the Transformative Climate Communities program.

Notes on Maps

The maps in this section focus on projects and program distribution in the vicinity of Los Angeles County's disadvantaged communities. However, projects and programs for which we were able to obtain information that are not in the maps may be included in narratives for each program, located in the appendices. Additionally, we show data that is not project-based at the Census tract level.

Notes on Data

While we do include data of appropriated and allocated funding through FY16/17, we base our analysis of awarded and implemented funding primarily on GGRF expenditures from FY14/15. The Transit and Intercity Rail Program (TIRCP) section references applications from FY15/16, but includes funding from the prior fiscal year. This analysis faced additional limitations since we were unable to get responses or information from all of the administrators, service providers, and grant recipients whom we contacted. Details on respondents are listed for each program in their respective sections. Additionally, different types and amounts of information were available (some programs post applications and other materials, some grant recipients provided us with entire applications, and some responded to questions we posed in direct correspondence).

We provide more information in the appendices to show how well investments meet SB 535 and co-benefit targets and to what extent outcomes address the public health and socioeconomic concerns of environmental justice advocates. There, we pay attention to how effectively direct-to-consumer programs penetrate low-income markets, the status and characteristics of funded projects in disadvantaged communities, and to what extent those communities are included in decisions made during the development and implementation of projects.

Program Investment Snapshots

The following California Climate Investment snapshots detail the distribution of resources and create indications to help determine the significance of the benefits created within disadvantaged communities. We group the programs in this section into two categories that raise distinct sets of concerns and questions related to the maximization of co-benefits and the extent of community engagement. The first—direct services and rebate programs—are incentive-based programs implemented by service providers who seek to maximize community awareness, and reach the consumers most in need of the intended benefits. Project-based programs, by comparison, are administered by state agencies that select projects for funding. Those projects are then implemented by the awarded applicants.

Within these two broad categories, we separate the programs into four investment categories that also determine the order of that they are listed. Note that **programs listed in bold** have more in-depth analysis provided in the appendices.

We separate the programs into four investment categories that also determine the order of that they are listed:

Energy Efficiency and Renewable Energy: These investments include increased adoption of solar energy technologies and methods of decreasing energy usage through building weatherizations and more energy-efficient appliances and HVAC systems.

Low-Income Weatherization Program (LIWP)

Low-Carbon Vehicles: Investments that mitigate harmful emissions from passenger and freight vehicle usage through adoption of clean on- and off-road vehicle technologies.

Clean Vehicle Rebate Program

Enhanced Fleet Modernization Program (EFMP) Plus-Up

Public Fleet Incentives in Disadvantaged Communities (Public Fleets)

Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP)

Carshare and Mobility Pilots

Alternative Technology Freight Demonstration (ATFD) Pilots

Transit, Land Use, and Housing: Investments that encourage transit ridership and active transportation, including improvements to public transportation, safer streets, bike/pedestrian amenities and infrastructure, affordable housing near transit, and first- and last-mile connectivity.

Affordable Housing and Sustainable Communities (AHSC)

Transit and Intercity Rail Capital Program (TIRCP)

Low-Carbon Transit Operations Program (LCTOP)

Natural Resources: Conservation and carbon sequestration through tree planting or greening the built environment in urban areas.

Urban and Community Forestry (UCF)

***DIRECT SERVICE
OR REBATES***

***PROJECT-BASED
PROGRAMS***

Low-Income Weatherization Program (LIWP)

AGENCY: Community Services and Development (CSD)

Single-Family and Small Multi-Family Solar Service Provider (Statewide): GRID Alternatives

LIWP provides free solar and weatherization services for homeowners and renters who live within a qualified disadvantaged Census tract and earn 60% or less of the state median income. Services include installation of solar panels, solar water heaters, insulation, low-flow shower heads; energy efficient light bulbs and appliances; CO/ smoke alarms; and testing, replacing, or repairing gas appliances, broken windows, and doors.

Co-Benefits

- + Lower utility costs
- + Job-related benefits
- + Resilience against grid outages
- + Home improvements
- + Air quality improvements
- + Improved health
- + Improved safety

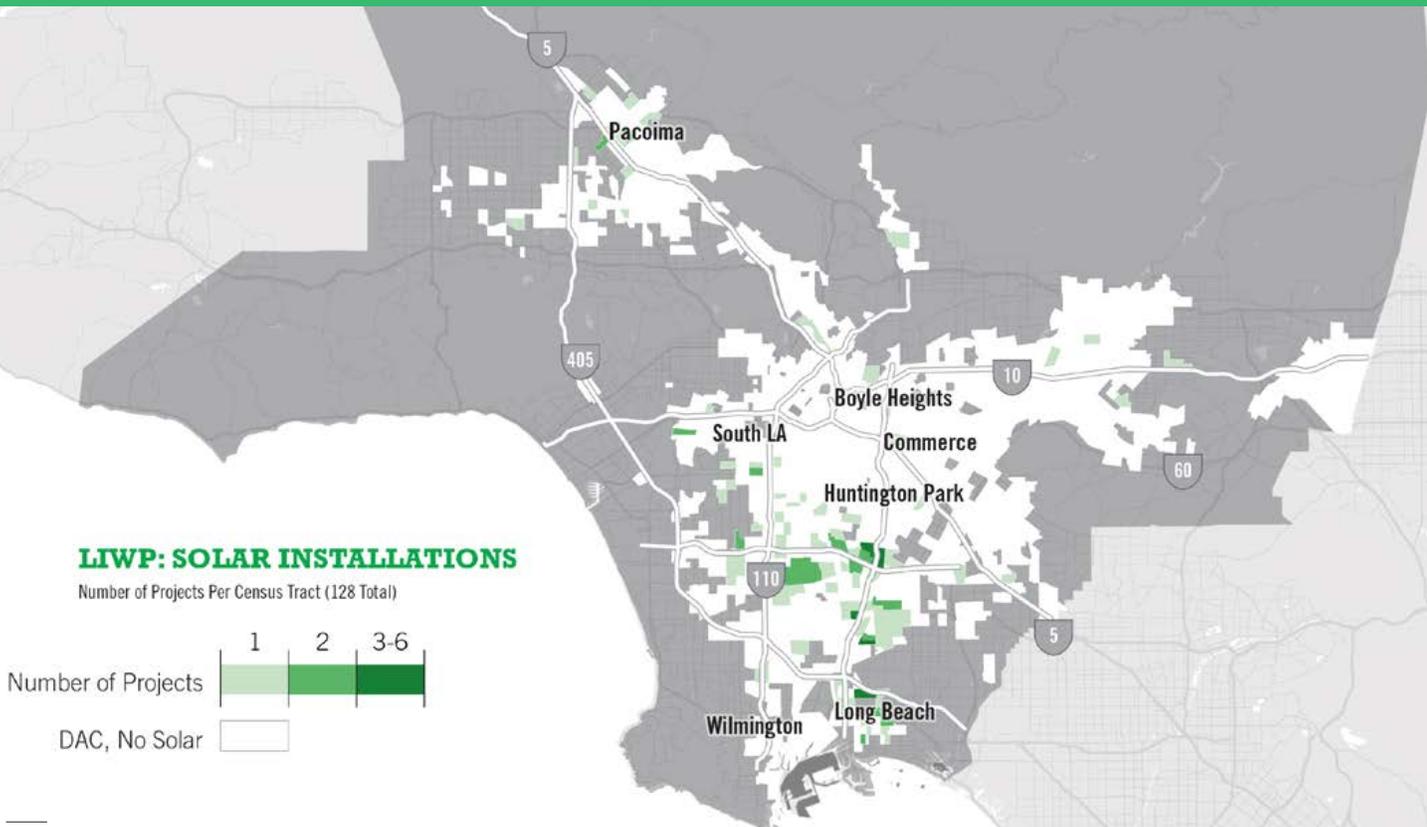
What's Working

- + Low-income homeowners received 128 solar panel installations and 279 home weatherizations free of charge
- + New draft guidelines propose a promising regional administration model that:
 - + Requires all administrators to report standardized labor data (although still only at the aggregate level); and
 - + Allows administrators the flexibility to coordinate services according to a regional workplan.

Mandate: 100% Within DACs

Total Allocations: \$174 million		
\$75m	\$79m	\$20m
<i>FY 14-15</i>	<i>FY 15-16</i>	<i>FY 16-17</i>
Implemented in CA: \$7.4 million		
\$6.3m	\$1.1m	
<i>Solar</i>	<i>Weatherization</i>	
Implemented in L.A.: \$1.3 million		
\$1.2m	\$100k	
<i>Solar</i>	<i>Weatherization</i>	

As of December 31, 2015



Low-Income Weatherization Program (LIWP)

Single-Family and Small Multi-Family Weatherization Service Providers (L.A. County):

Long Beach Community Action Partnership (LBCAP), Maravilla Foundation, Pacific Asian Consortium for Employment (PACE)

Equity Priorities

- + Set a wage floor and ensure job benefits
- + Ensure paid and accessible job training with pathways to employment
- + Ensure first-source hire for workers with job barriers
- + Streamline consumer qualification and application processes
- + Address building conditions and out-of-pocket cost barriers
- + Expand eligibility to all disadvantaged community residents
- + Standardize job tracking on an individual worker basis
- + Expand eligible types of improvements (e.g., cool roofs)
- + Fund outreach done by community-based organizations
- + Meet needs specific to renters

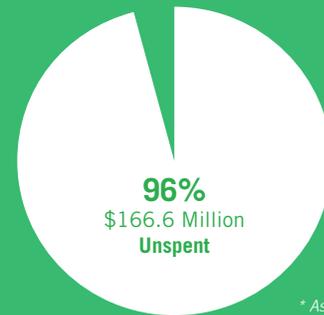
LIWP Solar and Weatherization Funding

As of Dec. 31, 2015, only 4% of allocated funds had reached low-income households. If the program expended all funds, Los Angeles County would have solar installations on approximately 2400 households and 5200 units weatherized (assuming the same percentages of solar and weatherization allocations, costs per project, and L.A. to CA investment ratios).

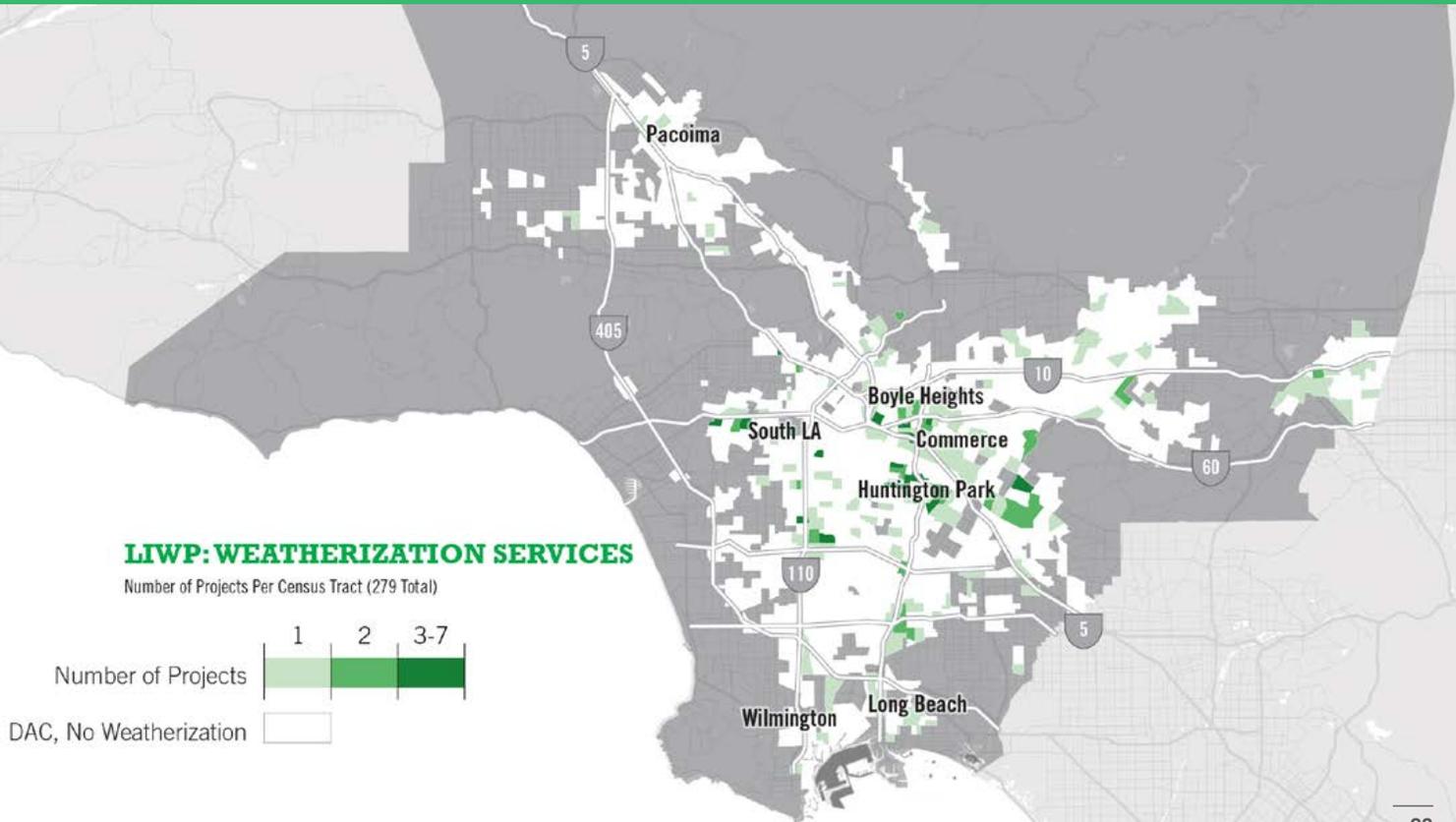
Key Takeaways

- + There is a need to establish labor guidelines at the program level, rather than leave decisions to individual service providers.
- + To effectively evaluate the labor component of the program, job tracking must be done on an individual worker basis.
- + Building condition and out-of-pocket costs, such as roof repair or electrical system upgrades, are significant barriers.
- + With over 95% of first round funding not implemented as of 12/31/2015, the program has been very slow getting investment benefits to residences.

Unspent funds *



* As of December 31, 2015



Clean Vehicle Rebate Project (CVRP)

Low-Carbon Transportation (LCT) Program

AGENCY: California Air Resources Board (ARB)

PROVIDER: Center for Sustainable Energy (CSE)

Provides rebates to individuals, nonprofits, government entities, and business owners who buy or lease new battery electric (BEV), plug-in hybrid electric (PHEV), fuel cell electric (FCEV), neighborhood electric vehicles (NEV), and zero-emission motorcycles (ZEM).

Co-Benefits (CVRP and EFMP)

- + Lower fuel costs
- + Reduced criteria pollutant forming emissions of nitrogen oxides (NOx), reactive organic gases (ROG), and particulate matter (PM)
- + Improved public health
- + Reduced fossil fuel demand
- + Increased awareness of advanced technologies in DACs

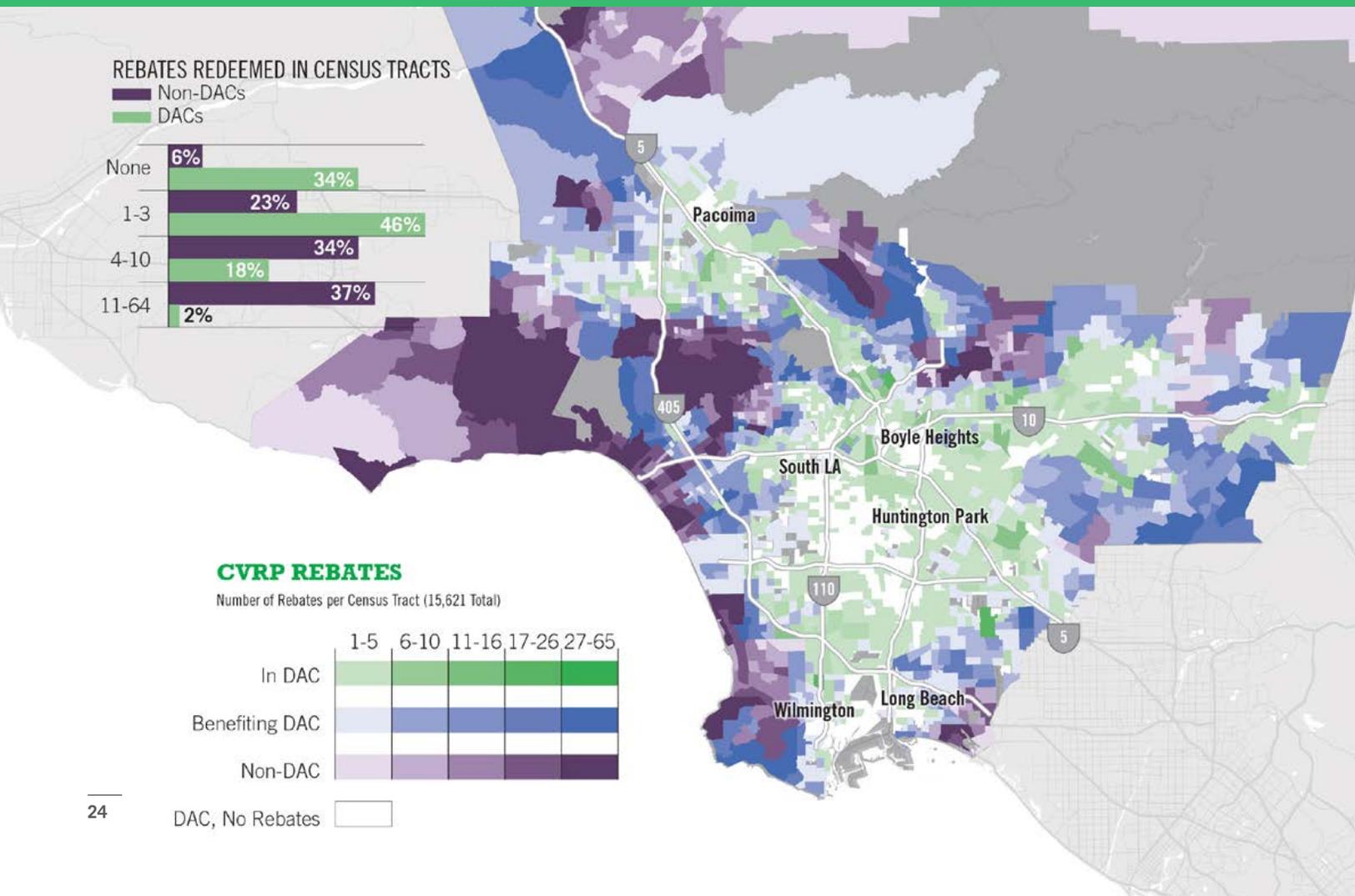
What's Working (CVRP and EFMP)

- + Over 2,300 advanced technology vehicles (2,244 CVRP rebates and 87 EFMP vouchers) were purchased within DACs in the 2 programs.
- + Beginning in November 2016, combined CVRP and EFMP benefits can reach as high as \$14,000 for qualified low-income households.
- + EFMP vouchers are applied at point-of-sale, increasing financial feasibility by lowering price at purchase and reducing the need for financing.

CVRP Target: 10% DAC Benefit

Total Allocations: \$339 million			
\$20m	\$111m	\$75m	\$133m
<i>FY 13-14</i>	<i>FY 14-15</i>	<i>FY 15-16</i>	<i>FY 17-18</i>
Implemented in CA: \$136 million			
\$78m	\$50m	\$8m	
<i>Non-DAC</i>	<i>DAC Benefit</i>	<i>In DAC</i>	
Implemented in L.A.: \$33 million			
\$8m	\$20m	\$5m	
<i>Non-DAC</i>	<i>DAC Benefit</i>	<i>In DAC</i>	

As of December 31, 2015



Enhanced Fleet Modernization Program Plus-Up (EFMP)

Low-Carbon Transportation (LCT) Program

AGENCY: California Air Resources Board (ARB)

PROVIDER: Southern California Air Quality Management District (SCAQMD)

EFMP Plus-Up is a disadvantaged community pilot vehicle retirement program. It provides vouchers for (both new and used) cleaner vehicle replacements. It may be used in conjunction with CVRP rebates for new vehicle purchases with a combined maximum benefit to low-income households of \$11,500 for vehicles eligible in both programs.

Equity Priorities (CVRP and EFMP)

- + Issue rebates prioritizing lower income levels
- + Overcome market barriers to South L.A. and Harbor-Gateway communities
- + Set lower income eligibility caps
- + Increase EV charging infrastructure in DACs
- + Fund CBOs to expand grassroots outreach
- + Prequalify eligibility and redeem rebates at point-of-sale
- + Expand financing programs through community-based lenders

Key Takeaways (CVRP and EFMP)

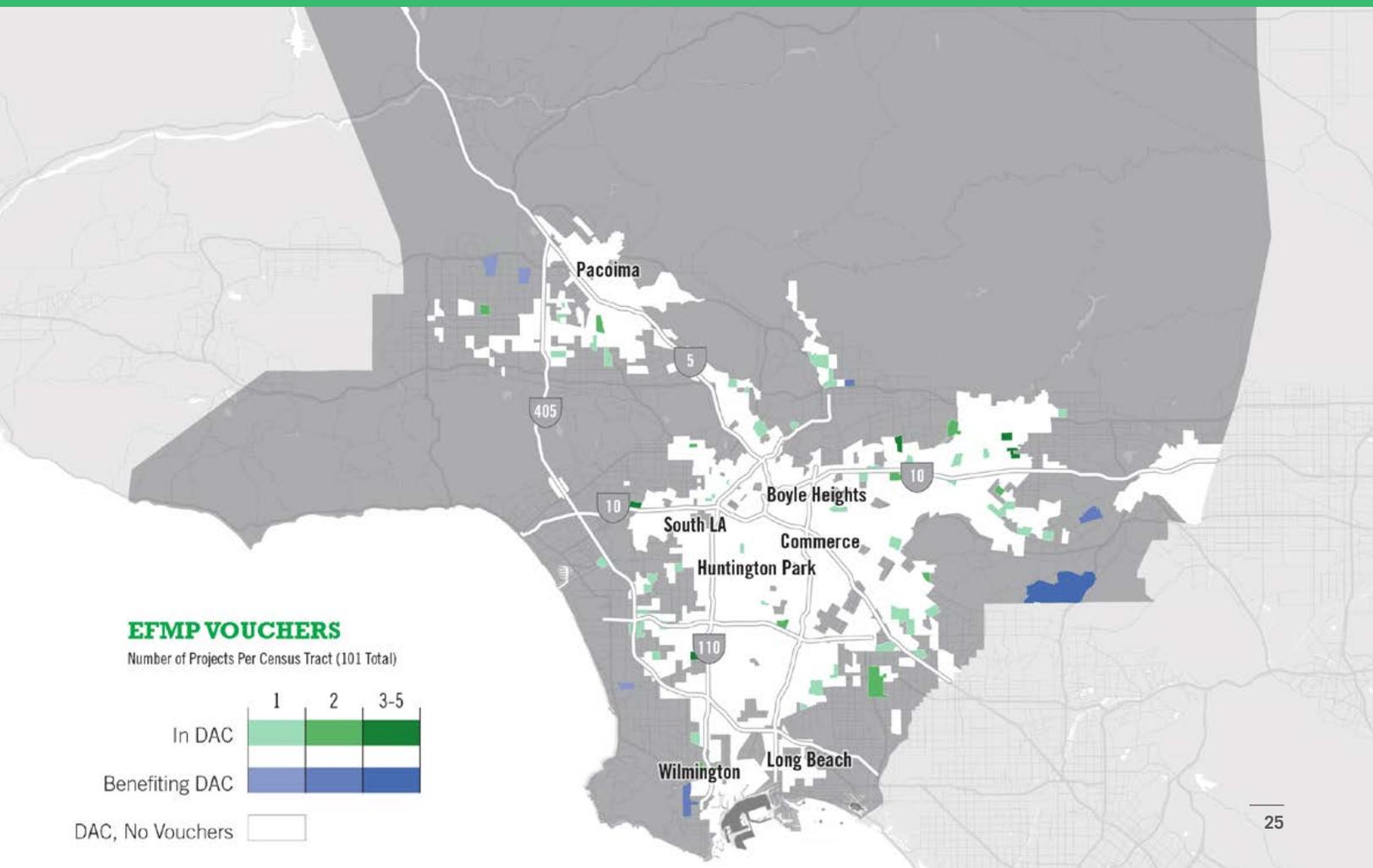
- + The maps show the majority of DAC uptake is in areas adjacent to less polluted areas. South/East LA, the Harbor-Gateway Cities and the northeast San Fernando Valley are seeing very sparse benefits.
- + Overall, DAC uptake of CVRP remains sparse: 89% had 0-5 rebates, while only 2% had more than 10.
- + Waiting for rebates after CVRP purchase with no point-of-sale pre-qualification limits feasibility for many low-income households.
- + CVRP and EFMP outreach efforts are underfunded and lack coordination. ARB should consider one outreach program for CVRP, EFMP and the DAC Financing program (currently a Bay Area pilot expanding this year).

EFMP Mandate: 100% DAC Benefit

Total Allocations: \$71 million

\$1m	\$10m	\$60m
FY 14-15	FY 15-16	FY 16-17
Implemented in CA: \$928 thousand		
\$238k		\$690k
DAC Benefit		In DAC
Implemented in L.A.: \$340 thousand		
\$50k		\$290k
DAC Benefit		In DAC

As of December 31, 2015



Public Fleet Pilot Project in Disadvantaged Communities (Public Fleets)

Low-Carbon Transportation (LCT) Program

AGENCY: California Air Resources Board (ARB)

PROVIDER: Center for Sustainable Energy (CSE)

The Public Fleet Pilot Project provides rebates for the purchase of CVRP-eligible vehicles by public agencies. Agencies must be located in a ZIP code containing a disadvantaged community Census tract or service the Census tract. The program offers rebates of up to \$15,000 for Fuel Cell Electric Vehicles (FCEVs), \$10,000 for Battery Electric Vehicles (BEVs), and \$5,250 for Plug-In Hybrid Electric Vehicles (PHEVs). CSE administers the program alongside the CVRP program.

Co-Benefits and Equity Priorities

- + Not a significant source of concern among advocates

What's Working

- + Savings are occurring for public agencies.
- + The Downtown Los Angeles area has received a concentrated benefit, although primarily in gentrifying areas.⁸

Key Takeaways

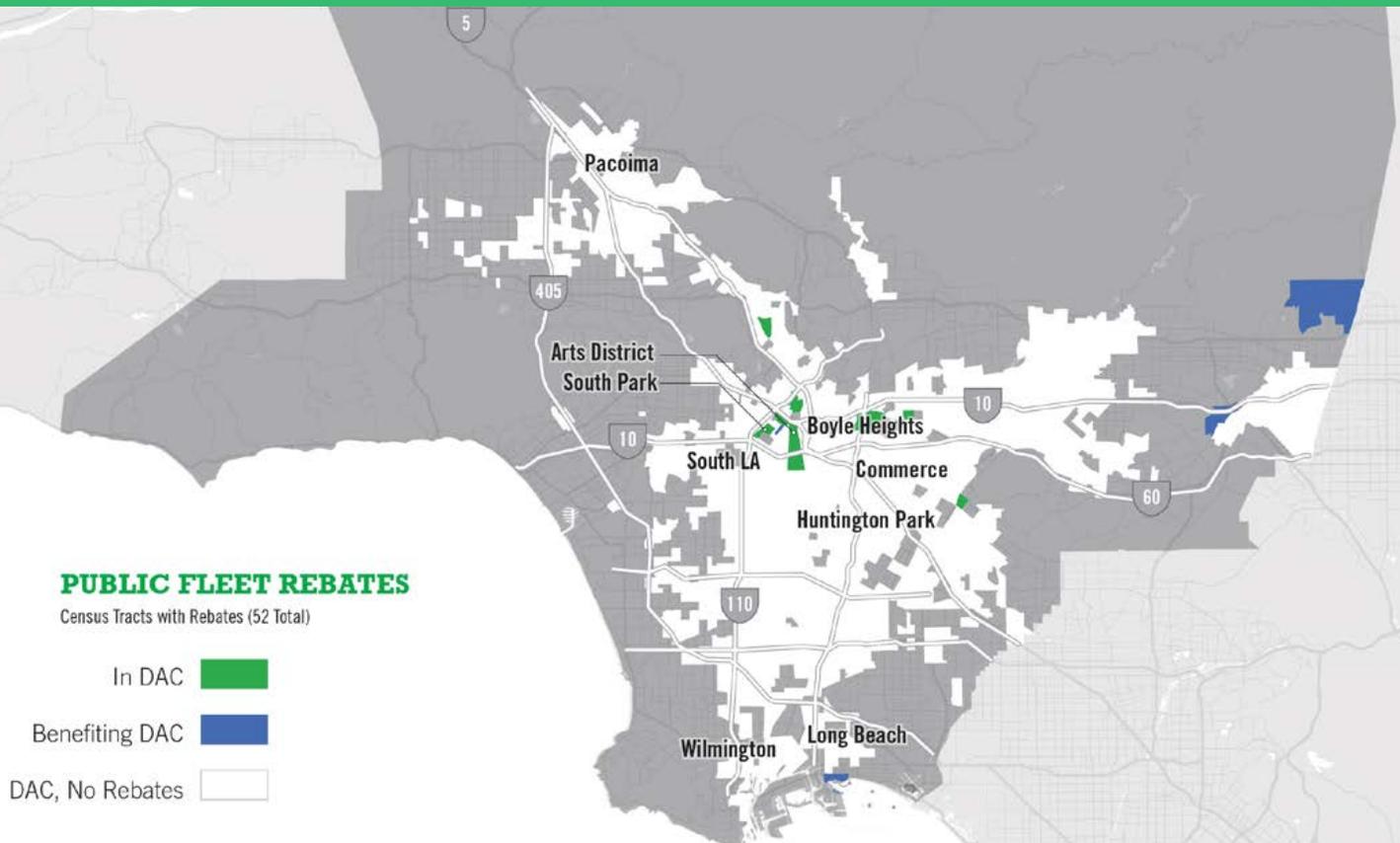
- + 52 rebates have been issued for 12 agencies.
- + Advocates have not targeted this program. Disadvantaged community benefits and concerns of equity are minimal.

Mandate: 100% DAC Benefit

Total Allocations: \$6 million

\$3m	\$3m
FY 14-15	FY 16-17
Implemented in CA: \$1.33 million	
\$870k	\$460k
DAC Benefit	In DAC
Implemented in L.A.: \$340 thousand	
\$110k	\$230k
DAC Benefit	In DAC

As of December 31, 2015



Hybrid/Zero-Emission Truck and Bus Voucher Incentive Project (HVIP)

Low-Carbon Transportation (LCT) Program

AGENCY: California Air Resources Board (ARB)

PROVIDER: CALSTART

HVIP provides first-come, first-served vouchers for the purchase or lease of hybrid and zero-emission trucks and buses. Vouchers range from \$2,000–\$110,000 depending on vehicle technology and weight. Incentives from \$3,000–\$15,000 can be added for vehicles located in or servicing DACs.

Co-Benefits

- + Lower fuel costs
- + Reduced criteria air pollutants
- + Improved public health
- + Reduced fossil fuel demand
- + Enabling market transformation of advanced technologies

Equity Priorities

- + Prioritize zero-emission and promote emerging technologies
- + Ensure companies receiving benefits do not misclassify their drivers as contractors

What's Working

- + 73% of vouchers redeemed in DACs indicate increased incentives may be working.
- + Vouchers have been given for a large number of delivery vehicles. If their primary routes are in DACs, the benefit could be significant.

Key Takeaways

- + Heaviest weight class is only receiving 18% of vouchers over the life of the program. Prioritizing these high polluters is critical to creating public health benefits for those living adjacent to goods movement corridors.
- + Market transformation of advanced technologies is likely hampered by the high priority given to market-ready technologies over promising new technologies.

Target: 10% DAC Benefit

Total Allocations: \$33 million

\$10m	\$5m	\$18m
<i>FY 14-15</i>	<i>FY 15-16</i>	<i>FY 16-17</i>

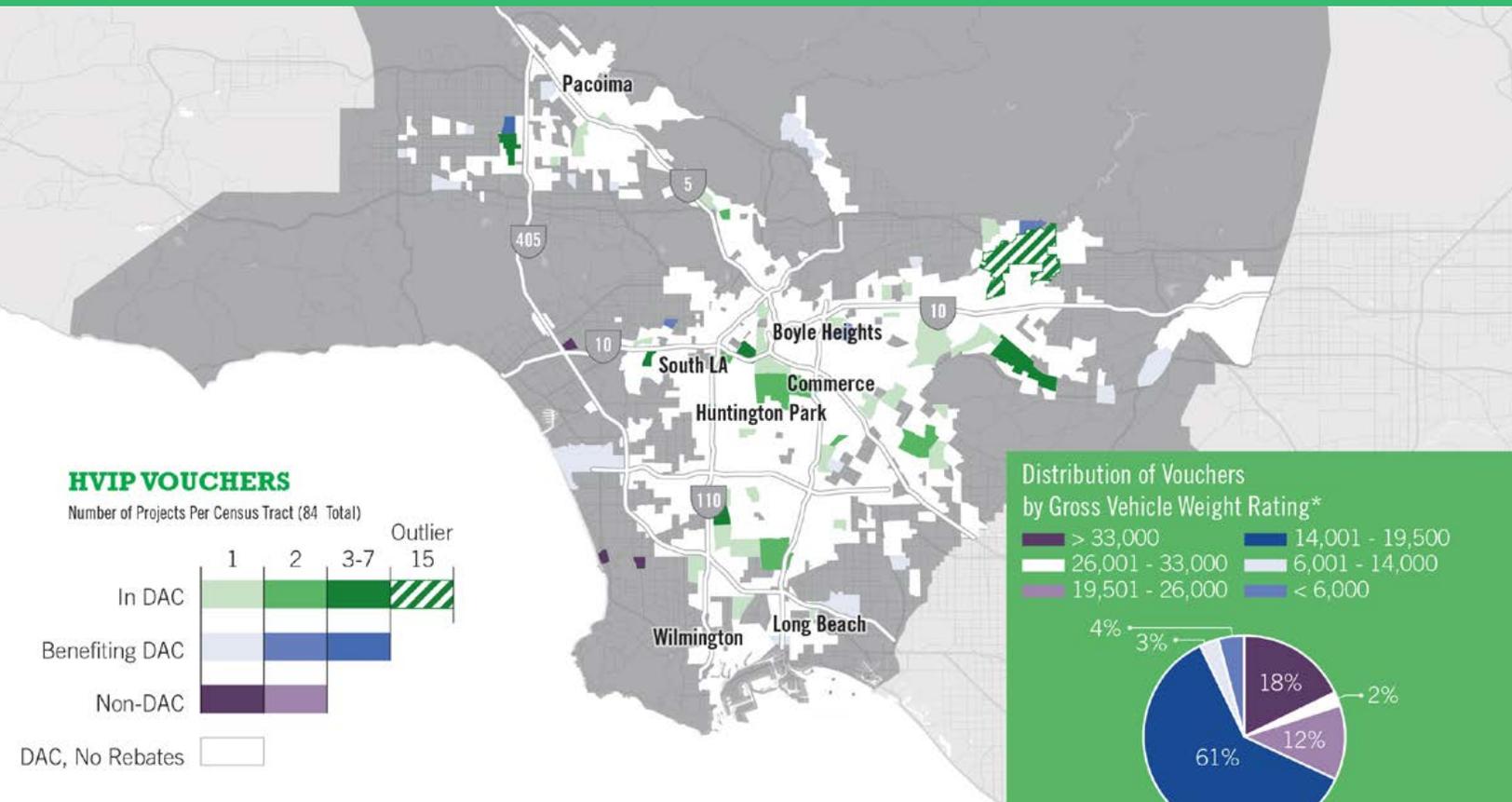
Implemented in CA: \$11 million

\$3.77m	\$2.26m	\$4.96m
<i>Non-DAC</i>	<i>DAC Benefit</i>	<i>In DAC</i>

Implemented in L.A.: \$3 million

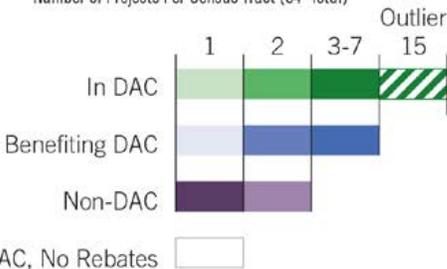
\$280k	\$630k	\$2.15m
<i>Non-DAC</i>	<i>DAC Benefit</i>	<i>In DAC</i>

As of December 31, 2015



HVIP VOUCHERS

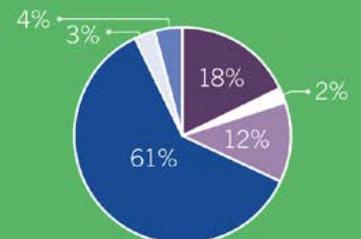
Number of Projects Per Census Tract (84 Total)



Distribution of Vouchers

by Gross Vehicle Weight Rating*

- > 33,000
- 26,001 - 33,000
- 19,501 - 26,000
- 14,001 - 19,500
- 6,001 - 14,000
- < 6,000



* Represents 655 vouchers over the life of the program.

Car Sharing and Mobility Options

Low-Carbon Transportation (LCT) Program

AGENCY: California Air Resources Board (ARB)

The Car Sharing and Mobility Options pilot project is designed to help individuals in disadvantaged communities benefit from the use of advanced technology vehicles without the responsibility of car ownership costs, and to encourage the shared use of transit, vanpools, and other mobility options. ARB awarded two carshare pilots from FY14/15 funding, one in Los Angeles for \$1.7 million, and one in Sacramento for \$1.4 million. In October 2016, ARB allocated an additional \$8 million to the program, \$2 million of which is reserved to expand existing projects based on their evaluation.

Co-Benefits

- + Improved public health
- + Reduced air contaminants
- + Increased mobility
- + Greater flexibility for daily activities (especially for single-parent families)
- + Reduced need for full-time ownership of vehicles

Equity Priorities

- + Adequate subsidies to ensure program is financially feasible for low-income households
- + Ensure low-income residents of disadvantaged communities are the primary beneficiaries of the program

What's Working

- + The addition of 100 advanced technology vehicles to the streets of Los Angeles, all located in disadvantaged communities, will be available for rental.
- + The planned addition of 200 charging units installed at on- and off-street public parking locations will increase feasibility of plug-in vehicles for lower income households.
- + Significant subsidies will help program feasibility for low-income households.

Mandate: 100% DAC Benefit

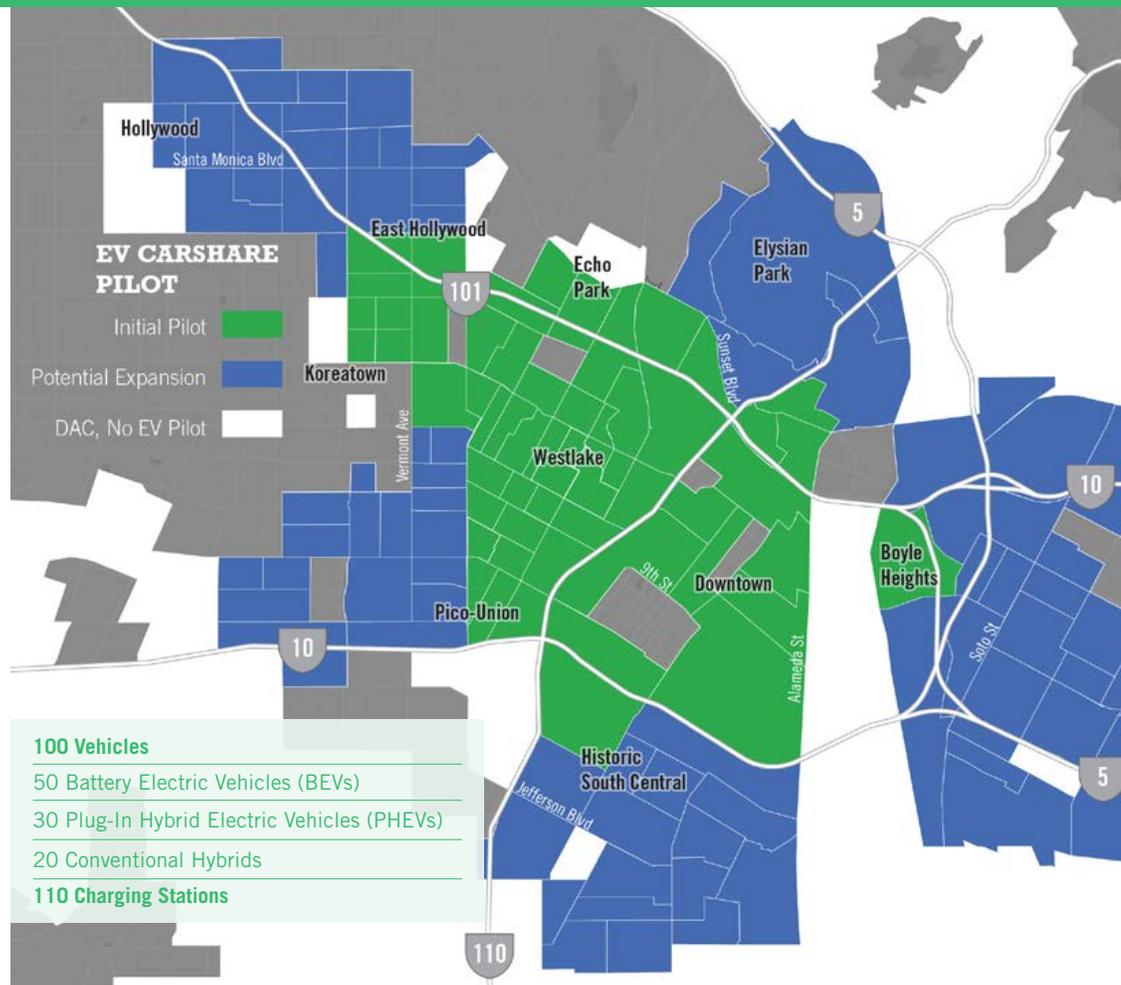
Total Allocations: \$11.1 million

\$3.1m	\$8m
<i>FY 14-15</i>	<i>FY 16-17</i>
Implemented in CA: \$3.1 million	
-	\$3.1m
<i>DAC Benefit</i>	<i>In DAC</i>
Implemented in L.A.: \$1.7 million	
-	\$1.7m
<i>DAC Benefit</i>	<i>In DAC</i>

As of December 31, 2015

Project Partners

- + **Mayor's Office of Sustainability:** Project guidance and ARB liaison throughout the term of the grant
- + **LADOT:** Coordinate vehicle and EV Supply Equipment (EVSE) charging station placements in on-street spaces
- + **LADWP:** Provide partial rebates for 200 charging units
- + **Public Works Bureau of Street Lighting (BSL):** Procure/install 30 street light chargers, utilizing existing above-ground power lines
- + **Housing and Community Investment Department (HCIDLA):** Identify locations of affordable housing units near transit hubs that will benefit from project
- + **Shared Use Mobility Center (SUMC):** Project consultant with extensive experience launching carshare programs
- + **Blue California:** Project vendor responsible for implementing a financially feasible pilot that best serves low-income residents



City of Los Angeles

EV Car Sharing Pilot for Disadvantaged Communities

The City of Los Angeles Electric Vehicle (EV) Car Sharing Pilot for Disadvantaged Communities establishes a 100-vehicle pilot carsharing project with 200 Electric Vehicle Supply Equipment (EVSE) charging stations in and around central Los Angeles. The program is located completely in disadvantaged community Census tracts as identified by CalEnviroScreen. Although the program is open to all income levels and people regardless of where they reside, the City plans to increase the financial feasibility of

Key Takeaways

- + With the program open to all income levels and located in gentrifying areas,⁹ it is unclear to what extent low-income households will participate. Tracking income data and/or place of residence of participants may be necessary to evaluate how well the pilot serves the needs disadvantaged community residents.
- + Program expansion may provide further disadvantaged community benefits, but it will likely occur only if the pilot proves to be financially self-supporting.

the program through subsidies for low-income consumers. The stated expectations of the project are to recruit at least 7,250 new users who will sell or avoid purchase of 1,000 private vehicles.

The City originally anticipated selecting an EV Carshare Operator in the spring of 2016, with vehicle rollouts following soon after. However, the selection of Blue California was not announced until December 2016. Extensive negotiations resulted in additional commitments from the City (\$1.8 million in total) and the Operator (at least \$10 million in total). The pilot was initially presented as a two-phase project as reflected in the map on the opposite page. However, according to Shared Use Mobility Center (SUMC) staff, the pilot must work towards a financially self-supporting model that may depend upon EVs rented at the higher unsubsidized rates. At this time the Operator does not expect see a return on investment for several years.

The primary concern of advocates is the financial and physical accessibility of carshares for low-income households. Because of the pilot's orientation to Downtown Los Angeles, some community-based organizations (CBOs) have expressed concern that the pilot may provide a more

desirable service to young professionals, students, and tourists than to disadvantaged community residents. The City seeks to maximize accessibility to low-income households, however, targeting 35% of vehicle usage by members of households earning \$25,000 or less. Additionally, the Operator will hire a full-time Outreach Manager to coordinate outreach with local CBOs and expects to provide "Street Ambassadors" who will recruit members, provide technical support, and address customer problems.

Another issue expressed by advocates is whether low-income consumers will see carsharing as a viable alternative mode of travel in a transit-rich area or whether there might be higher usage in areas with fewer transit options. City staff express that carsharing programs work best near transit and often increase transit ridership. Research supports these claims, but individual studies show that increased transit ridership occurred with more subsidies for low-income households,¹⁰ and that local residents increased their transit use when programs provided parking for vehicles at housing sites near transit.¹¹

Locating carshare vehicles near transit will increase the mobility of transit riders using Downtown as a destination. However, balancing accessibility at stations with carshare parking near affordable housing will likely be necessary for the goals of increased low-income mobility and transit ridership to succeed. The Operator will monitor enrollment and carshare use and the L.A. Department of Transportation (LADOT), SUMC, and a Steering Committee of equity-based organizations will continue to help develop incentives and mechanisms that improve the design and implementation of the pilot.

City officials have made a significant effort to include CBOs such as T.R.U.S.T. South LA, Salvadoran American Leadership and Education Fund (SALEF), and the Koreatown Immigrant Workforce Alliance (KIWA) on the Steering Committee and incorporate their suggestions. Moving forward, the biggest challenge facing the pilot will be meeting community needs and the bottom line of economic sustainability, a goal that a strong and active partnership between the City, CBO partners, and the Operator will help to advance.

Zero-Emission Drayage Trucks

Low-Carbon Transportation (LCT) Program – Advanced Technology Freight Demonstrations (ATFD)

AGENCY: California Air Resources Board (ARB)

ARB’s Advanced Technology Demonstration Projects program has received funding since 2011 and has included funding for freight technology demonstrations of marine vessels, locomotives, and off-road equipment. GGRF FY14/15 funding for this program, however, was not awarded until May 2016. To date there are three CCI projects (two in L.A. County, one in San Bernardino): a Zero-Emission Drayage Truck project and two Multi-Source Facility (MSF) projects.

Zero-Emission Drayage Trucks haul goods from one terminal or hub (e.g., port, warehouse, distribution center) to another over relatively short distances. This program funds projects that will accelerate the commercialization of zero- and near-zero-emission Class 8 trucks which, at >33,000 pounds GVWR, are the heaviest truck weight class.

CA Collaborative Advanced Technology Drayage Truck Demonstration (\$24m)

Grant Recipient: South Coast Air Quality Management District (SCAQMD)

SCAQMD is partnering with the Bay Area, Sacramento, San Diego, and San Joaquin Valley air districts on a statewide drayage truck pilot serving major California ports. Four truck Original Equipment Manufacturers (OEMs) will demonstrate 43 battery electric (BEV) and plug-in hybrid (PHEV) trucks in all five air districts, providing emission reduction benefits in California’s areas with the most concentrated drayage truck activity.

Although a statewide program, the San Pedro Bay Ports (Los Angeles and Long Beach) will likely see more benefits because of their significantly greater volume of trade activity.

What’s Working

+ These projects have the greatest potential for immediate public health benefits in communities on the frontlines of industrial pollution, both by direct reduction of toxic emissions and by decreased demand of fossil fuels produced at local refineries.

CA Collaborative Funding Partners

ARB	\$23.6m	59%
OEMs	\$ 6.1m	15%
SCAQMD	\$ 6.0m	15%
BAAQMD	\$ 3.0m	7.5%
SJVAPCD	\$ 1.0m	2.5%
SDAPCD	\$ 0.2m	0.5%
SDG&E	\$ 0.2m	0.5%
Total	\$40.1m	100%

Mandate: 100% DAC Benefit

Total Allocations: \$81 million	
\$47m	\$34m
<i>FY 14-15</i>	<i>FY 16-17</i>
Implemented in CA: \$47 million	
-1	\$47m ¹
<i>DAC Benefit</i>	<i>In DAC</i>
Implemented in L.A.: \$38 million	
-1	\$38m ¹
<i>DAC Benefit</i>	<i>In DAC</i>

As of December 31, 2015

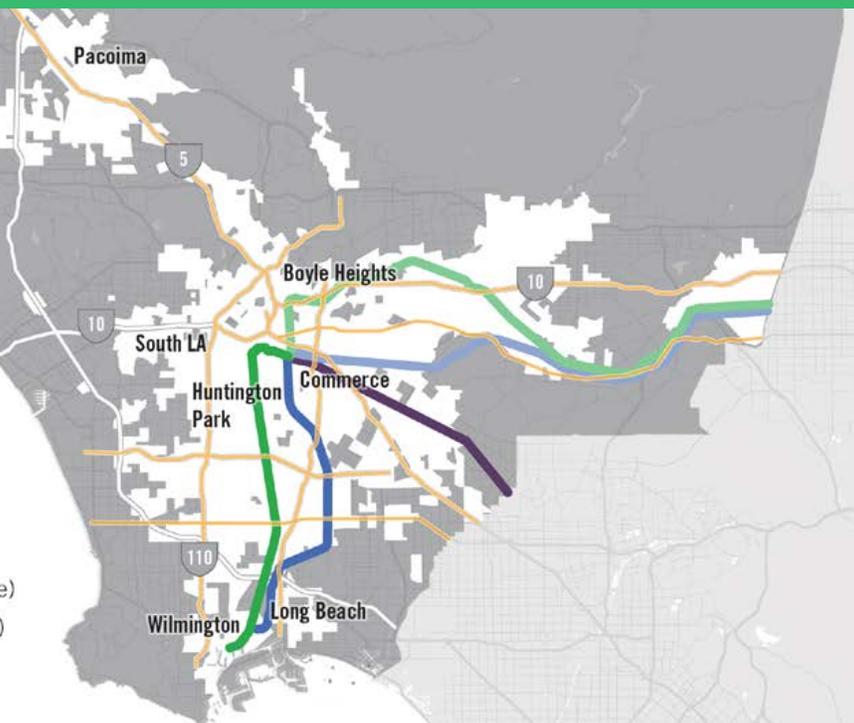
1- MSF project is 100% within DACs, drayage occurs along goods movement corridors statewide, mostly affecting DACs

- BYD MOTORS** - 25 battery electric drayage trucks to serve near-dock and short regional drayage routes with a range of 100 miles
- KENWORTH** - Four plug-in hybrid electric (PHEV) trucks with 50 miles all-electric range for sensitive areas and DACs, and a natural gas range of 250 miles
- PETERBILT** - Eight battery electric trucks with an 80 mile range for near-dock drayage, and four others with a 120 mile range for longer trips
- VOLVO** - Two PHEV diesel trucks with freight signal priority and a GPS-established virtual perimeter that triggers a switch to diesel

ZERO-EMISSIONS DRAYAGE TRUCKS

Multiple Air Districts

- Alameda Corridor
- Union Pacific Corridor
- Union Pacific Corridor (Alahambra Line)
- Union Pacific Corridor (LA Subdivision)
- BNSF Transcon
- Truck Corridors
- DAC



Multi-Source-Facility (MSF) Demonstrations

Low-Carbon Transportation (LCT) Program – Advanced Technology Freight Demonstrations (ATFD)

AGENCY: California Air Resources Board (ARB)

Multi-Source Facility (MSF) Demonstrations

advance the viability of employing zero- and near-zero-emission technologies with multiple types of equipment and vehicles at one freight facility.

Green Omni Terminal Demonstration Project (\$14.5m) Total Project Cost (\$26.6 million)

Grant Recipients: Port of Los Angeles, Pasha Stevedoring, and Terminals L.P.

The 40-acre Green Omni Terminal will be an energy independent marine terminal able to provide its own power needs from on-site renewable sources. It is meant to be replicable across all port terminals. Construction is scheduled to begin in late 2016 and be completed by mid-2017. The GGRF is providing 56% of the total \$26.6 million project cost. asha is contributing \$11.4 million in cash and in-kind resources and 11 different organizations will cover the balance of approximately \$700,000. Program features include:

- + **Solar-powered microgrid:** 1.03 megawatt photovoltaic rooftop array, 2.6 megawatt-hour battery storage system, charging equipment that can receive as well as supply power, and an energy control system
- + **Zero-emission cargo handling equipment:** 4 electrified yard tractors, 2 high-tonnage forklifts, 2 drayage trucks, 1 top handler, and 2 wharf crane upgrades
- + **ShoreCat Marine Exhaust Treatment:** A system that can capture over 90% of emissions produced by ships docked at the terminal without shore power
- + **Estimated Air Quality and GHG Benefits:** 3,200 tons of GHGs and 28 tons of diesel particulate matter, nitrogen oxides, and other toxic air contaminants—likely equivalent to the emissions of 14,100 cars

Co-Benefits

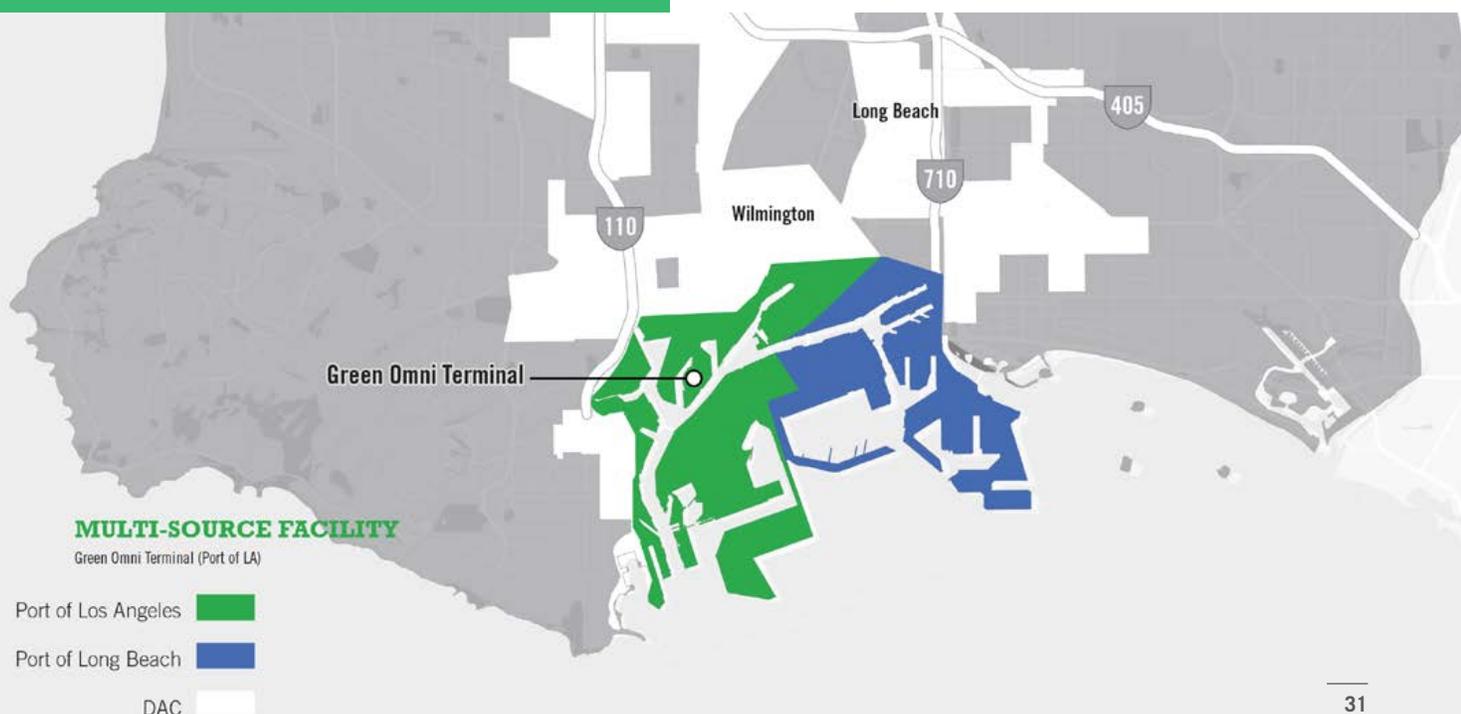
- + Significant public health improvement
- + Reduced criteria air pollutants
- + Decreased noise
- + Disaster preparedness
- + Market transformations of advanced technologies
- + Decreased production of fossil fuels at refineries

Equity Priorities

- + Invest more now to address severe public health concerns from diesel
- + Create catenary (overhead wire) zero-emission freight system
- + Create ongoing tracking system for project emissions, activities, and outcomes with data accessible to the public
- + Establish committees with EJ representatives to increase transparency and accountability in the goods movement sector

Key Takeaways

- + Scaling up successful demonstration projects is a crucial aspect of successfully investing simultaneously in the global reduction of GHGs and addressing severe and immediate threats to local public health by toxic air contaminants.
- + Transition to zero-emission (over “clean” diesel and natural gas) technology should be prioritized with investments supporting the conversion from a diesel freight system.



Affordable Housing & Sustainable Communities (AHSC)

AGENCY: Strategic Growth Council (SGC)
Continuous Appropriations: 20% of the GGRF

The AHSC Program invests in affordable housing and other sustainability improvements near transit. It reduces GHG emissions through compact infill development; encouragement of active transportation and transit usage; and limiting sprawl. Through FY14/15–FY15/16 SGC allocated \$45 million to the Sustainable Agricultural Lands Conservation program to protect agricultural land from development. The \$1.01 billion that the program has received from the GGRF is second only to the \$1.35 billion received by High Speed Rail. The program targets 50% of its funds to benefit disadvantaged communities. Understanding these benefits is, therefore, a key to determining how well climate investments as a whole are fulfilling the intentions of SB 535.

Co-Benefits

- + Reduced cost of living
- + Increased mobility and active transportation
- + Programming tailored to resident needs
- + Job creation
- + Lower transportation cost
- + Increased access to green space
- + Improved access to jobs

Equity Priorities

- + Include robust displacement mitigation in guidelines
- + Prioritize authentic community engagement
- + Mitigate local business disruption
- + Improve application clarity and transparency in the review process

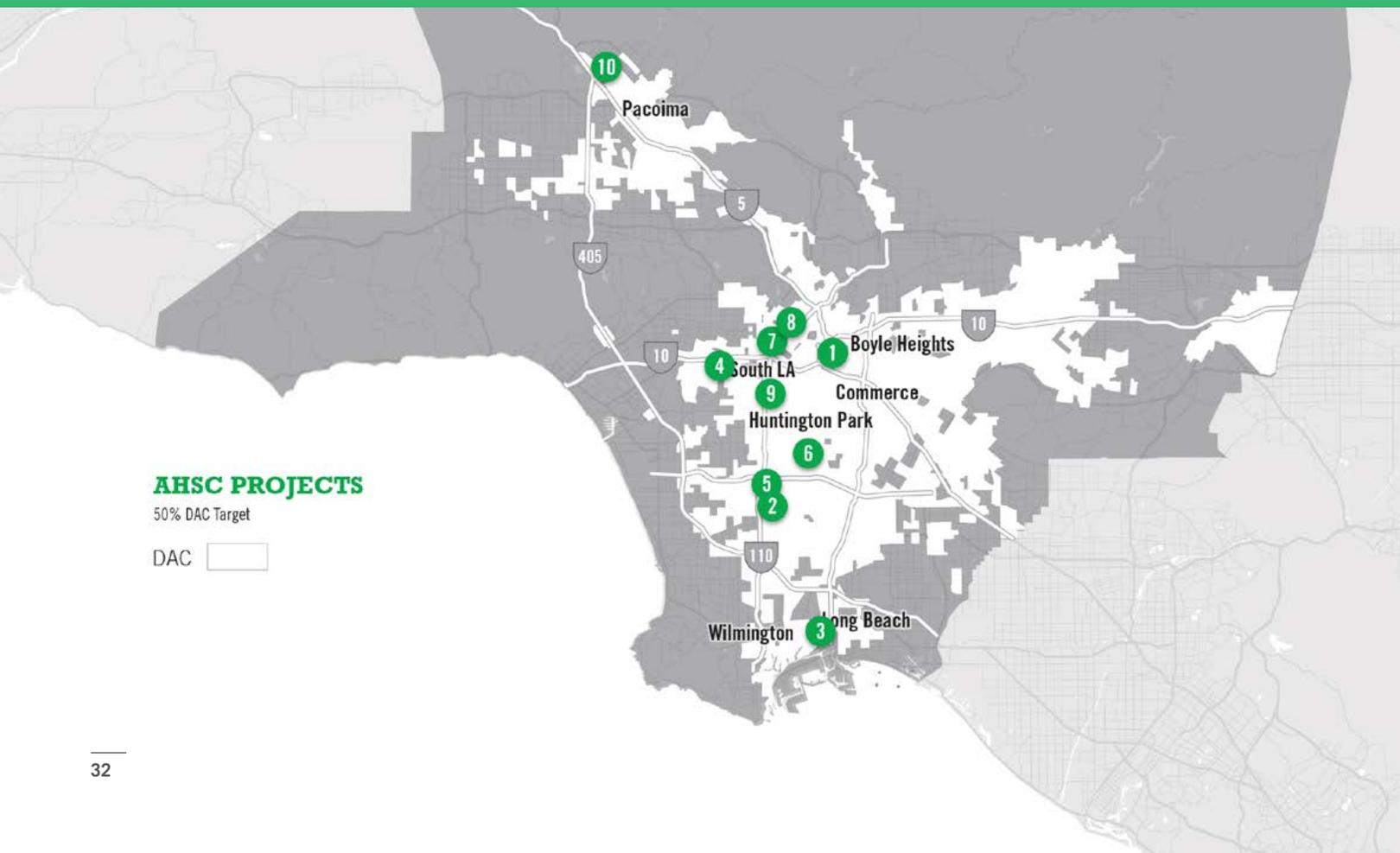
What's Working

- + 840 affordable units provided in L.A., all in disadvantaged communities.
- + Rolland Curtis East is a model example of equitable development and authentic community engagement. (see inset, Appendix C, page 104)
- + Revised guidelines increase co-benefits relative to GHG reduction in scoring; added an economic displacement scoring category (first of the CCI programs to do so); and improved criteria for community involvement.

Mandate: 50% DAC Benefit

Total Allocations: \$1.01 billion		
\$130m	\$480m	\$400m
<i>FY 14-15</i>	<i>FY 15-16</i>	<i>FY 16-17</i>
Implemented in CA: \$154 million		
\$37m	\$32m	\$85m
<i>Non-DAC</i>	<i>DAC Benefit</i>	<i>In DAC</i>
Implemented in L.A.: \$3 million		
-	-	\$21.5m
<i>Non-DAC</i>	<i>DAC Benefit</i>	<i>In DAC</i>

As of December 31, 2015



AHSC PROJECTS

50% DAC Target

DAC

Project Descriptions¹²

1. **1st and Soto: 2419 E 1st St, Los Angeles, CA 90033 (\$2.5m)** – Developer: East Los Angeles Community Corporation
Mixed-use project with 31 affordable housing units; 38 parking spaces and bike storage; low-emission/electric vehicle outlets; first floor retail; and estimated 30% DAC or at-risk youth hire.
2. **127th St. Apartments: 536-548 W 127th St, Los Angeles, CA 90044 (\$1.5m)** – Developer: Meta Housing Corporation
85 new units of affordable housing for residents with special needs; construction of 85 secure covered bike stalls; and installation of new pedestrian infrastructure.
3. **Anchor Place: 2000 River Ave, Long Beach, CA 90810 (\$2.4m)** – Developer: Century Housing Corporation
119 affordable units, including 75 for veterans and 18 for persons who are homeless and those with mental health conditions; on-site supportive services; bus stop upgrades, new transit hub with complete streets improvements, and conversion of an existing building into a transit depot.
4. **Crenshaw Villas: 45 S Crenshaw Blvd, Los Angeles, CA 90016 (\$2.2m)** – Developer: American Communities, LLC
A 5-story, mixed-use development with 49 affordable residential units for low-income seniors; 4,999 square feet of neighborhood-serving commercial/office uses; a vegetable garden; and free bicycle access with secured stalls.
5. **El Segundo Family Apartments: 535 W El Segundo Blvd, L.A., CA 90061 (\$1.9m)** – Developer: Meta Housing Corporation
75 new affordable rental units for working families and people with special needs; construction of 75 secure covered bike stalls; and installation of water-conserving landscaping.

Key Takeaways

- + Jobs, which are a key co-benefit and opportunity for training and apprenticeships have little to no focus on disadvantaged workers.
- + Community engagement and overall co-benefits have been awarded points easily, but in many cases do not amount to a significant addition beyond affordable housing near transit and informational community meeting.
- + Guidelines have improved but may not go far enough.

840 Affordable Units



6. **Jordan Downs, Phase 1: 9800 Grape St, Los Angeles, CA 90002 (\$6.5m)** – Developer: BRIDGE Housing Corporation
100 affordable housing units; part of larger mixed-income and mixed-use redevelopment project with 1,375 residential units; a 50,000 square-foot community center; job-training and supportive services; and approximately 100,000 square feet of community-serving retail.
7. **MacArthur Park Apartments, Phase B: 1901 W 7th St, L.A., CA 90057 (\$7.0m)** – Developer: McCormack Baron Salazar
Mixed-use development with 82 affordable housing units and 7,000 square feet of retail; improved access to the Metro Red and Purple lines at the Westlake/MacArthur Park Station; 1 free Metro pass per household (and additional discounted passes) for 55 years.
8. **Mosaic Gardens at Westlake: 1416 W Beverly Blvd, Los Angeles, CA 90026 (\$1.9m)** – Developer: LINC Housing
123 affordable-unit intergenerational housing community for families and seniors; 63 units reserved for individuals or families who are homeless, with 32 of those units reserved for individuals or families who are chronically homeless.
9. **Rolland Curtis Gardens East: 4331 S Main St, Los Angeles, CA 90037 (\$4.0m)** – Developer: Abode Communities
70 affordable housing units; 2 dedicated car-share parking spaces; 2 bicycle repair kiosks; active transportation programming; part of a larger mixed-use development project, Rolland Curtis Gardens, consisting of 140 units of affordable housing total in 2 wings, along with a community-serving health clinic, tot lot, and retail.
10. **Sylmar Court Apartments: 12421 San Fernando Road, Sylmar, CA 91342** – Developer: Meta Housing Corporation
101 affordable units and a neighborhood retail store; 25 units reserved for residents with special needs; improved pedestrian amenities and connection to a nearby bike path.

¹²At the close of the writing of this report, SGC staff released recommendations for 25 projects statewide totaling \$289 million in AHSC 2015-16 awards. Of those recommendations, 6 are in Los Angeles County (all in the City of LA) totaling \$65 million. These projects include second phases of Rolland Curtis Gardens and Jordan Downs, as well as projects in East Hollywood, Skid Row, Sun Valley, and Westlake. Information is provided in Appendix B and is also available online at <http://sgc.ca.gov/resource%20files/10112016AHSC1516AppendixA1&2.pdf>

Transit & Intercity Rail Capital Program (TIRCP)

AGENCY: CA State Transportation Authority (CalSTA)
Continuous Appropriations: 10% of the GGRF

TIRCP is a competitive grant program that funds capital improvements to California’s transit and rail systems to reduce GHGs; expands and improves transit service to increase ridership; integrates rail systems, including high-speed rail; and improves safety.

Co-Benefits (TIRCP and LCTOP)

- + Reduced congestion and vehicle miles traveled
- + Fare reductions and service improvements
- + Increased mobility and connectivity
- + Active transportation support
- + Improved public health and safety
- + Improved air quality
- + Increased system reliability
- + Attraction of jobs and housing

TIRCP Projects

- + **Antelope Valley Transit Authority (\$24m):** Supporting infrastructure for a Palmdale and Lancaster Bus Rapid Transit (BRT) development and purchase of electric buses for BRT and commuter service
- + **LOSSAN Rail Corridor Agency (\$2m):** 6/16-6/17 pilot for discounted or free transfers to local transit providers at 27 stations including the provision of free Metro passes at five L.A. County stations
- + **Metro (\$38m):** Blue Line upgrades to infrastructure and access, safety, and connectivity improvements Willowbrook/Rosa Parks station improvements
- + **Metrolink (\$41m):** Replacement of seven locomotives for Metrolink network and acquisition of two more for the Antelope Valley and Ventura County lines
- + **Orange County Transportation Authority (\$2m):** Purchase of five 40-foot compressed natural gas buses for new rapid bus route from Santa Ana to Long Beach

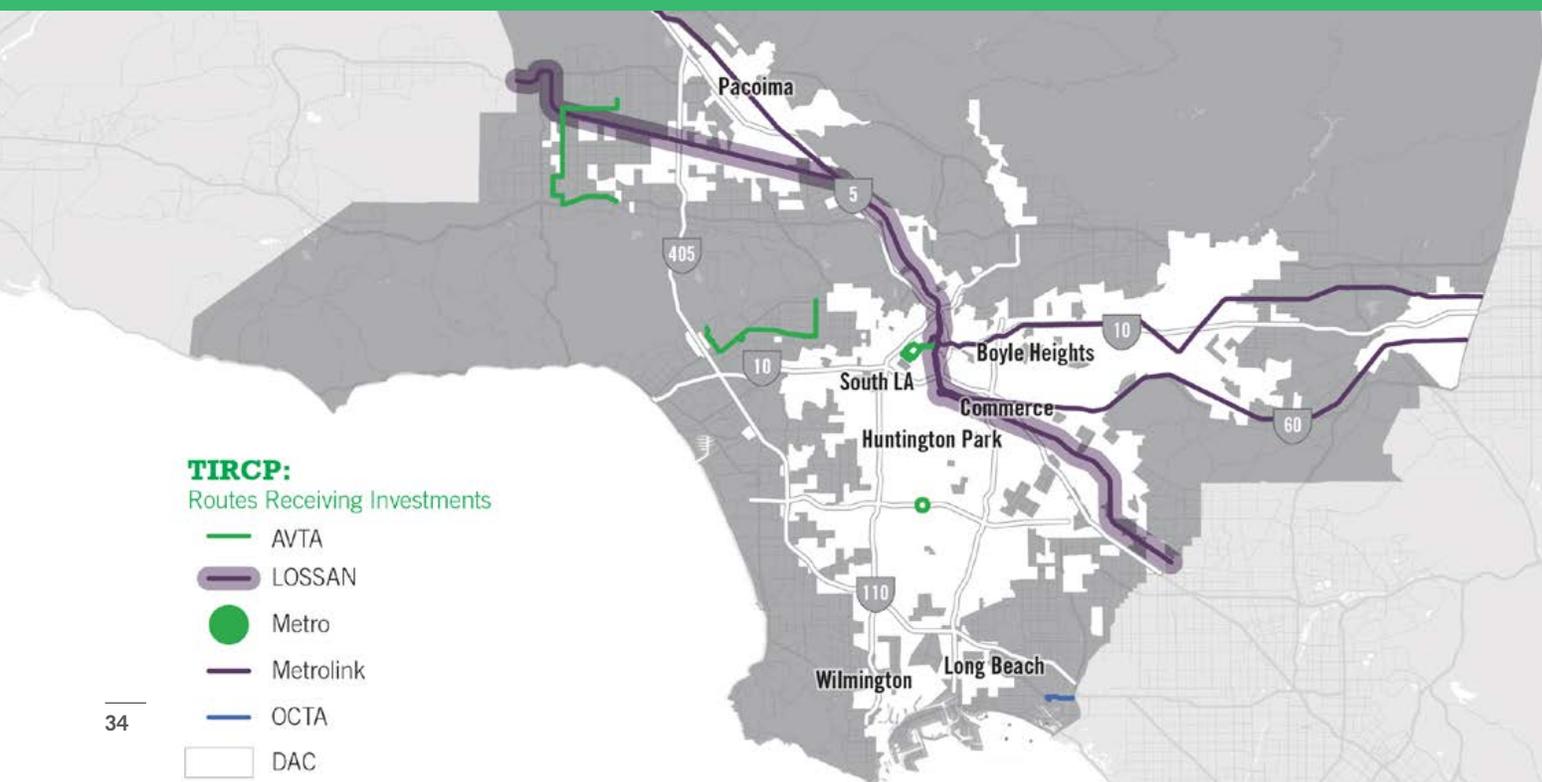
What’s Working (TIRCP and LCTOP)

- + TIRCP has strengthened community engagement language for projects intended to address community priorities and needs.
- + CalSTA and Caltrans are increasing transparency and inclusionary requirements.

TIRCP Mandate: 25% DAC Benefit

Total Allocations: \$600 million		
\$25m	\$240m	\$335m
<i>FY 14-15</i>	<i>FY 15-16</i>	<i>FY 16-17</i>
Implemented in CA: \$224 million		
\$11m	\$24m	\$189m
<i>Non-DAC</i>	<i>DAC Benefit</i>	<i>In DAC</i>
Implemented in L.A.: \$108 million		
-	\$24m	\$84m
<i>Non-DAC</i>	<i>DAC Benefit</i>	<i>In DAC</i>

As of December 31, 2015



- TIRCP:**
 Routes Receiving Investments
- AVTA
 - LOSSAN
 - Metro
 - Metrolink
 - OCTA
 - DAC

Low Carbon Transit Operations Program (LCTOP)

AGENCY: California Department Of Transportation (Caltrans)

Continuous Appropriations: 5% of the GGRF

LCTOP provides operating and capital assistance for transit agencies to reduce GHG emissions and improve mobility, with a priority of serving disadvantaged communities. Funding is awarded to transit agencies based on a formula as opposed to a competitive grant process.

Equity Priorities (TIRCP and LCTOP)

- + Ensure mobility benefits and operations funding
- + Reduce rail emphasis
- + Prioritize active transportation, vanpool, and shuttle services
- + Ensure affordability
- + Prioritize low-income areas with high ridership
- + Physical and economic displacement protection
- + Incorporate authentic community engagement
- + Program transparency and reporting on projects

LCTOP Projects

- + **AVTA (\$41k):** Zero-emission vehicle infrastructure installation [lies outside of map view]
- + **Culver City Bus (\$35k):** Operating funding for extra Line 6 bus
- + **Foothill Transit (\$168k):** Two electric bus chargers for Line 280
- + **Gardena GTrans (\$39k):** Line 1-x service expansion
- + **Los Angeles City DOT (\$215k):** DASH bus bike rack purchase
- + **Long Beach Public Transportation (\$163k):** Route 1 extended route and service hours
- + **METRO (\$6m):** Operating assistance for Gold Line extension from Pasadena to Azusa
- + **Metrolink (\$486k):** Replacement and installation of new ticket vending machines
- + **Montebello Bus Lines (\$57k):** Line 10 Thursday peak hour additional limited service
- + **Norwalk Transit System (\$5k):** Transit passes for DAC Cerritos Community College students
- + **Santa Monica Big Blue Bus (\$131k):** Increased service, focused on lines 15, 16, and 17
- + **Torrance Transit System (\$40k):** Upgrade bus bike rack capacity to three bikes

Key Takeaways

- + DAC benefits cannot be determined merely by service proximity, but must consider the financial feasibility, connectivity, and usefulness of destinations.
- + A low-income bus ridership focus is needed, especially in Southeast L.A. County.
- + Project evaluation transparency is needed to understand how project funding is determined.

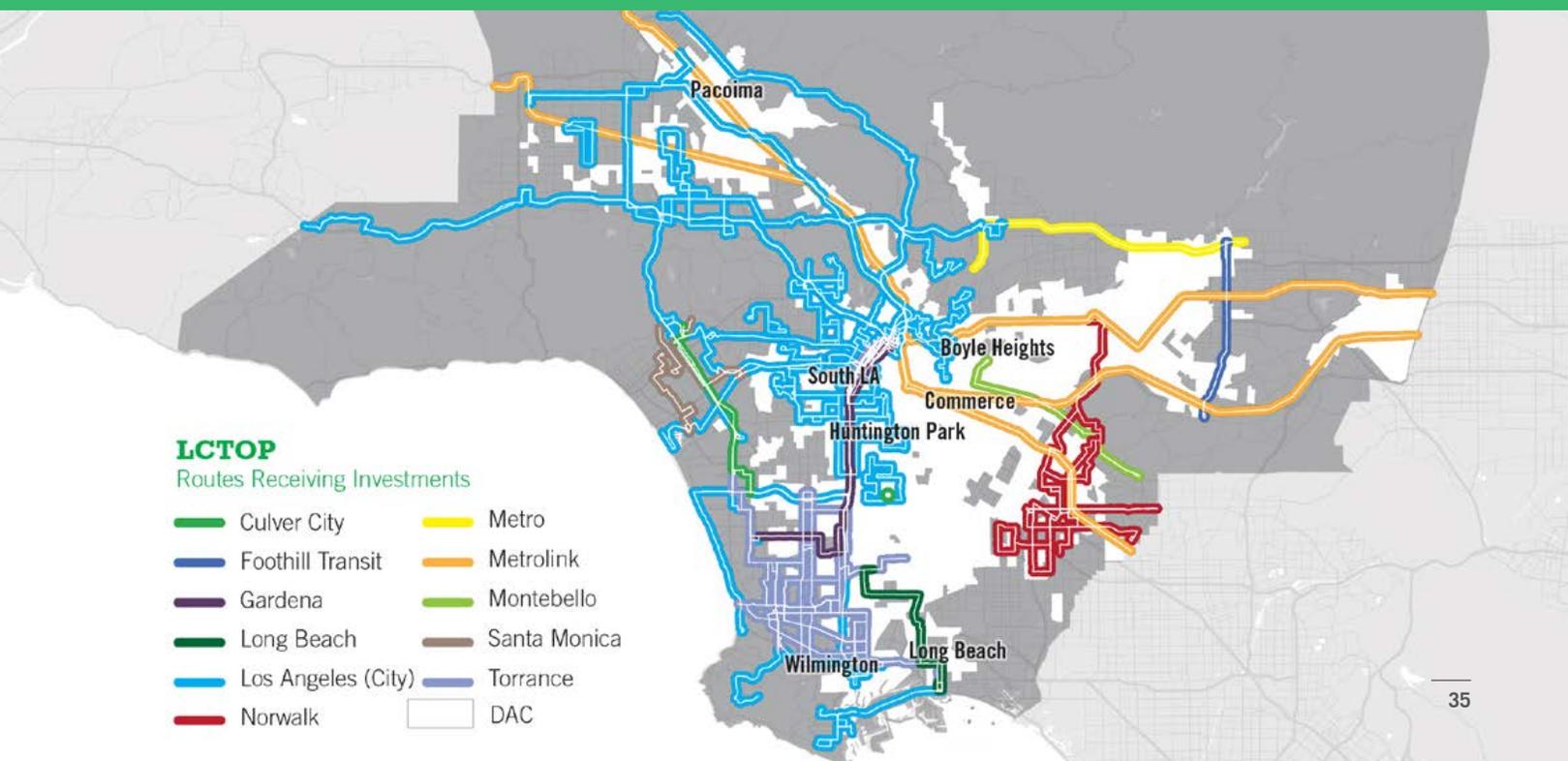
LCTOP Mandate: 50% DAC Benefit*

Total Allocations: \$245 million

	\$25m	\$120m	\$100m
	FY 14-15	FY 15-16	FY 16-17
Implemented in CA: \$27 million	\$1.6m	\$7.9m	\$17.7m
	Non-DAC	DAC Benefit	In DAC
Implemented in L.A.: \$7.3 million	-	-	\$7.3m
	Non-DAC	DAC Benefit	In DAC

As of December 31, 2015

*Only for transit agencies whose service areas contain a DAC



LCTOP

Routes Receiving Investments

- Culver City
- Foothill Transit
- Gardena
- Long Beach
- Los Angeles (City)
- Norwalk
- Metro
- Metrolink
- Montebello
- Santa Monica
- Torrance
- DAC

Urban and Community Forestry (UCF)

AGENCY: California Department Of Forestry And Fire Protection (CAL FIRE)

The Urban and Community Forestry program aims to expand and improve the management of trees and other vegetation in California’s communities. The program consisted of five grants, two of which issued awards in L.A. County: Green Trees for the Golden State (GTGS), for urban tree planting projects; and Green Innovations, focusing more on forward-thinking green infrastructure.¹³ As part of the GTGS program, CAL FIRE awarded funding to California ReLeaf for smaller statewide subgrants. Its program, Social Equity Tree Planting, awarded four projects in L.A. County which are also featured here.

Co-Benefits

- + Improved public health
- + Reduced air contaminants
- + Reduced heat island effect
- + Storm water capture
- + Access to workforce education and quality jobs
- + Trees and healthy community education

Co-Benefits (cont.)

- + Possible food production
- + Increased safety/reduced crime
- + Increased beauty and community pride
- + More community connection and sense of belonging

Equity Priorities

- + Include more forward thinking green infrastructure development
- + Expand eligibility within tree planting projects for greening that provides co-benefits but does not contribute significantly to overall tree canopy
- + Include mandate related to jobs
- + Prioritize authentic community engagement
- + Include robust displacement mitigation in guidelines
- + Mitigate local business disruption
- + Provide measures that support CBOs with limited capacity and/or experience
- + Improve application clarity and transparency in the review process

What’s Working

- + A majority of L.A. projects included some level of community involvement in project implementation, while closer to half mentioned some form of community involvement in project planning or design.
- + The L.A. County projects show positive steps to involve communities, particularly by training those who may face employment barriers.
- + Very accessible—CBOs can directly apply to the program.
- + 20% of CAL FIRE funds can be used for education and outreach.

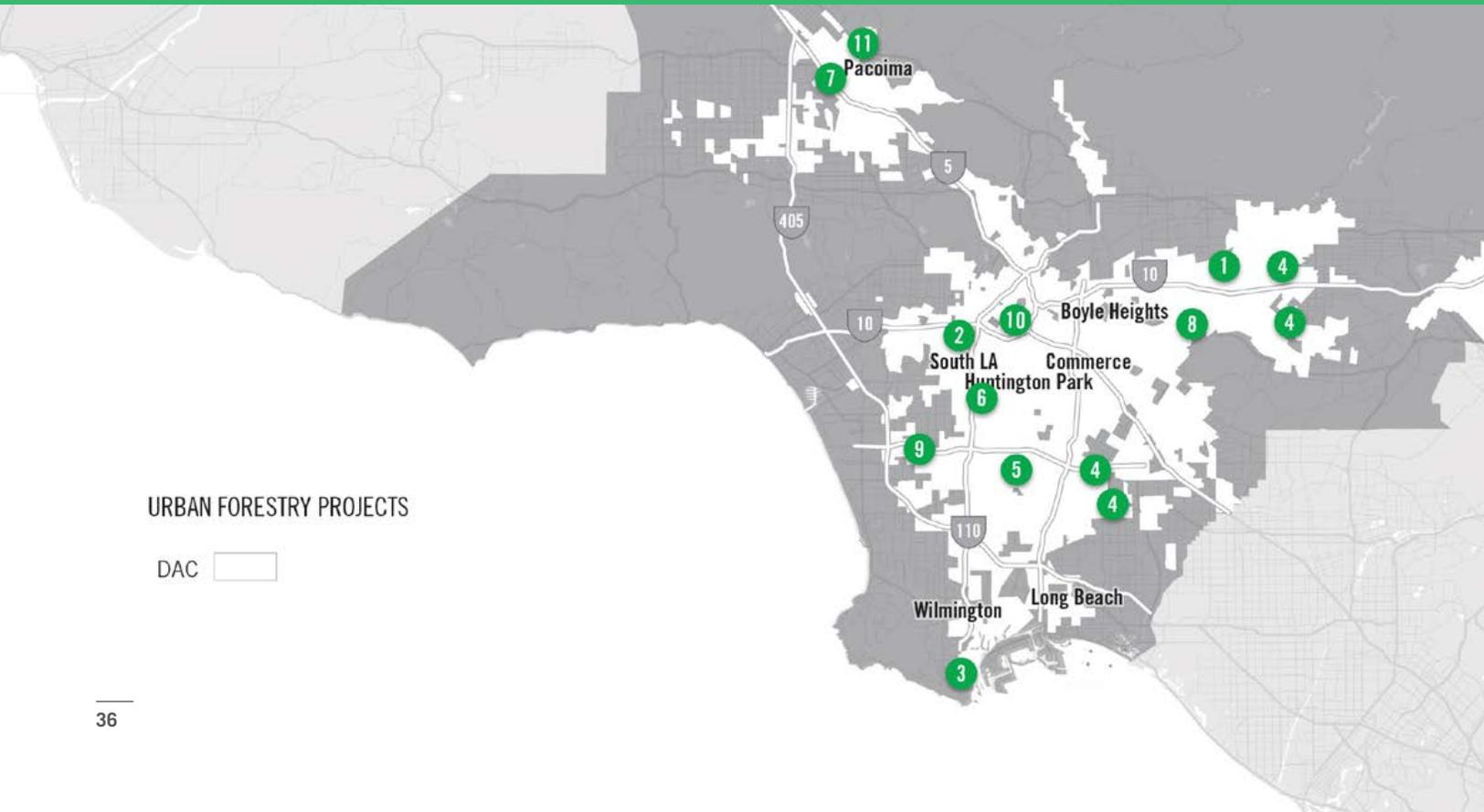
Mandate: 100% DAC Benefit

Total Allocations: \$32 million

\$18m	-	\$14m
FY 14-15	FY 15-16	FY 16-17
Implemented in CA: \$16 million		
-	- ¹	\$15.6m ¹
Non-DAC	DAC Benefit	In DAC
Implemented in L.A.: \$4.7 million²		
-	- ¹	\$4.7m ¹
Non-DAC	DAC Benefit	In DAC

As of December 31, 2015

1- Total funding in L.A. does not include the 4 County projects within the statewide CUFC program
 2- Some projects plant trees over a project area containing DACs and areas within 1/2 mile from a DAC.



URBAN FORESTRY PROJECTS

DAC

Project Descriptions

CAL FIRE GRANT: GREEN INNOVATIONS

1. **Mulhall Family Center Green Infrastructure** \$750,000 – *Amigos de los Rios*
Repurposing of abandoned school site for wellness center with Citizen Science Station, removal of asphalt and concrete, irrigation system, bioswales, permeable pavement, raised bed planters, picnic tables, active transportation trails, community garden, habitat demonstrations areas, and cool roof. Part of a larger effort across various sites in the El Monte City School District; with intent to plant total of 600 (270 CAL FIRE funded) trees and 2,000 shrubs.
2. **Green Streets through Community Engagement** \$330,000 – *Korean Youth Community Center (KYCC)*
Funding for 1,120 trees to be planted in and around West Adams, as well as mulching turf removal, and infrastructure modifications to support growing of large trees. Includes strategies to better understand and incorporate concerns leading to resistance to tree planting.
3. **San Pedro Urban Forest Ecosystem Restoration** \$1,482,000 – *Los Angeles Conservation Corps (LACC)*
Planting of 3,000 trees (1,000 CAL FIRE funded) in San Pedro's downtown area. Will create 3,600 linear feet of vegetated stormwater capture, install 25 street-side vegetated rain gardens, and convert 25 front yards to drought tolerant landscaping.
4. **California Initiative to Reduce Carbon and Limit Emissions (CIRCLE)** \$750,000 – *California Urban Forest Council*
Planting of 1,350 site-adapted and drought tolerant trees of various species in public parks and rights of way at DACs across the State, including four L.A. County locations: Paramount, Baldwin Park, Bellflower, and La Puente.

Key Takeaways

- + Appropriately balance between the prioritization of GHG reduction and community benefits, particularly when considering eligible types of improvements.
- + The majority of labor is performed by youth or other community volunteers, with only a few cases of stipend provisions.
- + Community engagement is stated as a high program priority, but documentation is not clear. With many projects it was hard to establish anything beyond volunteer tree planting.
- + CAL FIRE provided applications upon request, but the agency does not disclose how points are assigned in evaluating proposals.

CAL FIRE GRANT: GREEN TREES FOR THE GOLDEN STATE

5. **Advancing Communities via Forestry and Training** \$675,000 – *Los Angeles Conservation Corps (LACC)*
Planting of 1,875 (1,500 CAL FIRE funded) trees in two phases in the City of Compton and the unincorporated communities of Rancho Dominguez and Willowbrook with a separately funded walking path. At-risk youth, ages 18-24, will be trained and hired from the target communities to provide the necessary project labor.
 6. **South L.A. Carbon Into Canopy: Vermont Corridor** \$750,000 – *City of Los Angeles, Bureau of Sanitation*
Plant or provide 3,300 trees (1,800 street trees and 1,500 for residents, none funded by CAL FIRE) and prioritizes DACs with CalEnviroScreen scores above the 90th percentile. Businesses and residents will be engaged in the process and fruit and shade tree giveaways will occur.
7. **Tree Planting in San Fernando Valley DACs** \$750,000 – *LA Beautification Team*
Plant and maintain 1,550 trees within disadvantaged communities in the northeast San Fernando Valley. Curb cuts will result in the removal of 11,000 square feet of concrete. In addition to planting trees on public sidewalks, trees will also be distributed to low-income households. Tree health and environmental impact will be measured by Occidental College students.

SOCIAL EQUITY TREE PLANTING (smaller subgrants through CALIFORNIA RELEAF)

8. **Whittier Narrows Emerald Necklace** \$70,000 – *Amigos de los Rios*
Plant 225 native/drought-tolerant trees in Whittier Narrows Recreation Area to restore tree canopy habitat lost from a 2015 fire and pest invasions. Creates a citizen science project measuring the effects of the new trees on the heat island effect.
9. **Lennox Enhancement & Engagement Project** \$30,000 – *From Lot to Spot*
Planting 75 trees along four residential blocks in Lennox, a small, unincorporated community directly in the LAX flight path and bordering the 105 and 405 freeways. This is phase 2 of a 2015 project where over 100 trees were planted in Lennox's public parkways.
10. **Greening Central Avenue in DTLA** \$30,000 – *Industrial District Green*
Planting of 50 trees in Downtown L.A.'s Skid Row with partnerships with residents, homeless, and Arts District business owners.
11. **Tree Planting/Education Next Century Public School** \$18,000 – *The University Corporation*
Planting of 53 drought-tolerant trees at Global Green Academy in Pacoima. Project design in collaboration with school teachers and administrators with hands-on experience for elementary school students and family with adoption of trees.

Data Sources

Most data relating to allocated and implemented CCI funding came from the *2016 Annual Report to the Legislature on Cap-and-Trade Auction Proceeds* produced by the California Department of Finance in coordination with ARB. Supplemental data not cited elsewhere in the document was also gathered from the following sources:

LIWP, CVRP, EFMP, Public Fleets, and HVIP:

- The ARB California Climate Investments Branch provided Census tract-level rebate and service redemption for LIWP and all clean vehicle incentive programs funded by the GGRF through 12/31/2015.
- FY2013/14 funding for CVRP and HVIP: SB 862 (2014). Available online: http://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201320140SB862
- The ARB California Disadvantaged Community Liaison's Office provided HVIP rebate redemption from program inception in FY2009/10 to May 31, 2015.

For the Los Angeles Electric Vehicle (EV) Carsharing Pilot:

- Los Angeles City Clerk, Council File: 15-1227. Title: California Air Resources Board (CARB) Fiscal Year 2014-15 / L.A. City Carsharing Pilot Project / Grant. Available online: <https://cityclerk.lacity.org/lacityclerkconnect/index.cfm?fa=ccfi.viewrecord&cfnumber=15-1227>

For the Advanced Technology Freight Demonstration (ATFD) Zero-Emission Drayage Pilot:

- ARB AQIP and Low-Carbon Transportation Advanced Technology Demonstration Projects: <https://www.arb.ca.gov/msprog/aqip/demo.htm>
- SCAQMD, Governing Board Meeting Agenda: March 4, 2016: <http://www.aqmd.gov/home/library/meeting-agendas-minutes/agenda?title=GovBdMtg-2016-Mar4>
- SJVUAPCD Governing Board Meeting Agenda: February 18, 2016: http://www.valleyair.org/Board_meetings/GB/agenda_minutes/Agenda/2016/February/final/12.pdf
- ARB Press Release. May 4, 2016: <https://www.arb.ca.gov/newsrel/newsrelease.php?id=809>

For the ATFD Multi-Source Facility Pilot:

- ARB AQIP and Low-Carbon Transportation Advanced Technology Demonstration Projects: <https://www.arb.ca.gov/msprog/aqip/demo.htm>
- Port of Los Angeles Press Release. May 26, 2016: https://www.portoflosangeles.org/newsroom/2016_releases/news_052616_green_omni.asp

For the AHSC program:

- California Strategic Growth Council. Annual Report to the Legislature FY2015/16. July 1, 2016: <http://sgc.ca.gov/pdf/SGC%202016%20Annual%20Report.pdf>
- Individual project applications. Available online through the Financial Assistance Application Submittal Tool (FAAST) website: https://faast.waterboards.ca.gov/Public_Interface/PublicSearch.aspx

For the TIRCP and LCTOP programs:

- Individual project applications received from several applicants. See endnotes 43-44.

For the UCF program:

- Full project applications provided by CAL FIRE.

Los Angeles County Investment Findings and Recommendations

Our analysis focuses on verifying benefits and inclusive practices through direct services and rebates that have reached low-income households as well as projects that have broken ground for the benefit of disadvantaged communities that have come out of the California Climate Investments (CCI).

There was some difficulty in substantiating equitable outcomes, primarily due to the limitations of existing data. Many funded projects have yet to reach the point of implementation. Others, though in progress, still have little indication of what benefits may be realized upon completion, and in many cases, those who received funding were hesitant to talk about the status of their projects and the specific benefits achieved. Furthermore, even with programs well underway, there are often significant issues of insufficient reporting and tracking of co-benefits, such as job creation, or the methodologies by which they should be measured.

Many direct service and rebate programs still have the vast majority of their funding in reserve (Figure 2). The Enhanced Fleet Modernization Project (EFMP) program has 98% of its allocations yet to be awarded; and information is only available for 5% of the Low-Income Weatherization Program (LIWP) appropriations. Similarly, projects awarded funding through the Affordable Housing and Sustainable Communities (AHSC) program and Low-Carbon Transit Operations Program (LCTOP) each represent under 15% of total appropriations.

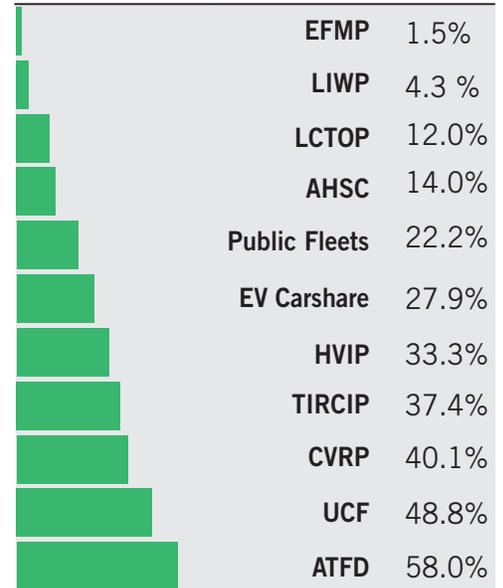
Not all of this postponement in implemented funding is due to administrative delays. Legislators appropriated a significant amount of funding in January 2016 and September 2016 that, understandably, is not yet implemented. Our report also does not account for recent AHSC, TIRCP, and LCTOP awards released too late to include in our analysis.¹⁴ Basic summaries of these projects are provided in the appendices.

In this summary, our findings focus on three key issues facing the CCI programs:

1. The distribution of resources in Los Angeles County's disadvantaged communities;
2. The significance of those benefits to local residents; and
3. What types of inclusive participatory practices were used when developing and implementing funded projects.

Lastly, we want to note some legislative activity to pay attention to in assessing co-benefits of CCI programs in the future: For the time period analyzed in this report, a majority of SB 535 funding occurred outside of DAC Census tracts, causing concern about benefits. As a case in point, our Clean Vehicle Rebate Project (CVRP) map shows rebates redeemed in the Hollywood Hills and Palos Verdes counting as SB 535 benefits because of their proximity to disadvantaged communities. Indeed, AB 1550 (Gomez, 2016) now overrides SB 535 and mandates 25% of the GGRF to be spent within and for the benefit of disadvantaged communities, as well as an additional 10% to be spent for the benefit of low-income households.¹⁵ While 60% of CVRP investments qualified for SB 535 funding, through December 2015, only 15% occurred within DACs. Implementation of AB 1550 should be closely monitored, both to evaluate the extent to which it improves DAC benefits and because greater penetration into low-income markets will be needed to achieve the 25% mandate within DACs.

Figure 2. Reported CCI Implemented Funding Statewide as of September 30, 2016



Distribution of Resources

Investments in many disadvantaged areas are limited. Methods of determining whether resources are effectively distributed vary between incentive- and project-based programs. With both program types, however, there were fewer benefits experienced in disadvantaged communities (DACs) in several areas:

- Southeast L.A. County, particularly from northern Long Beach and Wilmington up to Route 60, and the 110 interstate across to the 605. This region consists mostly of unincorporated areas of L.A. County and the Gateway Cities, including Commerce, Huntington Park, Maywood, South Gate, Lynwood, Paramount, Bellflower, Norwalk, Bell, Bell Gardens, Cudahy, Downey, Santa Fe Springs, and Pico Rivera. Several L.A. City neighborhoods are also within underinvested areas of Southeast L.A. County, including Wilmington, Harbor-Gateway, and parts of South L.A.
- The San Gabriel Valley, where disadvantaged communities stretch out along the 10 freeway and the 60 freeway east of the 710. This area includes the cities of West Covina, El Monte, Industry, La Puente, Rosemead, Baldwin Park, and Irwindale.
- The San Fernando Valley including the L.A. City neighborhoods of Pacoima, Sun Valley, portions of North Hollywood, Van Nuys, and Reseda.

Accessing hard-to-reach populations may require local education campaigns to raise awareness and understanding of alternative technologies and specific program benefits. There is a need to dispel false perceptions held by low-income households of high-cost burdens. Issues of mistrust, language barriers, and other challenges to effective outreach also may exist. Penetrating these areas may require specific outreach plans and working with organizations that have door-to-door experience in the area.

FINDING 1

Direct service and rebate programs could benefit from outreach coordination.

Recommendation: Coordinate outreach efforts of multiple programs to maximize productivity of time intensive activities.

Clean Vehicle Rebate Project (CVRP) rebates redeemed within disadvantaged community Census tracts may not be reaching low-income households. High rates of rebate redemptions in disadvantaged communities were often within tracts with higher-income populations, such as Mount Washington, Atwater Village, El Sereno, parts of Burbank, and gentrifying Downtown neighborhoods. CVRP rebates, open to both businesses and residences, were also redeemed more frequently in industrialized tracts with few residents, such as Vernon, the City of Industry, and the western portion of Cerritos. Both of these factors call into question whether low-income residences are actually accessing the incentives.

To overcome barriers to low-income markets, **we recommend combining the outreach efforts of CVRP, Enhanced Fleet Modernization Project (EFMP), and Light-Duty Financing Assistance** (a Bay Area pilot expanding statewide) into a single coordinated program. The financial feasibility for low-income households to purchase clean vehicles grows significantly when program benefits are stacked together (Table 3). EFMP combined with low-income financing decreases the upfront capital needed to purchase used clean vehicles, and combined with CVRP, subsidies for eligible new vehicles in some cases more than double what is available through CVRP alone.

The Low-Income Weatherization Program (LIWP) could also benefit from outreach coordination, as **solar installations and weatherization services occurred in close proximity to each other with no coordination**. This is because solar and weatherization service providers determine eligibility for their programs separately without significant sharing of information. But, income eligibility for both programs are the same, and while separate home conditions must be established for solar and weatherization services, the effort of door-to-door outreach activity would be far better served if physical eligibility for both programs was determined together.

LIWP's new guidelines propose a regional administration model which would allow for coordinated outreach efforts between solar installations and weatherization services. Because of the advantages in determining eligibility for both programs, we recommend that LIWP's new regional administration model prioritize outreach efforts coordinating weatherization and solar services, as well. **LIWP's new regional administration model should be monitored to see whether coordination of services and outreach achieve better uptake of the services provided in the program.**

Table 3. Combinable Clean Vehicle Subsidies through EFMP, EFMP Plus-Up, and CVRP in the South Coast and San Joaquin Valley Air Districts, as of November 1, 2016*

Income Eligibility % of Federal Poverty Level (FPL)**	Program	Replacement Options					Alternative Transportation Mobility Options: Public Transit or Rideshare
		2008 or Newer Conventional Hybrids 20+ MPG	2008 or Newer Conventional Hybrids 35+ MPG	New Plug-In Hybrid Electric Vehicles (PHEVs)	New Battery Electric Vehicles (BEVs)***	New Fuel Cell Electric Vehicles (FCEVs)	
Low Income <225% FPL	EFMP	\$4,000	\$4,500	\$4,500	\$4,500	\$4,500	\$4,500 Face Value
	EFMP Plus-up	\$2,500	\$2,500	\$5,000	\$5,000	\$5,000	Not Available
	CVRP	Not Available	Not Available	\$3,500	\$4,500	\$7,000	Not Available
	Total	\$6,500	\$7,000	\$13,000	\$14,000	\$16,500	\$4,500
Moderate Income <300% FPL	EFMP	Not Available	\$3,500	\$3,500	\$3,500	\$3,500	\$3,500 Face Value
	EFMP Plus-up	Not Available	\$1,500	\$4,000	\$4,000	\$4,000	Not Available
	CVRP	Not Available	Not Available	\$3,500	\$4,500	\$7,000	Not Available
	Total	Not Available	\$5,000	\$11,000	\$12,000	\$14,500	\$3,500
Above Moderate Income <400% FPL	EFMP	Not Available	Not Available	\$2,500	\$2,500	\$2,500	\$2,500 Face Value
	EFMP Plus-up	Not Available	Not Available	\$3,000	\$3,000	\$3,000	Not Available
	CVRP	Not Available	Not Available	\$1,500	\$2,500	\$5,000	Not Available
	Total	Not Available	Not Available	\$7,000	\$8,000	\$10,500	\$2,500

* ARB expects program to be expanded during FY16/17 to the Bay Area and Sacramento Metro air districts.

**2016 Federal Poverty Levels – Individual: \$11,880; Family of 2: \$16,020; Family of 3: \$20,160; Family of 4: \$24,300; Family of 5: \$28,440

***For new Battery Electric Vehicles an additional \$2,000 is available through EFMP for a home charging unit.

FINDING 2

Programs do not sufficiently prioritize outreach to penetrate low-income markets.

Recommendation: Create, fund, and implement targeted disadvantaged community outreach strategies.

CVRP is often oversubscribed statewide while few rebates are redeemed in disadvantaged communities. This is because disadvantaged community awareness of clean vehicle programs is a more significant problem than statewide awareness. Therefore, implementing statewide outreach strategies without a more targeted disadvantaged community approach may not be sufficient to improve rebate redemption in low-income households.

We recommend focusing CVRP outreach more on disadvantaged communities. Building disadvantaged community awareness of the program could not only help increase uptake where the program is performing the weakest, but also could also help satisfy the more demanding guidelines for disadvantaged community benefits set by AB 1550.

Programs that base outreach budgets on a percentage of service provider fees incentivize fewer outreach activities. A part of how service provider proposals stay competitive is by promising to provide services under budget. As an example, while CVRP allows for 7% of funding for service provider administration, proposals will not likely be competitive unless they are able to have an administrative budget of 3.5% to 4%.¹⁶ At the same time, The California Air Resources Board (ARB) has promoted providing more outreach funding by allowing the new service provider up to 50% of their administrative fees for outreach. In this case, outreach funding suffers in the interest of increasing the competitiveness of the proposal.

We recommend providing “use it or lose it” outreach funding for service providers in place of basing the amount on a percentage of the administrative budget. Considering the amount of funding that will be applied to new CVRP rebates, with a maximum 7% administrative budget, outreach funding could be close to \$3 million.¹⁷ Having multiple programs benefiting from this larger budget could be critical for a successful outreach strategy, especially considering the time-intensive activities necessary for disadvantaged community outreach. Rather than allow a “race-to-the-bottom” of administrative costs to decrease the available funding for outreach, agencies should instead provide a set “use it or lose it” outreach budget and incentivize innovative service provider/community-based organization (CBO) partnerships focusing on penetrating low-income markets.

Only 41 awards were granted through project-based programs, which is a small sample size to likely be effective. Several programs in our early analysis did not reveal issues of distributional equity. For example, the Urban and Community Forestry (UCF) program funded 11 separate projects. Some projects planted trees along residential and commercial corridors over several square miles. Others planted at scattered sites or large open space park areas. These projects were fairly well distributed across L.A. County, but underinvested areas may emerge as more projects are funded. Nevertheless, we found a few potential areas of concern, most notably in transit projects.

FINDING 3

State transit agencies did not direct service or infrastructure investment to local bus transit in the unincorporated areas of Southeast Los Angeles County.

Recommendation: Transit program administrators should require disadvantaged community investments to improve transit lines with heavy low-income ridership (such as local bus services) and those with fewer existing funding sources.

With respect to the **Transit and Intercity Rail Capital Program (TIRCP) and Low-Carbon Transit Operations Program (LCTOP)**, all GGRF funding awarded to Metro was approved for rail lines that focus on downtown destinations. It received a \$38 million TIRCP grant for Blue Line infrastructure upgrades and a \$6 million TIRCP grant for operating assistance on the Gold Line Azusa extension, which had a budget of over \$700 million that was funded by Measure R.¹⁸ Because Metro is the sole transit provider dedicated to the unincorporated areas of L.A. County, all local bus lines with high levels of low-income ridership within their jurisdiction were left without investment.

Rail funding is already over-prioritized in L.A. County, and many needs remain unaddressed on local bus lines. There are broad geographic areas densely populated by low-income residents that are far from rail service. Distributing \$44 million to relieve overcrowding, provide bus shelters, upgrade from natural gas to zero-emission buses, or create infrastructure to separate and prioritize signals for bus transit could more equitably distribute benefits across the County and avoid paying for transit investments that could more likely find funding elsewhere.

The proposed operating area for the City of Los Angeles Electric Vehicle (EV) Pilot may benefit the Downtown workforce more than low-income disadvantaged community residents.

Recommendation: Locate parking and charging infrastructure near affordable housing to increase equitable outcomes.

FINDING 4

Because the L.A. EV Carsharing pilot is located around a Downtown nexus, EV rentals may be popular with the workforce commuting into the area. According to the project consultant, the pilot must be economically self-sustaining for it to move forward,¹⁹ and since low-income subsidies will be provided, its success may depend upon the higher revenues generated by unsubsidized rentals. The biggest challenge facing the program will be balancing community expectations with the operator's bottom line. To do this, **we recommend locating a sufficient number of EV carshares near affordable housing to increase low-income household usage and accessibility to transit.**

Smaller cities have less capacity to develop competitive Affordable Housing and Sustainable Communities (AHSC) proposals.

Recommendation: Advocates should monitor the Strategic Growth Council's technical assistance program to see if it helps build smaller municipalities' ability to secure AHSC funding.

FINDING 5

The AHSC program invested 100% of its L.A. County funding in projects within disadvantaged communities. These benefits were spread out across the City of Los Angeles, with several projects occurring in what is an otherwise underinvested area of Southeast Los Angeles County. **However, nine out of the 10 funded AHSC projects were inside the City of Los Angeles, with the other in Long Beach.** There were no funded projects in unincorporated L.A. County; and no funded projects east of the 710. The staff recommendation for the second round of AHSC funding (Appendix A) followed suit, with all six County projects in the City of L.A.

SGC received \$500,000 from the GGRF to provide technical support for potential applicants that would otherwise lack the capacity to develop competitive proposals. The agency selected the Southern California Association of Governments (SCAG) to provide technical assistance in the Southern California area in January 2016. Concept proposals for the second round of

AHSC funding were due two months later. Because of this short time frame provided for SCAG to develop supportive activities, monitoring how this program affects future funding rounds will be important to determine its effectiveness.

Co-Benefit Significance

A second important question of equity is whether benefits address a substantial community need. The impact of direct service and rebate benefits—with the exception of job creation—is primarily determined by how many incentives are accessed (and by whom), and whether the service or rebate itself is something valued by the community. With project-based programs such as Affordable Housing and Sustainable Communities (AHSC), Transit and Intercity Rail Capital Program (TIRCP), and Urban and Community Forestry (UCF), project strategies and the selection criteria determine whether benefits meet a significant need.

FINDING 6

Applicants often vaguely define benefits and avoidance of harms with little to justify their significance.

Recommendation: Require applicants to provide documentation substantiating projected benefits and avoidance of harms.

It is unclear if disadvantaged community benefits are critically assessed by administering agencies or if substantiation is offered by applicants to explain how they will avoid harms and achieve projected benefits. The process of qualifying disadvantaged community benefits is not always clear. For example, Low-Carbon Transit Operations Program (LCTOP) and AHSC administrators approve enhanced economic activity as a co-benefit on numerous proposals with no explanation of how significant those benefits might be or how they were evaluated. In terms of avoidance of harms, several AHSC awardees were allowed to not address issues of displacement because their developments occurred on vacant land. However, this ignores the issue of economic displacement, business disruption, or other damaging economic outcomes.

Rather than a generalized statement of projected disadvantaged community benefits, applicants should provide specific details of benefits, their expected timelines, and strategies they will utilize to achieve them. Applications should also identify potential harms resulting from project development and explain what mitigations will be taken avoid them. This should include, but not be limited to, evidence of protections against direct displacement, such as prioritizing investments in municipalities with rent control, just cause evictions, or other strong tenant protection ordinances. Applicants should identify and address other possible harms—such as business disruption, traffic congestion, and potential toxic exposure (e.g., with brownfield development)—when reasonable concerns are present.

FINDING 7

Job claims tend to be vague and are not substantiated in project outcomes.

Recommendation: Agencies should require recipients of funding to track job benefits to substantiate claims and better evaluate programs.

Affordable Housing and Sustainable Communities (AHSC): **Job benefit claims varied widely on AHSC applications.** One developer claimed to create “hundreds” of jobs, another utilized an industry formula to determine the number of jobs its project would create, and yet another provided no specific quantity, but estimated that it usually achieves a 30% targeted hire rate of workers facing barriers to employment.

Urban and Community Forestry (UCF): **All applicants claimed job creation and training as a co-benefit, but were able to substantiate very little** (e.g., paid/volunteer, length of time on the job, specific skills obtained). We were only able to confirm the creation of one full-time paid position and about a dozen part-time workers who were employed no more than a month each. Some awardees told us that all work was performed by youth volunteers, sometimes with the provision of a small stipend.

Low-Income Weatherization Program (LIWP): GRID Alternatives uses a volunteer model for its solar installations but also subcontracts out to some organizations that pay trainees. Pacific Asian Consortium on Employment (PACE) operates the Downtown/Pico Union WorkSource Center and hires some people from the Center for its weatherization services (which include both LIWP and Low Income Home Energy Assistance [LIHEAP] activities). Both GRID and PACE also draw from local training programs or internships, and provide work hours and field experience, but usually without pay. Specific data, however, was again not available.

Requiring the reporting of job data may help push forward methodologies to integrate informed evaluations to improve program development and define best practices in workforce development. The California Clean Energy Jobs Act (Proposition 39) provides one such promising job reporting system that labor advocates believe holds promise.²⁰ Prop 39 requires certified payroll records submissions and provides job data at the individual level. Although reporting is limited to only a portion of construction trade jobs, and still does not contain all of the data necessary to determine many equitable outcomes, it can provide a wealth of information to vastly improve evaluation of job creation on a program-by-program basis.²¹

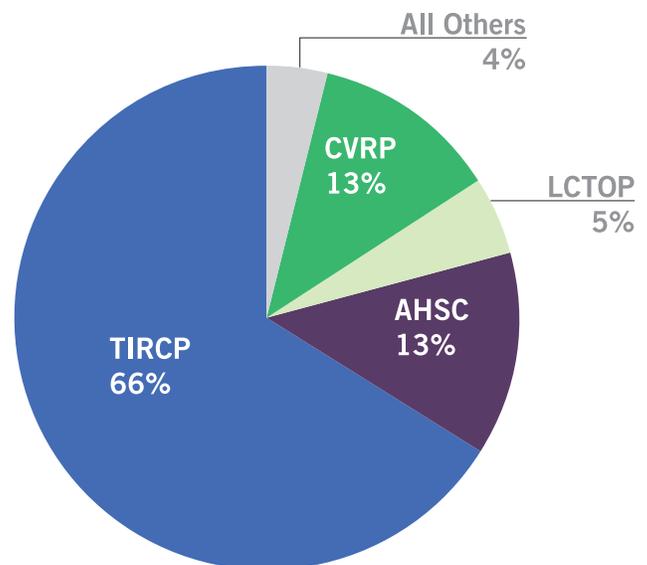
Substantiating benefits in transit and housing development is especially critical.
Recommendation: Increase transparency of projects and administrative decision making in all CCI programs, especially when public agencies receive funding.

FINDING 8

Understanding how transit and housing projects impact disadvantaged communities is imperative to understanding the overall benefits of CCI programs. Because transit and housing developments have the greatest potential to physically alter neighborhoods and affect the lives of surrounding residents, evaluating their impacts is essential to understanding CCI program impact. This can be especially concerning when evaluating the potential harms that transit-oriented development can create. An upcoming UCLA report finds that Los Angeles neighborhoods near rail projects can experience rising rents and are “associated with increases in white, college-educated, higher-income households, [and] greater losses in disadvantaged populations, including individuals with less than a high school diploma and lower-income households.”²²

Furthermore, transit and housing funding represents the vast majority of qualified disadvantaged community investments. AHSC investments within disadvantaged communities have totaled \$21.5 million, with TIRCP nearly four times that amount. Combined with LCTOP’s \$7.3 million, the three programs account for 91% of all funding invested for the

Figure 3. SB 535 Funding Benefiting L.A. DACs by CCI Program



benefit of L.A. disadvantaged communities (Figure 3). However, as we have detailed throughout this report, getting project-specific data for awarded transit projects is very difficult.

In order to evaluate how program awards can maximize the significance of disadvantaged community benefits and their relevance to the community, administering agencies should make all awarded applications publicly available as well as any metrics used to qualify disadvantaged community benefits. Awardees should file publicly available follow-up reports annually to track the progress of projected benefits. Furthermore, CCI program administrators should require public agencies receiving funds to hold scheduled public meetings from before project implementation up until project completion, to provide information and address public concerns.

FINDING 9

Administering agencies sometimes award incentive points for mandated elements of a program.

Recommendation: Award points for project elements that create co-benefits and protections against displacement exceeding program requirements.

Project elements that are prerequisites for program eligibility should not also be awarded incentive points. The AHSC program incentivizes the creation of up to three co-benefits, but on almost every awarded project in L.A. County, the provision of affordable housing is listed as a co-benefit awarded points (Table 4). This creates no incentive beyond what is needed to qualify for the program. Improved transit connectivity is another program imperative that increases scoring, even without the provision of any infrastructure to improve that connectivity.

Eligibility for disadvantaged community benefit incentives in scoring criteria should be limited to the inclusion of benefits in project design that go beyond requirements of the program. For example, if the AHSC program awards points for affordable housing, it should establish a baseline of affordability and what threshold over that baseline must be achieved to qualify for bonus points. Alternatively, bonus points could be awarded for other project elements exceeding program requirements, such as establishing a community land trust that guarantees affordability with a 99-year ground lease.

Similarly, points should not be awarded for avoiding direct harms, such as relocation plans for physical displacement of residents. Avoiding direct harms should be a prerequisite for eligibility. Program guidelines should limit “do no harm” incentives to proposals that provide robust tenant protections or targeted community economic development strategies to counter potential future threats. Examples of such measures could include protection against economic displacement through first-source hiring programs, land banking, revolving loan funds for small businesses, or local purchase and supplier diversity programs.

FINDING 10

Ensuring quality job creation and training is an optional co-benefit in all CCI programs.

Recommendation: Set point-based incentives in each CCI program for quality job creation, prioritized for workers facing barriers to employment.

Although workforce development is a stated priority of almost every program and represents one of the most important benefits to disadvantaged community residents, no baselines for jobs are set and they are considered an optional co-benefit in all CCI programs. Even the best example of job incentives in AHSC’s updated guidelines are placed in an Economic Displacement and Workforce Training/Employment Strategies category, where tenant protection, condominium conversion restrictions, and inclusive housing ordinances may be awarded all available points in place of a jobs benefit.

Table 4. AHSC Project Co-Benefits in Los Angeles County, FY15/16

Project Name	Co-Benefit #1	Co-Benefit #2	Co-Benefit #3
1st and Soto TOD Apartments, Phase 2	Reduce health harms	Improve social relationships	Create jobs
127th Street Apartments	Reduce housing costs	Reduce overcrowding	Provide access to parks
Anchor Place	Reduce housing costs	Increase walk/bike access	Reduce transportation costs
Crenshaw Villas	Reduce housing costs	Increase walk/bike access	Reduce energy building use
El Segundo Family Apartments	Reduce housing costs	Reduce overcrowding	Provide access to parks
Jordan Downs, Phase 1	Reduce obesity	Increase access to jobs	Improve air quality
MacArthur Park Apartments Phase B	Reduce housing costs	Reduce transportation costs	Improve access to transit
Mosaic Gardens at Westlake	Reduce housing costs	Reduce air pollution	Create jobs
Rolland Curtis	Reduce housing costs	Bring housing closer to jobs	Reduce air pollution
Sylmar Court Apartments	Reduce housing costs	Reduce overcrowding	Provide access to parks

Source: <http://www.hcd.ca.gov/financial-assistance/affordable-housing-and-sustainable-communities/>

All programs should incentivize job quantity, quality, and access with points not able to be fulfilled by any other co-benefit. This would ensure a greater quality of life for workers and build economic resilience against displacement of residents and businesses. Agencies should also set quality job baselines with living wages, standardized skill development, job benefits, and other important criteria and further prioritize “first-source” hiring programs that target disadvantaged workers.

Participatory Development

Our third area of concern was to identify where projects and programs established inclusive participatory development principles that created partnerships and collaborations with community-based organizations (CBOs). Opportunities for participatory activities occur throughout the development and implementation of both projects and programs. Participation and collaboration are defined by many potential elements including: community outreach, consultation, facilitation of meetings and workshops, the co-design of projects, and directly providing assistance to community-led plans.

Direct service and rebate programs often fail to anticipate obstacles that prevent low-income households from accessing program benefits.

Recommendation: As part of an effective outreach strategy, agencies should seek out direct community input to evaluate their programs and determine unforeseen obstacles to disadvantaged community participation.

FINDING 11

Unanticipated barriers to eligibility may arise that programs fail to address. With the Low-Income Weatherization Program (LIWP), electrical systems not up-to-code and roofs needing repair often disqualify households with the greatest need and the most energy-inefficient homes. The Clean Vehicle Rebate Project (CVRP) has its own obstacles, such as no point-of-sale rebates or prequalification which both limit the financial feasibility of the program because of the increased need for financing and the wait time for rebate delivery.

Important program evaluation can be provided by seeking input from community members through focus groups, community meetings facilitated by CBOs, or as part of a door-to-door awareness campaign. These expenses should be considered when establishing an appropriate outreach budget to ensure that opportunities to maximize program effectiveness are not ignored.

FINDING 12

Meaningful participation of disadvantaged community residents in determining the design, development, and implementation of awarded projects is rare.

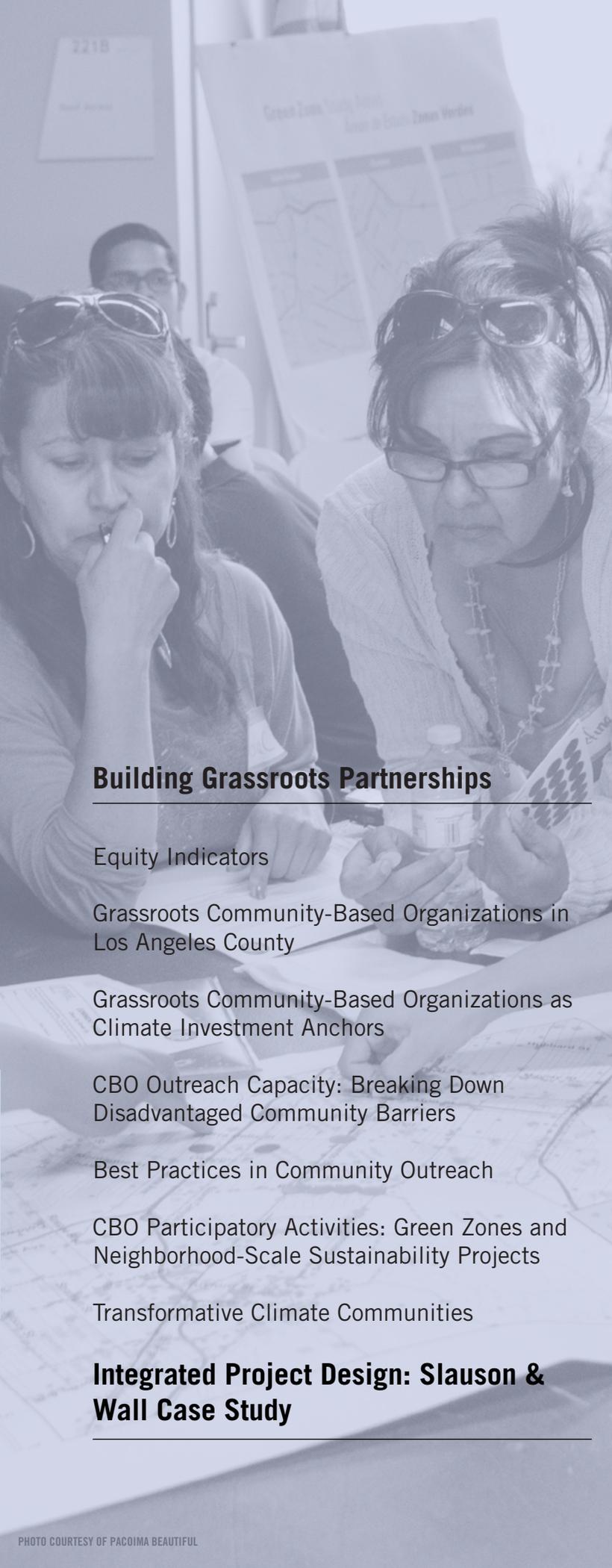
Recommendation: Adopt a community participation metric that recognizes and rewards increasing levels of community consultation, collaboration, partnership, and leadership.

With almost every project we analyzed, community engagement was substantiated with little to no influence of disadvantaged community residents in determining project outcomes or designs. Few projects emphasized deep community participation and collaborative activities, instead limiting community engagement to informational meetings with disadvantaged community residents to gather feedback. As a result of this lack of collaboration between developers and disadvantaged community stakeholders, awarded projects lost many opportunities to incorporate local knowledge and the resources of CBOs into the design and implementation of projects. (See **Creating a Community Participation Metric** in Section 3 for more on this.)

We recommend requiring open and accessible public meetings and letters of cross-sector support for all projects to qualify for disadvantaged community investments. An administrative shift is necessary to understand and prioritize progressively inclusive practices in CCI programs targeting benefits in disadvantaged communities. Merely informing communities and allowing for public comment is insufficient to create this change. Agencies must recognize projects that consult, collaborate, partner with, and empower the communities in which they invest. Guideline language should emphasize “community participation” instead of “community engagement” to clarify that increased community inclusivity is what programs seek to prioritize.

BUILDING COMMUNITY PARTNERSHIPS

A failure to engage grassroots CBOs that possess expertise in community organizing, participatory development, and the design and implementation of crosscutting interventions greatly hinders the potential impact of development in disadvantaged communities. The following section, Building Community Partnerships, takes a deep dive into the resources of these organizations, where their skillsets match up with the needs of CCI programs and how to effectively identify and prioritize innovative and inclusive programs and projects with the potential to transform the communities in which they invest.



Building Grassroots Partnerships

Equity Indicators

Grassroots Community-Based Organizations in Los Angeles County

Grassroots Community-Based Organizations as Climate Investment Anchors

CBO Outreach Capacity: Breaking Down Disadvantaged Community Barriers

Best Practices in Community Outreach

CBO Participatory Activities: Green Zones and Neighborhood-Scale Sustainability Projects

Transformative Climate Communities

Integrated Project Design: Slauson & Wall Case Study

Building Community Partnerships



Building Community Partnerships

In this section, we look at the economic and environmental justice organizing practices of several grassroots community-based organizations (CBOs) operating in Los Angeles County. We highlight areas where they organize, the roots of their work, and their work's intersection with climate justice concerns. We look at their work in terms of their methods of outreach and engagement of under-represented local stakeholders and their expertise in participatory development and capacity building in the communities they represent.

It is not surprising that the more isolated areas within the large contiguous block of disadvantaged community Census tracts in Southeast Los Angeles County still have little evidence of climate investment benefits. These areas have historically experienced little to no investment and a lack of proactive safeguards to protect public health. This neglect has formed a geographically isolated area where corrective action and environmental health protection rarely exist unless people come together to create change. Invariably, grassroots activities are present when a community comes together. They begin with a few concerned residents who build networks of supportive members who share their concerns.

Collaborations with grassroots CBOs can give public sector programs access to skilled outreach and participatory practices that can help direct investments to communities that have experienced historic disinvestment. This expertise can maximize future GGRF investments in disadvantaged communities, such as the newly designated Transformative Climate Communities (TCC) program (AB 2722, Burke 2016). This important program provides flexible funding for multi-benefit carbon-reduction strategies with a greater emphasis on public health and economic revitalization driven by authentic community engagement.

We present several multi-stakeholder community-led Green Zone developments, including the Clean Up Green Up (CUGU) ordinance that creates new land use strategies to remediate toxic hot-spots in the L.A. City communities of Boyle Heights, Pacoima, and Wilmington. We also share findings on an integrated design project with T.R.U.S.T. South LA members at its Slauson & Wall Village site. We discuss this design project and other neighborhood-scale sustainability plans, illustrating robust co-benefit strategies, deep community partnerships, critical analysis, and problem solving.

With the Strategic Growth Council (SGC) determining TCC's guidelines in the period following the release of this report, we hope that evidence of community-led grassroots organizations' important work will help guide TCC funding to its greatest potential benefit.

Equity Indicators

In order to achieve equitable outcomes across a wide range of programs, we identify three overall concerns of equity:

- **Distributional Equity**, which ensures that the resources targeting disadvantaged communities are—at the very least—proportionately experienced by the most vulnerable community members;
- **Procedural Equity**, which is accomplished through participatory processes and authority granted to community members to direct investments for their benefit; and
- **Transformative Equity**, which reverses historic neglect by overcoming systemic barriers to empowerment and increasing community capacity and self-determination.

Grassroots Community-Based Organizations in Los Angeles County

To illustrate the potential impact of grassroots CBOs on achieving these equitable outcomes, we look briefly at the historic and current activities of seven organizations operating in Los Angeles County:

- Communities for a Better Environment (CBE)
- East Yard Communities for Environmental Justice (EYCEJ)
- Pacoima Beautiful
- Redeemer Community Partnership (RCP)
- Strategic Concepts in Organizing and Policy Education (SCOPE)
- Tenemos que Reclamar y Unidos Salvar la Tierra-South L.A. (T.R.U.S.T. South LA)
- Union de Vecinos

These CBOs all organize in communities exposed to some of the worst cumulative impacts of toxic emissions and socioeconomic vulnerabilities in Los Angeles County as identified by CalEnviroScreen. These include the three CUGU communities, South Los Angeles, and several Southeast Los Angeles County municipalities, including Commerce, Huntington Park, and other Gateway Cities.

The work of these organizations is rooted in either environmental or economic justice, including industrial pollution, land control, workforce development, youth programs, renters' rights, and voter engagement. All organizations, in turn, have also intersected with climate justice concerns—namely that investments meant to combat climate change address the more immediate threats to public health and prosperity experienced by those living on the frontlines of industrial pollution.

PHOTO COURTESY OF UNION DE VECINOS



A Grassroots Glossary ²³

Advisory Groups: Groups (usually longer-term) that provide ongoing advice on the strategic direction of a program or project.

Basebuilding: Increasing local power through the development of supporting membership.

Community Organizing: Coordinating activities with people who live in close proximity to one another to act on a shared self-interest and achieve a specific goal.

Charrette: A planning session for a particular development where community members, designers, and project developers may collaborate on vision that determines the end result of a project.

Focus Groups: Short-term groups (usually only a one-time meeting) that provide feedback based on their perceptions, opinions, beliefs, and attitudes.

Green Zones: Can mean either a neighborhood-scale sustainability plan, or a more specific targeted land use and regulatory strategy to mitigate health threats due to residential proximity to stationary and mobile sources of pollution.

Groundtruthing: A community fact-finding process where residents supplement technical information with local knowledge in order to better inform policy and project decisions.

Leadership Development: Advancing the ability of committed members and supporting the development of skills to create change and expand the CBO's mission.

Membership Meetings: Providing opportunities for CBO members and staff to learn from each other and better determine organizational behavior and mission.

Mutual Learning: A reciprocal exchange of information, as in popular education, that facilitates learning by both parties.

One-On-Ones: Scheduled face-to-face meetings with key stakeholders for the purposes of increasing capacity and advancing organizational mission.

Roundtable Discussions: Facilitated conversations with multiple stakeholders, such as agencies, technical experts, and community members to share knowledge and insight for the purpose of improving the development or implementation of a program or project.

Wayfinding: Spatial problem solving to determine routes for effective mobility and connectivity.

COMMUNITIES FOR A BETTER ENVIRONMENT (CBE)

CBE, founded in California in 1978, is the oldest organization of the seven featured in this report. During its near 40-year battle to remediate the toxic effects of oil refineries on neighboring communities, CBE has focused its efforts on both the local and global effects of fossil fuel production. Because of the severe threat to the lives of nearby residents, its immediate goals have been to create more stringent regulations reducing toxic fuel sector emissions and ensuring that violations are enforced with sufficient consequences. Equally important goals, although more long-term, are reducing demand and decreasing reliance on fossil fuels, while ensuring that clean energy development benefits the communities most harmed by the oil industry.

CBE uses a three-pronged approach of organizing, research, and legal action in its work, including issues of local health concerns and effective climate change policies. CBE's organizing includes community education and engagement with climate adaptation and resiliency issues; its research includes measuring the global warming impacts of lower quality crude oil production;²⁴ and its legal work includes AIR versus CARB, in which CBE argued that the state agency violated CEQA by failing to adequately analyze cap-and-trade alternatives and accurately predicted that the program could increase criteria and toxic air emissions disproportionately in low-income communities of color.²⁵

CBE also has extensive relationships with federal, state, and local agencies as a service provider or grantee assessing brownfields, canvassing neighborhoods for eligible single- and multi-family solar installations, and conducting community outreach for electric vehicle car incentives, water and energy conservation initiatives, appliance rebates, and many other environmental and environmental justice related issues. CBE is a key partner in the Clean Up Green Up ordinance in the City of Los Angeles and the designation of Wilmington as a Green Zone.

Intersections with Climate Justice: CBE's climate justice initiative expands beyond clean energy work, which is evident in its multi-year Climate Adaptation and Resiliency Enhancement (CARE) program. CBE has conducted workshops, focus groups, and advisory group meetings informing local residents of climate adaptation issues and gaining information on their day-to-day challenges and how social vulnerabilities might affect resilience to impacts of global warming, such as urban heat island effects and sea level rise. This participatory analysis has produced a climate and vulnerabilities assessment, and an upcoming set of recommendations, such as improved energy access, healthcare services, and infrastructure in the form of a roadmap to resiliency.

Additionally, CBE was a co-sponsor of SB 1275, the Charge Ahead California Initiative (de León, 2014), which is a driving force in the push for clean vehicle funding, and is responsible for inserting equity measures such as income caps and increasing low-income subsidies in the Clean Vehicle Rebate Program (CVRP), as well as the creation of the suite of clean vehicle programs in disadvantaged communities. These GGRF programs include funding for Enhanced Fleet Modernization Project (EFMP) Plus-Up, Financing Assistance, and Carsharing and Mobility pilots.



Focus Areas:

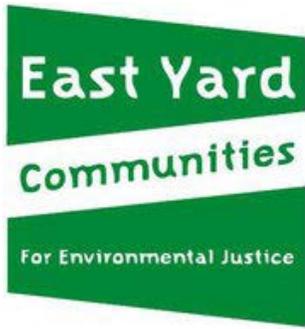
Huntington Park,
Wilmington, Southeast L.A.
County, Richmond

Historic Lens:

Environmental Justice

Initial Focus:

Industrial Pollution



Focus Areas:

Commerce, East Los Angeles, Long Beach, Southeast L.A. County

Historic Lens:

Environmental Justice

Initial Focus:

Industrial Pollution

EAST YARD COMMUNITIES FOR ENVIRONMENTAL JUSTICE (EYCEJ)

Commerce and East Los Angeles residents started EYCEJ in 2001 by collaborating to reduce the diesel exhaust pollution from trucks and trains that service the train yards in the Southeast Los Angeles area. Today, EYCEJ builds capacity in communities most severely affected by industrial pollution and seeks policy changes at the local, regional, and state levels. Successful campaigns include: the passage of the first Green Zones policy in the nation in the City of Commerce, improved regulations and monitoring at the Union Pacific Railroad – East Los Angeles Intermodal facility, and the shutdown of Exide Technologies, a battery recycler and chronic polluter in Vernon, California.

Intersections with Climate Justice: Through its focus on environmental justice and air quality issues, EYCEJ engages community members on how global warming and environmental racism disproportionately impacts low-income communities of color. It holds popular education workshops on goods movement, environmental justice, reproductive health, air pollution, and policy advocacy. EYCEJ also conducts toxic tours and community dialogues to expose public agencies first-hand to the impacts of industrial pollution that their members face.

EYCEJ has participated in coalitions and worked independently on several projects that focus on public health and safety—but have a significant carbon-reduction benefit as well. These include the Coalition for Environmental Health and Justice’s (CEHAJ) Community Alternative 7 (CA7) proposal that proposes holistic improvements to the I-710 South corridor with active transportation, L.A. River improvements, a zero-emission freight corridor, and a community-led Complete Streets visioning in the East Los Angeles Union Pacific neighborhood promoting walkability and traffic-calming measures.



Focus Areas:

Pacoima, Northeast San Fernando Valley

Historic Lens:

Environmental Justice

Initial Focus:

Community Clean-Ups

PACOIMA BEAUTIFUL

Pacoima Beautiful was founded by five mothers in 1996 as an organization focusing on neighborhood beautification, and soon after began the first of many campaigns to enlist community members in the identification of toxic sources of pollution. Concerned with making “better neighbors” of industrial operations, Pacoima Beautiful not only engages local residents of all ages, but also commits to a long-term engagement of local manufacturers, helping them to learn how to access resources and possible incentives to abide by regulations and adopt cleaner business practices. This residential/industrial outreach was instrumental in helping to pass the City of Los Angeles’ Clean Up Green Up ordinance instituting pilot Green Zones in Pacoima, Wilmington (with partner organizations CBE and Coalition for a Safe Environment), and Boyle Heights (with partner organization Union de Vecinos).

Intersections with Climate Justice: Although Pacoima Beautiful maintains a continued wariness of the term “climate justice” because of its potential to greenwash investments, its work has significant overlap with climate adaptation strategies. The organization recently partnered with GRID Alternatives to secure free solar panel installations for local low-income homeowners, as well as conducted community outreach to increase awareness of clean vehicle subsidies, energy-efficient rebates, and adoption of trees in low-income Northeast San Fernando Valley communities. It also has substantial expertise in the development of multi-benefit projects such as green alleys and other water infiltration infrastructure that: alleviates urban heat island effects, promotes social interactions, recharges Los Angeles City groundwater, increases active modes of transportation, and reduces the need for imported water and the energy required to pump it into L.A.

REDEEMER COMMUNITY PARTNERSHIP (RCP)

Redeemer Community Partnership (RCP) began with a handful of individuals who successfully urged the City to revoke the liquor license of a nearby liquor store because it was a magnet for violence. As its membership grew it began providing educational support for children and youth with three volunteers conducting tutoring services. These activities have since grown to neighborhood-wide programs developed in partnership with residents.



RCP is a nonprofit, faith-based community development corporation that works collaboratively with local families, neighborhood schools and universities, and other nonprofits and CBOs. Its membership base is in the West University Park neighborhood of South Los Angeles where it has operated for nearly 25 years. Community members make up 100% of its staff and 60% of its board. RCP focuses on creating a network of programs and partners to support local children’s development from cradle to college to career. It coordinates educational programs supporting literacy development, science-based curricula, and family learning, and holds annual events to build a community vision for a safe and healthy neighborhood through awareness of public space and the different ways people may utilize it.

Focus Area:
South Los Angeles

Historic Lens:
Faith-Based Community
Development

Initial Focus:
Public Safety

Intersections with Climate Justice: RCP addresses environmental and economic inequities through community-led activities that increase awareness of the public health threats from toxic oil drilling sites in neighborhoods. Its is one of the founding members of the Stand Together Against Neighborhood Drilling (STAND-LA) campaign, a coalition of community groups seeking to protect the health and safety of Angelenos who live adjacent to urban oil extraction sites. Additionally, RCP is currently conducting the *Make Jefferson Beautiful* campaign to transform a one-mile stretch of Jefferson Boulevard from a dangerous thoroughfare to a community-friendly, tree-lined, active transportation corridor that enhances public safety and changes the way people view and interact with public space.



Focus Area:
South Los Angeles

Historic Lens:
Economic Justice

Initial Focus:
Voter Engagement, Workforce
Development

STRATEGIC CONCEPTS IN ORGANIZING AND POLICY EDUCATION (SCOPE)

SCOPE develops grassroots leadership through voter engagement, political education, and community organizing with the goal of getting those traditionally locked out of the decision-making process to move into positions of leadership for community self-determination.

Over the past 23 years, SCOPE has used these strategies to win campaigns to create a healthier built environment and bring targeted public investment and good jobs into the local community. SCOPE has worked with community-based organizations, labor unions, and environmental advocates to identify key growth sectors that provide good training and job opportunities for low-income workers and key services and infrastructure in disadvantaged communities. Over the past decade, SCOPE has focused on the growing need to build community-level resilience, equity, and opportunity so that communities most affected by pollution and poverty are not left behind in the changing economy. Working with local partners and South L.A. grassroots leaders, SCOPE defined five issues that form the context of where it works at the intersection of economic and environmental justice should apply: jobs, affordable housing, land use, toxicity, and transit.

Intersections with Climate Justice: SCOPE's work on climate justice was born out of its research on entry-level jobs and workforce pipelines in growth-sector industries. Recognizing both the emerging opportunity presented by the green jobs sector and the disproportionate threat posed by climate change, SCOPE intentionally placed itself in environmental, climate, and labor discussions to help craft solutions to the disproportionate economic and environmental burden experienced by low-income communities of color. In 2011, SCOPE partnered with LAANE and IBEW Local 18 to launch the RePower L.A. campaign. Later that year, the RePower L.A. Coalition won the establishment of a new entry-level job classification at LADWP, the Utility Pre-Craft Trainee (UPCT) Program, which offers low-income residents on-the-job training in building efficiency retrofits, leading to unionized entry-level positions that provide living wages and benefits. SCOPE and its partners secured \$100 million in funding to continue the UPCT jobs program in FY14/15 and ensured the continuation of workforce hiring into the UPCT pipeline. Over 6,500 homes in low-income neighborhoods have been retrofitted with over 200 workers trained and employed through the UPCT Program. Additionally, SCOPE is a member of the California Climate Equity Coalition (CCEC), formerly the SB 535 Coalition, focusing on best practices in workforce development and jobs reporting for CCI programs.

TENEMOS QUE RECLAMAR Y UNIDOS SALVAR LA TIERRA (T.R.U.S.T.) SOUTH LA

T.R.U.S.T. South LA formed in 2005 through community organizing efforts as a democratic and permanent steward of land to proactively and holistically address: redevelopment and displacement of working-class communities; environmental threats in low-income neighborhoods; and disempowerment and isolation of neighborhood residents. T.R.U.S.T. secures land in the interest of the local low-income population primarily in its Community Land Trust (CLT). Its Board of Directors is majority controlled by elected Regular Members, all of whom must be local low-income residents or workers. The Board is in charge of all major decisions and holds permanent control over all of the organization's assets. In addition to community stewardship of land, T.R.U.S.T. focuses on broader socioeconomic development issues through capacity building to increase the decision-making power of local residents related to the development of their neighborhood.

In addition to current efforts to convert scattered-site multi-family residences into limited equity housing cooperatives owned by T.R.U.S.T., the organization is in predevelopment with a mixed-use seven-acre brownfield site that will provide homes for 120 low-income families, a community center, and a four-acre park. This project, Slauson and Wall Village, is featured in an integrated project design in this report (Page 74), as an example of how community-led projects may incorporate both GHG reductions and local toxic remediation.

Intersections with Climate Justice: T.R.U.S.T. South LA has done extensive work through its community advocacy for increased use of active transportation and the need to receive public investment for the infrastructure necessary for safe bicycling and pedestrian activities. The organization has been very active in advocating for GGRF guidelines, both at ARB Board meetings and workshops relating to the overall administration of disadvantaged community investments, and at Strategic Growth Council (SGC) public meetings for the Affordable Housing and Sustainable Communities (AHSC) program. Its interest in AHSC, specifically, was to ensure that the program prioritized building socioeconomic resilience against displacement due to the rising land values caused by transit-oriented development. T.R.U.S.T.'s development partner, Abode Communities, was awarded two AHSC grants for the Rolland Curtis Gardens (RCG) project (see inset, page 104, Appendix C). This project, a participatory development between T.R.U.S.T. members and residents at and around the RCG site, will secure 140 affordable units in perpetuity in the rapidly gentrifying area near USC and the Expo Rail Line.



Focus Areas:
South Los Angeles

Historic Lens:
Economic Justice

Initial Focus:
Community Land Control,
Displacement

UNION DE VECINOS

Union de Vecinos was founded in 1996 to fight against the demolition of the Pico Aliso Public Housing projects. Since then the organization has won many victories for economic and environmental justice, including: winning a **Best Practice award for its community organizing from the United Nations' Huairou Commission**; stopping the privatization of public housing in Los Angeles; passing a Just Cause Eviction ordinance; preventing the displacement and eviction of hundreds of tenants; improving housing conditions for hundreds of tenants; installing two parks in Maywood; the transformation of over 20 public spaces from unsafe, unmaintained hazards to vibrant areas for fairs, mercados, and places for social engagement; and a multi-year ground-organizing effort in the City of Maywood to clean up contaminated tap water to make it safe for the community.

Focus Areas:

Boyle Heights, Maywood

Historic Lens:

Economic Justice

Initial Focus:

Housing Preservation,
Anti-Displacement, Public
Housing

Intersections with Climate Justice: Union de Vecinos has contracted with local utility companies to provide outreach incentives and rebates, including a recent award for LADWP's Non-Profit Community Partnership Grant Program to provide outreach and awareness of existing LADWP energy efficiency programs. It is a key partner in the Clean Up Green Up ordinance in the City of Los Angeles and the designation of Boyle Heights as a Green Zone. Union de Vecinos has focused primarily on economic justice issues and employs a highly critical lens when evaluating climate investment strategies because of the potential to trigger the displacement of low-income renters. Transit-oriented development, urban greening, and other place-based improvements, it argues, will usually result in pushing property values higher and attracting the type of investors looking to cash in on an "up-and-coming" location unless those investments embed economic empowerment, social resilience, and community stabilization at their core. For Boyle Heights, with its close proximity to downtown and easily accessible bus and rail lines, improvements to the neighborhood that do not take into account the ability of the majority low-income renter population to continue to afford living there could be a serious force of displacement.



Grassroots Community-Based Organizations as Climate Investment Anchors

Each of these organizations, regardless of their primary focus, shares both an economic and environmental justice analysis with a pointed concern for public health. This work makes them ideal partners for achieving equitable outcomes in climate investment activities funded by the GGRF as well as other statewide climate programs. Co-benefits such as workforce development, reduced costs of living, reduced soil, water, and air contaminants, and increased open space and healthy lifestyle options are examples of the primary focuses of these community-based organizations (CBOs).

Table 5: CBO Intersections with Climate Justice

CBO	Initial Organizing Issue	Climate Related Organizing
CBE	Industrial Pollution, Oil Refineries	Clean Vehicles/Fuels, Energy Efficiency/ Renewable Energy (EE/RE), Resilience/ Adaptation, Green Manufacturing
EYCEJ	Industrial Pollution, Diesel Emissions	Zero-Emission Freight Corridor, Green Manufacturing, Active Transportation
PB	Industrial Pollution, Community Beautification	EE/RE, Green Manufacturing, Green Infrastructure, Brownfields
RCP	Public Safety	Neighborhood Oil Drilling, Active Transportation, Complete Streets
SCOPE	Voter Engagement, Workforce Development	Green Jobs, EE/RE, Resilience/Adaptation
T.R.U.S.T.	Displacement, Land Control	Active Transportation, Sustainable Communities
UV	Displacement, Housing Preservation	Water Quality, Green Alleys, Green Manufacturing



Three common strategies form the basis of each CBO’s activities: **Community organizing, participatory activities, and holistic analyses.** An immediate goal of community organizing is to achieve an equitable distribution of resources where public and private investment has failed to meet people’s needs. Participatory activities use collaborative problem-solving procedures for people who have different experiences, knowledge, and skillsets to inform these resource decisions. CBOs learn from the day-to-day experiences and activities of community members. CBOs, in turn, inform local residents about how land use decisions, policies and regulations, economic activities, historic racial segregation, and other factors continue to create injustice and inequality in their communities. This holistic analysis provides the framework to envision and achieve a transformation of the community.

Together these strategies form a particular set of skills that are well suited to achieve CCI program administrators’ stated goals of equitable outcomes in carbon-reducing projects and programs in environmental justice communities—as summarized in Table 6, below.

Table 6: Achieving Equity: Matching CBO Expertise with Program Needs

Equity Issue	CCI Relevance	CBO Solution	Equity Priority Addressed
Distributional	PROGRAMS: Rebates and services PROGRAM NEED: Low-income access	Community organizing	Maximizing benefits in disadvantaged communities
Procedural	PROGRAMS: Project-based PROGRAM NEED: Community-led vision	Participatory activities	Bringing community leaders to the decision-making table
Transformative	PROGRAMS: Integrated investments PROGRAM NEED: Holistic solutions	Holistic analysis	Building sustainability and resilience in EJ communities

Community Organizing

Community organizing capacity is an important resource to **overcome the obstacles direct service and rebate programs face to increase benefits in low-income communities.** Successful distribution to the most vulnerable and isolated areas is more likely achieved when the organizations conducting outreach are already well connected to local institutions such as places of faith, local schools, community centers, health clinics, and community development corporations. These existing relationships take years to develop through extensive community outreach, or base building, (e.g., door-knocking, community meetings, one-on-ones) and trust developed from long-term relationships. An organization external to the community would have to create these networks from scratch, increasing both the time and effort necessary to access hard-to-reach populations, overcome language barriers, and identify local events and opportunities to reach large numbers of people.

Successful community organizing depends on a strong membership base, but equally important is **building continuous leadership development**. The ability to identify and develop leaders within their memberships builds the capacity of the organization to reach more people. Many of these leaders become staff members and ensure that the organization remains represented and driven by the needs and strategies of the community. Still others volunteer in their spare time to hold community meetings, reach out to neighbors, speak at public meetings, conduct research, and otherwise amplify the voice of the CBO and advance its mission.

Participatory Facilitation

Participatory activities that CBOs often facilitate include collaborative research, problem solving, and design efforts resulting from mutual learning between CBOs and community members. Community members learn about systemic barriers, technical issues, and available resources. Residents provide crucial experiential knowledge of day-to-day interactions relating to mobility, public space utilization, and existing hardships. Participatory activities create community ownership of projects to determine where solutions are needed the most.

Project and program evaluation can improve with: **focus groups**, which provide important and immediate feedback; **advisory groups**, which provide ongoing input into progress and direction of activities; and **roundtable discussions**, which increase understanding and the likelihood of consensus between stakeholders. **Charrettes** and other collaborative activities such as **groundtruthing, wayfinding, and crowdsourcing** can each ensure that technical and experiential knowledge informs project designs. Furthermore, the leadership development that occurs in community organizing helps to reach more people through their extended networks. This in turn provides greater access to the experiences and knowledge of a wider section of the local population, which ensures that a broad community vision informs decisions.

Holistic Analysis

Solutions that go beyond site-specific project development (an affordable housing development) or a single-issue investment (solar panel installation) are necessary to create neighborhood-scale transformation. In order to create comprehensive solutions to the multiple stressors faced by environmental justice communities, a holistic analysis particular to the targeted community must exist. Integrated investment strategies, if they are to be effective, will require local knowledge obtained through participatory development practices, but also must provide a bird's-eye-view of how industries, infrastructure, economic development, environment, social mores, land use, and much more intersect.

For example, the Clean Up Green Up (CUGU) communities of Boyle Heights, Pacoima, and Wilmington share concerns of high levels of diesel-fueled traffic, industrial pollution, and conflicting land uses, but neighborhood-scale Green Zone development would need to address issues particular to each community as well. A strategy for Wilmington would involve oil refinery mitigations and more attention to goods movement infrastructure because of the neighboring ports. Boyle Heights is under greater threat of displacement due to its increasing desirability as a place to live, making issues of economic stability as important as neighborhood improvements. Pacoima must deal with higher overall temperatures and flood control due to insufficient drainage and sidewalk infrastructure.

These areas of CBO expertise offer state agencies the capacity to address the primary concerns of community advocates. These priorities include **maximizing benefits in disadvantaged communities** by leveraging the outreach capacity of CBOs through extensive networks and

trusted relationships, **bringing community leaders to the decision-making table** through a rich understanding of participatory development strategies, and **building sustainability and resilience in EJ communities** through projects and programs driven by the holistic analysis and expert local knowledge at the root of the work of grassroots organizations.

CBO Outreach Capacity: Breaking Down Disadvantaged Community Barriers

All but one of the CBOs profiled above have experience providing outreach for statewide or local programs, building community awareness and engagement related to the reduction of GHGs and other local contaminants. The outreach efforts of these CBO supported several GHG-reduction programs including:

- **Low-Carbon Transportation:** CBE has worked closely with the Charge Ahead California initiative and ARB on the State's mission to add one million electric vehicles over the next 10 years. CBE has provided extensive community outreach and helped to identify potential policy barriers for successful disadvantaged community uptake of clean vehicle rebates.
- **Low-Income Weatherization Program (LIWP):** Pacoima Beautiful conducted outreach in conjunction with GRID Alternatives on LIWP solar installations with several low-income Pacoima homeowners receiving free solar panel installations.
- **The City of L.A.'s EV Carsharing Program:** T.R.U.S.T. served on the Steering Committee to help ensure that the local program funded by ARB is effectively accessed by low-income disadvantaged community residents. It advised on the creation of a community outreach team to help address barriers to access such as a lack of charging locations, proximity to affordable housing, immigrant status, and possession of a bank account or credit card.
- **Affordable Housing and Sustainable Communities (AHSC):** T.R.U.S.T. partnered with Abode Communities on the successful Rolland Curtis Gardens AHSC submission that featured a tenant-led anti-displacement campaign and participatory planning process to provide housing for 140 families, a health clinic, and locally-serving retail and ongoing proximity to the Expo Rail Line. (See page 104, Appendix C, for more project information.)
- **Urban and Community Forestry (UCF):** Pacoima Beautiful provided outreach for the recipient of a UCF grant, with 10 local youths getting commitments from 91 homeowners to assume responsibility for a tree planted in front of their homes.
- **SB 350 Barriers Study:** Both CBE and SCOPE held roundtable discussions to better understand the barriers for low-income customers to access all forms of renewable energy being generated in the State and energy efficiency investments. Multiple meetings were convened between the California Energy Commission (CEC) and equity advocates, as well as language-appropriate meetings with community members in Spanish and translation services for CEC staff.

Other common CBO experiences include contracting with local utilities on outreach for energy efficiency and renewable energy (EE/RE) rebates and incentives (CBE, Pacoima Beautiful, SCOPE, Union de Vecinos); and involving community members in the direct mitigation of industrial pollution through local exposure to air contaminants (CBE, Pacoima Beautiful), soil contamination (EYCEJ, Pacoima Beautiful), and the reporting of industrial violations (CBE, EYCEJ, Pacoima Beautiful, RCP, Union de Vecinos).



PHOTO: LIBERTY HILL

Business Outreach

Conducting business outreach takes an even greater time commitment than residential door knocking, but can create cross-sector support critical to successful project and program development. Finding local businesses to endorse the Commerce Green Zones and Clean Up Green Up (CUGU) campaigns was essential to building the political support necessary to pass the policies through the Commerce and Los Angeles City Councils. This required a time-intensive process of identifying local businesses and getting face to face with their owners and/or managers.

An important tool for business outreach, especially when attempting to have voluntary adoption of cleaner, energy-efficient technologies, is to connect them with supportive resources. To help these efforts, Liberty Hill produced a financial and technical resources directory called the Guide to Green for businesses in the City of Los Angeles and another for Commerce-based businesses. The directories list local, regional, state, and federal programs that can assist companies to become more energy and water efficient, reduce impacts on worker and community health, and adopt technologies that protect environmental quality and increase productivity.

One Pacoima Beautiful staffer who worked on the CUGU campaign confirmed the difficult nature of business outreach, explaining, “It is hard to develop relationships with businesses—they are so busy with day-to-day operations, it usually takes multiple visits just to get them to listen to you. But I have seen their eyes light up when you finally make that connection and you give them information that can help them. Businesses support for environmental programs is a key to successful organizing, because if you get them involved you can make a bigger change.”

“Business support for environmental programs is a key to successful organizing, because if you get them involved you can make a bigger change.” - Pacoima Beautiful staff

CBOs: Trusted by the Community

It is not only the experienced outreach efforts and technical expertise that may advance community uptake of direct services and rebate programs, but also the reputation of the organization in the community. CBOs can provide the organizational reputation needed to improve outreach to a level no one else can. Not only are CBOs capable of communicating in the languages of the community, but because of their histories and visibility as organizations fighting for the health and vitality of residents, they are trusted by the community.

SCOPE's experience is that outreach by a trusted organization is extremely important when a variety of companies, including solar panel installers, turf removal specialists, and other "green" service providers inundate people by knocking on their doors. They also mentioned that being able to discuss household eligibility for a variety of programs and services not only maximizes the efforts of going door-to-door, but also helps to affirm the organization's concern for local residents rather than a particular program or agency.

One of the most significant reasons for this trust is that the vast majority of CBO staff and volunteers are community members themselves. Leadership development comes from within the community, and staff members from the community lead workshops and discussions with other community members. Furthermore, each organization strives to have a diverse staff and volunteer base that mirrors the balance of gender, race, age group, sexual preference, and other demographics in the community at large. Ensuring this representation not only helps create a greater understanding of the community, but also helps carry the vision of the organization out to all members of the community.

Outreach by a trusted organization is extremely important when a variety of companies, including solar panel installers, turf removal specialists and other "green" service providers inundate people by knocking on their doors.

BEST PRACTICES IN COMMUNITY OUTREACH

While compiling this report we identified several best practices in community outreach that should be prioritized for many CCI programs, with particular relevance for incentive- and service-based programs that need to build awareness in disadvantaged communities and face barriers to effectively penetrating low-income markets. Because of the time-intensive nature of community outreach and the limited amount of funding that is often available for this work, leveraging the organizing skills and knowledge of CBOs with regular outreach activities is essential to maximize access and uptake of incentives and services in disadvantaged communities.

1

Despite the time-intensive nature of door knocking, it is the most effective outreach method for program uptake. While none of the CBOs to which we spoke has quantitative data, each agreed that talking to people face-to-face makes getting people to participate in any activity or program far easier—especially when outreach staff members are local residents themselves. Phone calls, direct mail, social networking, and posting announcements all have the ability to reach more people, but may never produce the rate of response of in-person conversations.

2

Climate themed events can promote multiple programs. Eastside Sol, an annual environmental justice music and arts festival in the East L.A. area, promotes clean energy and healthy environments with tree giveaways, demonstrations such as a solar-powered music stage and food truck, and test driving EVs. Partners include utility companies, labor and economic development organizations, and solar and EV program administrators who can meet and inform a large number of people about their programs and potential community benefits.

Discussions facilitated by CBOs between administrators and community members can build trust and help evaluate programs. When conducting community meetings to build program awareness in the community, program administrators should also listen to what is important to the community. In addition to providing presentations and program materials, two-way communication should occur that allows residents to discuss how well the program fits their needs and areas that programs may fail to address. This can be a crucial aspect of program evaluation, and inform the development of new programs to replace or complement current programs.

3

Focus groups can uncover strengths and obstacles in specific programs. Focus groups can shed light on unforeseen challenges and better understand where outreach has been more successful. Unlike community meetings, focus groups are one-way conversations where participants are usually asked a prepared set of questions to help evaluate program efficacy in a specific area.

4

Connect services and incentives to important needs of the community. Relating programs to important community issues helps build interest in participation. For example, local youth going door-to-door to talk about how concerned they are with the lack of trees and accessible green space in their neighborhood can be very effective in getting households to agree to provide care for a tree if planted in front of their home.

5

A trusted organization opens many doors that would otherwise remain closed. Private companies promoting things such as solar panel installation often inundate low-income households with offers that can be predatory or a bad fit for the household. Cutting through overwhelming information is always difficult. But residents are more likely to listen to a CBO with a local history by outreach staff who are their neighbors.

6

Providing people with a range of options builds interest and optimizes door-to-door efforts. Rather than promoting a single program, a CBO can act like a case manager—identifying available incentives and subsidies, differentiating between public and private offers, and determining eligibility for multiple programs. In addition to providing a greater service to people, this can make the time-intensive nature of getting face-to-face with people much more productive.

7

Enable outreach staff to determine eligibility, provide application assistance, and approve applicants on-site. Clear and thorough eligibility guidelines should be available at first point of contact to not waste people's time. Streamlining eligibility and approval so that staff can sign people up on-site produces significantly better results.

8

Allow added time and repetitive visits to get in front of business owners during business outreach. When conducting commercial outreach, getting face-to-face with business owners usually requires multiple visits. Unlike residents, there are often front-desk people who may be protective of any business decision maker's time. Most people are too busy with their operations to want to talk to solicitors. Repetitive visits at different times of the day usually helps to break down those barriers.

9

CBO Participatory Activities

We turn now to a discussion of how grassroots organizations conduct participatory development and why it provides an indispensable resource for programs to meet mandates of equitable development and protection of vulnerable populations in disadvantaged communities. We provide examples of “Green Zone” development and neighborhood-scale sustainability projects conducted by each of the CBOs featured in this report. This work illustrates the value of public agencies or developers forming partnerships with grassroots CBOs—or direct funding of the CBOs themselves as primary applicants for the design and implementation of equitable development projects. These partnerships provide the capacity for multiple stakeholder engagement and the creation of informed community-led development proposals that ensure local support because of the significance of the benefits created to disadvantaged community residents.

Green Zones

The California Environmental Justice Alliance (CEJA) alliance defines Green Zones as *“a place-based strategy that uses community-led solutions to transform areas overburdened by pollution into healthy, thriving neighborhoods.”*²⁶ Green Zones also have great potential to address global warming and local toxic exposure simultaneously. The largest GHG emitters in L.A. County are most often responsible for exposing nearby residents to co-pollutants and volatile organic compounds (VOCs), such as particulate matter, butylene, lead, hexavalent chromium, and other heavy metals that pose a more immediate and localized threat to public health than climate change in the short term. This environmental cross-benefit does not only occur with refineries, power plants, waste facilities, and other large-scale operations, but also with smaller facilities and industrial clusters that produce levels of GHGs and a cumulative impact on local health that may be underestimated when looked at individually.

In L.A. County, two official Green Zone campaigns have won municipal support. EYCEJ’s City of Commerce Green Zones campaign became the first Green Zones policy passed in the nation; and the Clean Up Green Up (CUGU) campaign resulted in the adoption of a City of Los Angeles ordinance establishing pilot green zones in the L.A. communities of Boyle Heights, Pacoima and Wilmington.



PHOTO COURTESY OF EYCEJ

Commerce Green Zones

In the City of Commerce, EYCEJ worked with multiple stakeholders to pass their “Green Growth Corridor” policy. The original policy consisted of a four-pronged framework: **Reducing** environmental impacts through voluntary business collaborations; **revitalizing** local economic opportunities; **reinvesting** in adequate infrastructure that supports future economic opportunities and quality of life; and **preventing** toxic exposure for residents from new development. The City Council passed three of the four measures initially. They rejected, but agreed to study, the “Prevention” framework.

In support of the “Revitalization” framework, EYCEJ has launched the “Useful Spots, Not Empty Lots” initiative, engaging local youth to identify brownfields and potential solutions for repurposing the parcels. EYCEJ also worked with the community and youth groups to identify specific areas of concern where trucks commonly violated no idling

regulations. They then installed “No Truck Idling” signs and worked with the City to educate truck drivers and residents on State laws, and informed residents about how to report violations.

In 2016, the City approved an official implementation plan along with \$120,000 to support measures listed in the plan. The plan identifies further areas for research, consistent review of the City’s progress, as well as a plan for the City Council to revisit the proposed zoning changes and limit further siting or expansions of industries that produce air toxics. The City is also hiring a consulting firm to provide local businesses with technical assistance to make their businesses more environmentally sustainable.

Clean Up Green Up (CUGU)

Led by the L.A. Collaborative for Environmental Health and Justice—CBE, Pacoima Beautiful, Union de Vecinos, and Communities for a Safe Environment (CFASE)—Clean Up Green Up (CUGU) grew out of grassroots efforts in three L.A. toxic hotspot neighborhoods—Boyle Heights, Pacoima, and Wilmington—where residents live with intense concentrations of local pollution. The ordinance adopted by the Los Angeles City Council focuses on pollution prevention, pollution reduction, and economic revitalization where cumulative environmental health impacts—such as high incidence of asthma and respiratory disease—result from the close proximity of residents to concentrated industrial and transportation pollution sources.



PHOTO COURTESY OF ADRIAN MARTINEZ

Key components of the CUGU initiative include:

- A citywide provision subjecting all oil refinery and asphalt manufacturing expansions to new conditions and mitigation measures; and another mandating the installations of high-grade air filters for all new or expanded development within 1,000 feet of freeways.
- A requirement for industrial businesses to post signs to notify diesel truck drivers of the State rule mandating that engines be turned off after five minutes of idling.
- Increased performance standards for new and expanded development including noise and lighting, landscaping and buffering treatments, building set-backs and design features, and other site plan requirements to reduce impacts on neighborhood residents.
- A 500-foot buffer between homes and new or changed uses of auto dismantlers, smog check, and repair shops.
- Facilities that produce harmful fugitive emissions must completely enclose the smoke, dust, fumes, and other emissions they generate.
- An Ombudsperson to assist local businesses to become more environmentally and economically sustainable, and to coordinate the City and other regulatory agencies for better enforcement.

CUGU, by establishing new health-protective land use practices, ensures that these communities will not worsen due to ongoing concentration of polluting industries in the future. It sets a foundation for “cleaning up and greening up” these neighborhoods that is very complimentary to the CCI programs, especially the new Transformative Climate Communities (TCC) program.

The “Guide to Green” Program

One important strategy that both Green Zone campaigns employ is building cross-sector support by providing businesses with **Guide to Green** directories of available financial and technical resources. The Guides list local, regional, state and federal programs for small-to-medium-sized manufacturers and other local businesses to adopt advanced clean technologies and energy efficient practices.

By linking the regulatory focus of Green Zone policies with GHG reductions, these strategies can be an essential part of a model Transformative Climate Communities proposal. Furthermore, by focusing on eco-industrial measures that CCI programs do not currently cover, the flexibility of TCC could provide funding for a largely ignored sector with significant carbon-reduction capacity. **Closing this eco-industrial investment gap is critical to mitigating some of the most severe health threats in disadvantaged communities while at the same time preserving vital economic activity; keeping businesses in place and protecting jobs—particularly higher-wage manufacturing jobs—in areas typically characterized by high unemployment.**

Businesses willing to adopt cleaner business practices and become better neighbors could even increase their bottom line due to energy savings, and develop more advanced skills relating to green technologies among their workforce. As part of accepting financial aid, businesses must comply with increased regulations.

Neighborhood-Scale Sustainability Projects

Green Zone development strategies are not limited to land use and regulatory policies adopted by municipalities. They may also be any bottom-up community development project that offers holistic solutions for EJ communities facing multiple environmental and economic stressors.

All seven CBOs described above have developed or implemented at least one neighborhood-scale sustainability project that employs crosscutting GHG-reduction strategies and a wide range of innovative economic, environmental, and public health measures. The technical expertise of CBOs, as well as the local knowledge and day-to-day experiences of community members, inform these projects and display another essential grassroots CBO skillset that can advance equitable outcomes in CCI programs.

Bradley Green Alley Project (Pacoima Beautiful)

The goal of the Bradley Green Alley Project is to create groundwater mitigation and reduce industrial runoff while encouraging active transportation and enhancing physical connectivity of low-income renters to nearby commercial and social activities on Van Nuys Boulevard and Bradley Plaza. The nearby plaza was completed in 2015 and serves as a social hub for programming and services such as Zumba classes, bike repair, and community festivals.

The Green Alley project improves connectivity between Bradley Plaza and the San Fernando Gardens public housing complex and deters illegal trash dumping and drug activity. The project includes: an artistic public wayfinding system through the alley and surrounding area; the development of innovative and affordable groundwater remediation strategies;

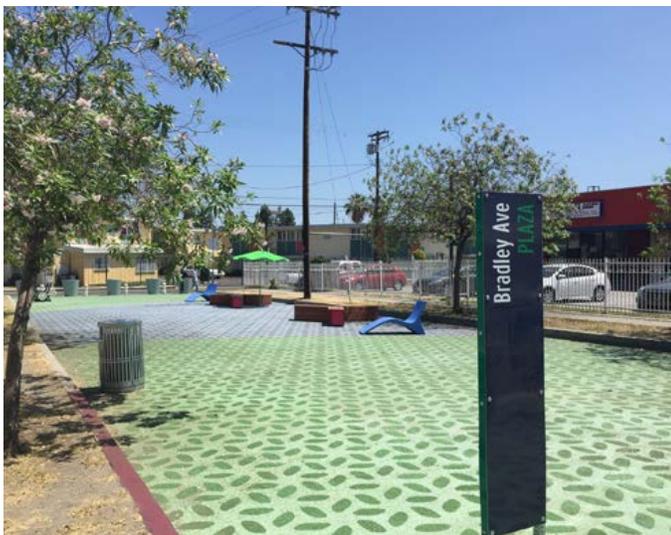


PHOTO COURTESY OF PACOIMA BEAUTIFUL

lighting, landscaping, and other aesthetic alley improvements; and increased services directed to San Fernando Gardens' residents. The project has multiple sources of funding including a Supplemental Environmental Policy settlement, LADWP, and Neighborhood Improvement Fund and CDBG grants. Pacoima Beautiful has formed partnerships with the L.A. Housing and Community Investment Department, L.A. Bureau of Sanitation, L.A. City Council District 7, and the Trust for Public Land.

Integration of Carbon-Reduction: Large-scale groundwater infiltration and remediation strategies create a local environmental benefit and a significant reduction of GHGs by cutting the electricity needed to pump, treat, and transport water. The project orients greening and active transportation infrastructure to benefit public housing residents.

Brown to Green Implementation Plan (CBE)

Brown to Green is a plan to remediate over 110 acres of brownfields in Huntington Park through a community-driven vision which includes economic development, active transportation, transit connectivity improvements, and brownfield education for the community. CBE conducted a series of community workshops to identify community priorities and compile an asset and liability inventory. CBE youth and adult volunteers provided outreach to over 2,000 students and residents throughout Southeast L.A. County. A bus tour of the area followed, staff provided background information to the community, and answered questions about clean-up strategies.



PHOTO COURTESY OF COMMUNITIES FOR A BETTER ENVIRONMENT

These activities, along with site visits to other revitalization efforts, informed future brainstorming sessions, visioning activities and charrettes. CBE has formed partnerships and working relationships with the City of Huntington Park, EPA, HUD, local businesses, property owners, and intermediaries such as CicLaVia to conduct a strength, weakness, opportunity, and threat (SWOT) analysis to a wide variety of short- and long-term actions as they move the project forward in the community's vision.

Integration of Carbon-Reduction: Provides an exemplary model of community-led partnership with local government support of community plans. Strategies incorporate near-term multi-modal infrastructure improvements (bike/pedestrian/transit) and longer-term conversion of contaminated brownfields into permanent assets promoting increased social activity, healthy lifestyles, and community-driven economic development.

Community Alternative 7 (CA7): I-710 Corridor Expansion in the Community's Vision (EYCEJ, CBE)

EYCEJ and CBE, as members of the Coalition for Environmental Health and Justice (CEHAJ),²⁷ played key roles in the development of this comprehensive plan. The coalition fought for, and won, a mandated Health Impact Assessment to provide a more comprehensive understanding of potential health impacts related to



PHOTO COURTESY OF EYCEJ

Caltrans planned expansion.²⁸ The proposal incorporates several significant GHG-reduction strategies, including expanded rail and bus service, transit hub shuttles, and community bus service; a separated four-lane, zero-emission freight corridor; L.A. River improvements including restoration of natural waterways, restored wetlands, native landscaping, and walk and bike trail networks to remove barriers to access by the neighboring communities; and improvements to active transportation infrastructure and first-and-last mile connectivity.

Co-benefits are also a key element of the proposal, including soundproofing and noise mitigation for nearby residences and schools; air filtration for residences within 500 meters of the 710 and major arterials; safe routes to school and other public safety elements; and an annual job-training provision to fund pre-apprenticeship programs, targeted hiring for workers facing barriers to employment, and a low-interest revolving loan program to assist small and disadvantaged businesses that perform project-related work.²⁹

Integration of Carbon-Reduction: Provides significant and immediate remediation of local toxic exposure to black carbon and other criteria air pollutant through permanent installation of zero-emission freight infrastructure. Improves connectivity to rail and rapid bus service through improved community connector bus lines and L.A. River revitalization with enhanced active infrastructure development.



PHOTO COURTESY OF SCOPE

Communities Building Resilience: South L.A. (SCOPE)

SCOPE and the U.S. Green Building Council (USGBC), in partnership with the LADWP and a team of technical experts, are launching a South L.A. community resilience pilot project on a half-mile corridor on West Florence Avenue, developed in accordance with community members' visions. In its first phase, this project will create a community resilience hub at SCOPE's offices; in its second phase, it seeks to extend green infrastructure and connectivity projects outward along the corridor. SCOPE conducts community walks, groundtruthing, and design charrettes to determine strategies that may include installing green infrastructure to reduce heat island effects, infiltrate stormwater, and bring greatly needed trees and gardens to the area. Other potential elements include a

solar system that can both generate clean energy and support an emergency cooling station; small green business resources, training, and incubation opportunities; and other climate resilience and adaptation strategies. All implementation will support local job training opportunities. The project will create both a real world example of community resilience building, as well as tools to replicate the process in other communities.

Integration of Carbon-Reduction: Develops a green corridor and clean tech hub that provides increased community climate resilience, first-hand experience to advanced low-carbon technologies, support for green business startups, and skilled workforce development.

Make Jefferson Beautiful (RCP)

Make Jefferson Beautiful is a community-initiated campaign seeking to beautify and activate a one-mile commercial corridor between Western and Vermont Avenues in South L.A. Beginning in 2010, RCP enlisted the community in the Take a Walk Campaign, employing groundtruthing to identify issues along Jefferson Boulevard, beginning with ADA-compliant sidewalks and other repairs. Since then, RCP has led participatory mapmaking activities informed by community

members' direct experiences, traffic analysis, community bike rides, and expanding residents understanding of the potential uses of public space. RCP has received funding from a variety of sources, most notably, in partnership with Los Angeles City Council District 8, L.A. DOT, Vision Zero, and the Bureau of Engineering. CalTrans has recommended \$6 million of state funding toward Make Jefferson Beautiful through the state-level Active Transportation Program Cycle 3. The proposed project includes buffered bike lanes for Jefferson Blvd, curb extensions, pedestrian lighting, sidewalk repair, adding a planted median along a neighboring school, and street trees. The investments on Jefferson Blvd will improve connectivity between the campus and the community to better link residents to 8,000 new jobs and retail at the USC Village.



PHOTO COURTESY OF EDDIE KO AND REDEEMER COMMUNITY PARTNERSHIP

Integration of Carbon-Reduction: Infrastructure development promotes active transportation, improved access to nearby economic opportunity, and enhanced public safety.

Right to Healthy and Stable Neighborhoods (Union de Vecinos)

Union de Vecinos engages community members in the transformation and repurposing of public space using community-driven designs addressing community-identified needs. Since 2003, community members from Union de Vecinos have organized around the need for street improvements and increased safety through reclaiming and transforming Boyle Heights' streets and alleys. Local neighborhood committees identified the absence of pedestrian infrastructure and the run-down conditions of sidewalks, streets, and alleys as causes of multiple neighborhood problems. It organized events such as movie nights, swap meets, and cleanups in the alleys; painted murals; installed street furniture, planters, solar lighting, and street signs; and created Pedestrian Safe Zones featuring traffic-reducing infrastructure supportive of pedestrian activity. To date, it has transformed 20 public spaces in Boyle Heights and the City of Maywood from unsafe areas into community gathering places used for fairs, mercados, meetings, and community celebrations.



PHOTO COURTESY OF UNION DE VECINOS

Integration of Carbon-Reduction: Active transportation infrastructure elements enhance public safety and promote social interaction and a repurposing of public space in the community's interest.

Rolland Curtis Gardens (T.R.U.S.T. South LA) A community-led affordable housing development near USC and the Expo Rail Line with partner Abode Communities. (See case study on page 104 in Appendix C.)



PHOTO COURTESY OF T.R.U.S.T. SOUTH LA

Transformative Climate Communities

In September 2016, the state legislature and the Governor’s Office passed AB 2722 (Burke)—the Transformative Climate Communities (TCC) Program—to which the GGRF appropriated \$140 million. The purpose of this legislation is to fund neighborhood-level transformative climate community plans that include GHG-reduction projects providing a maximum level of local economic, environmental, and health benefits to disadvantaged communities. EJ advocates supported this bill, co-sponsored by CEJA, as they were concerned that the “siloed” approach of programs addressing one carbon-reduction strategy was too narrow to benefit disadvantaged communities.

A primary benefit of the TCC program is it creates one program to fund multiple strategies (e.g., energy efficiency/renewable energy; low carbon vehicles; transit, land use, and housing; natural resources), rather than separate grants operating narrowly within each category (as described thus far). Perhaps equally important, however, is the flexibility that the TCC program provides to allocate funding for specific strategies that are not currently eligible to receive cap-and-trade funding such as community solar, industrial EE/RE programs, geothermal and wind energy, microgrid development, urban composting, rain barrels, permeable pavement, cool roofs and pavements, kinetic tiles, and brownfield decontamination. These important tools for community revitalization and GHG reduction currently represent investment gaps that the TCC program has the capacity to close through its open-ended versatility.

The TCC program is also concerned with how investments are determined and stresses the importance of multi-stakeholder partnerships across labor, nonprofit, local agencies, and business sectors, with a strong emphasis on the formation of community partnerships. The language of the bill states that the Strategic Growth Council (SGC)—the body overseeing the TCC program—will award projects that demonstrate community engagement in all phases of their development and implementation, and specifically mentions community-based organizations as eligible primary applicants.

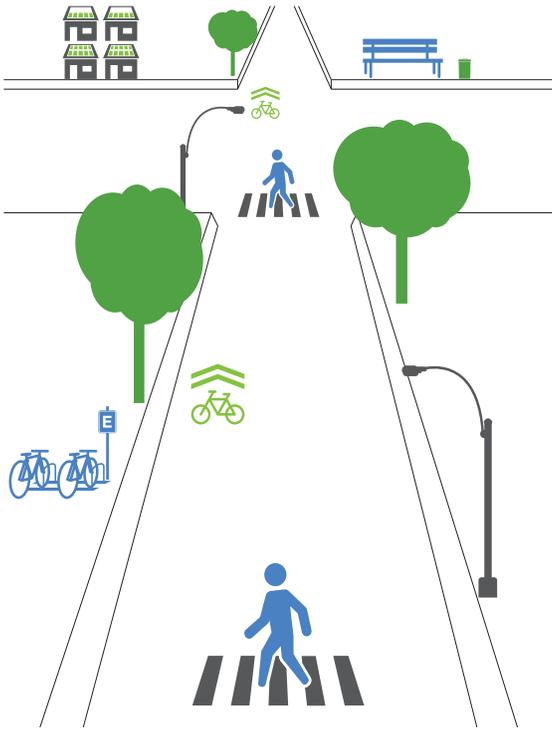
**FOOD
NOT
WAREHOUSES**
GREEN = OXYGEN
**FAMILIES
OVER
DEVELOPERS**

HONK
4
JUSTICE



PHOTO COURTESY OF JESSE MARQUEZ

Integrated Project Design: Slauson & Wall Case Study



In order to demonstrate the potential benefits of the TCC program further, we undertook an integrated project design for this report that showcases both community input strategies and illustrates the importance of flexible investment strategies to address the particular needs of a given community. We were fortunate to have the support of the UCLA Luskin School of Public Affairs Bronson Fellowship program to assign a graduate student to this novel project for a compressed eight-week schedule during the summer of 2016. This case study allows us to explore more fully how to incorporate holistic design interventions as part of a comprehensive approach featuring multiple climate investments that work in conjunction with each other.

Identifying a Community Partner

Our goal was to engage leaders from a disadvantaged community in the creation of a model TCC plan through a participatory design process to identify crosscutting GHG-reduction strategies for the community's benefit with an emphasis on those that other disadvantaged communities can replicate.

As a public foundation, Liberty Hill does not work directly with community residents, so for the purpose of this project we partnered with a community group on the ground. We set criteria to help guide the selection process of our project site, which included:

- An active community partner working in a disadvantaged community with an engaged base of residents;
- A project that can be replicated in terms of the community planning process and design interventions;
- A shovel-ready project or project concept that was community generated;
- A project with co-benefit implications;
- A project receptive of integrated GHG-reduction strategies; and
- A project that can be competitive for TCC funding.

Selected Project

The project selected for this process was T.R.U.S.T South LA's Slauson & Wall Village—a seven-acre brownfield site located in South Los Angeles. The geographical boundaries of the site are Slauson to the north, Wall Street to the west, Los Angeles Street to the east, and E. 59th Place to the south. It is necessary to demolish the unused warehouses on the property and remediate the soil before redeveloping the site to include 120 units of affordable housing, a community center, and a four-acre park.

The Slauson Corridor is an ideal project for the TCC as there are already commitments for public investment along Slauson. A community-driven neighborhood scale greening plan

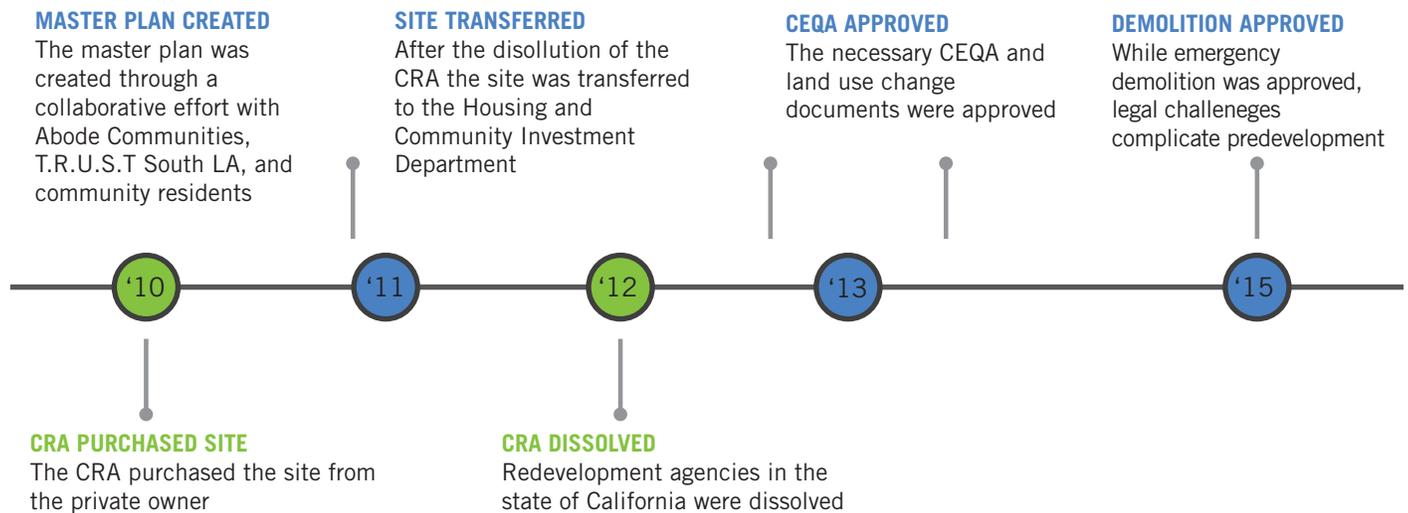
funded by TCC could coordinate these investments, employ GHG-reduction interventions, capture economic benefits for local residents, and advance a community vision. T.R.U.S.T. South LA is working with partners now to develop such a proposal for TCC.

A TCC plan could easily incorporate many existing assets of the Slauson & Wall Village project. First, the existing master plan created by T.R.U.S.T., Abode Communities, and community residents incorporates urban sustainability with the principles of holistic remediation and community-driven development that EJ advocates see as central elements of the TCC program. Furthermore, public transit and active transportation features adjacent to the site provide neighborhood-scale connectivity to employment opportunities and other destinations.

A second major asset is the site’s proximity to the proposed L.A. County Rail to River project, a portion of which passes through the site area along Slauson Avenue. The Los Angeles County Metropolitan Transportation Authority (Metro) has made a significant investment in the Rail to River project along Slauson Avenue, which will transform an abandoned rail line into a safe biking and walking path that connects the Crenshaw/LAX Line, the Silver and Blue Lines, and the Los Angeles River. This presents a unique opportunity for expanded connectivity through a major addition of active transportation infrastructure.

Project History

In 2010, the Los Angeles City Community Redevelopment Agency (CRA/LA) purchased the site from the private owner. Later in 2011, the master plan for the site was created. Abode Communities and T.R.U.S.T. South LA collaborated with community residents to complete the master plan. In 2012, state legislation dissolved all community redevelopment agencies in California, which introduced serious complications to the Slauson & Wall project. In 2013, following the dissolution of the CRA/LA, the City transferred the Slauson & Wall project to the Housing and Community Investment Department (HCIDLA), where it currently remains. In May 2013, the necessary CEQA documents and land use changes were approved. While the City approved a motion for an emergency demolition of the site in May 2015, legal challenges complicate predevelopment of the site. T.R.U.S.T., Abode Communities, and HCIDLA are working together to transfer ownership of the site to T.R.U.S.T. and Abode and to move the demolition and redevelopment process forward.

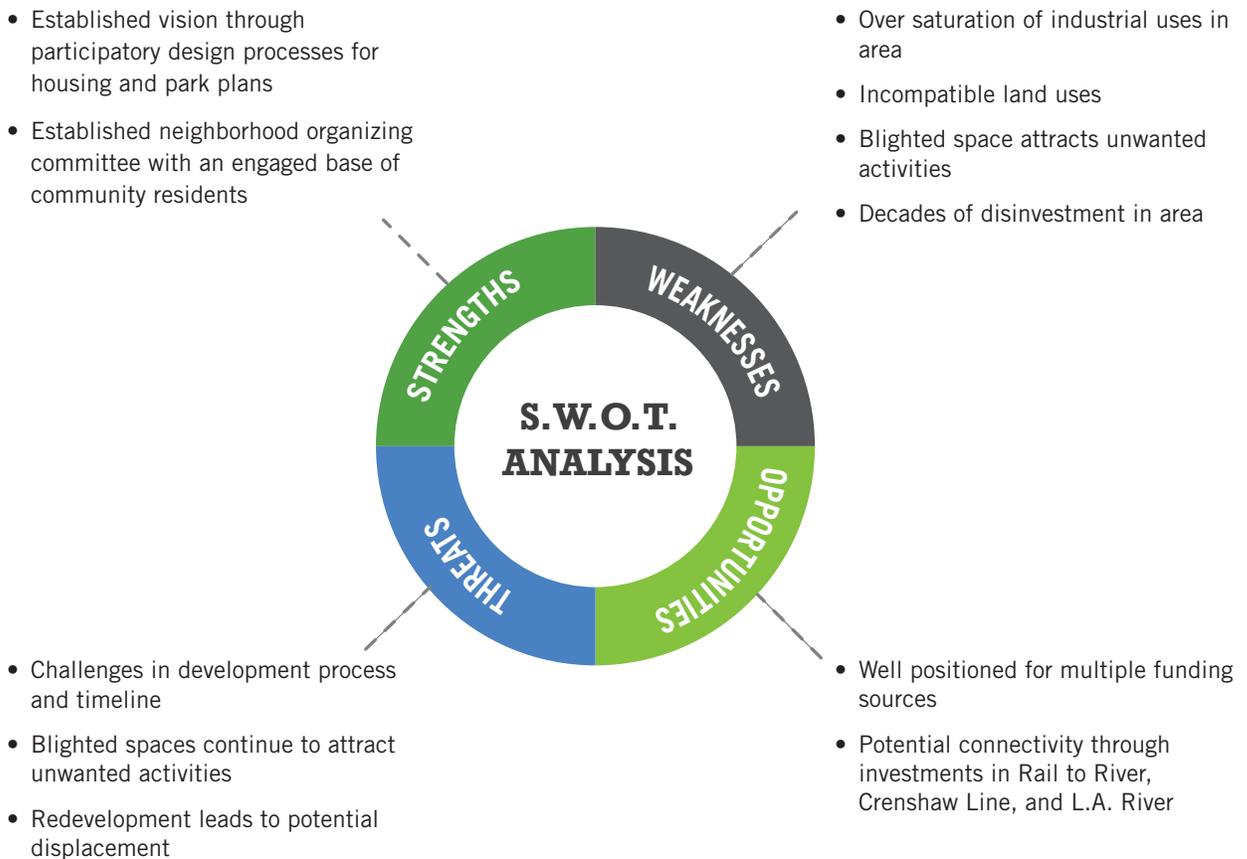


TCC Plan Development Process

While T.R.U.S.T. has conducted participatory planning since the beginning of the Slauson & Wall project, due to the time constraints of this report it was not possible to continue in a truly participatory manner with the process of project design. We were only able to accommodate community input at the beginning of the plan development process and during the initial design. It would have been preferable to have more feedback and input from members of the community at different phases of the design process and to respond to any criticisms or concerns after the first (and only) presentation with changes to the design. We would therefore identify this process as a collaborative design rather than a true participatory process. This underscores the need for organizations that already have a connected relationship with the communities they serve to undertake deeper levels of community inclusivity and for those activities to be a part of development from project inception.

Once securing a partner and a project site, we proceeded to conduct a Strengths, Weaknesses, Opportunities and Threats (S.W.O.T) analysis of Slauson & Wall to identify factors that could potentially influence the success of the project. We expanded the boundaries of the original site to capture more of the neighborhood. The new catchment area includes 60th Street to the south, San Pedro Street to the east, Slauson Avenue to the north, and S. Main Street to the west.

The initial planning phase also involved preliminary research conducted through informal and formal conversations with T.R.U.S.T staff and members. We also identified a series of community engagement strategies, such as interviews with residents from the surrounding neighborhood, surveys, and workshops. Feedback from the workshops was to inform potential strategies for a TCC project.



With support from T.R.U.S.T. South LA's staff, we collaborated with a group of about 25 residents, some of whom T.R.U.S.T.'s neighborhood organizing committee developed as community leaders. The residents were interested in the TCC program, open to collaborating on our draft development plan, and agreed to participate in two workshops. While our intent was to focus on design interventions that can achieve GHG reductions, residents identified numerous challenges facing their neighborhood at both workshops such as illegal activities, speeding vehicles, truck idling, industrial water runoff, pollution from auto body shops, and public safety concerns. Residents also expressed frustrations with the delayed development of the masterplan and with what they perceived as elected officials' lack of attention to their concerns. While some residents' concerns do not fall within the categories of climate investments, it was clear that our TCC plan must incorporate design interventions to address these issues for it to be truly reflective of overall community needs.

We designed our second workshop to incorporate issues raised by residents, while also discussing design interventions to promote climate resiliency. We asked residents during a mapping activity to place icons representing different interventions on an enlarged map of their neighborhood. Participants identified where they would like more bike lanes, stop signs, speed bumps, seating, and other physical interventions. This activity was helpful because it visually displayed the most needed types of interventions. Through resident feedback at both workshops, we were able to adapt our approach.

TCC Proposal and Interventions

The recommended interventions are a combination of the four climate investment categories outlined on page 21, as well as local labor benefits, business support strategies, regulatory interventions, and other solutions to the problems the community residents expressed during the earlier workshops.

We sought to incorporate **Low-Carbon Vehicle** strategies that discourage harmful emissions from passenger and freight vehicle usage. This included EV car shares as well as strategically located signage that prohibits bus idling in the neighborhood, which was a big issue identified by community residents that needed to be addressed. One potential obstacle identified in this investment category included restrictive access to EV carshares that require the use of a credit card.

Transit, Land Use, and Housing investment possibilities include safer streets, bike/pedestrian amenities and infrastructure, and improvements to transit mobility and connectivity. Because this category encompasses so many climate goals it offers a wide range of recommendations. Some specific interventions are solar-powered device charging stations by transit stops, shade structures, and traffic calming measures in the form of crosswalks, stop signs, and speed bumps. Transit connectivity is especially relevant to the projects because of proximity to the immediately adjacent Rail to River project as well as the Crenshaw Line. Improving safety measures are also highly relevant to provide safe routes to schools and increased access to employment opportunities and popular destinations in the area.

Energy Efficiency and Renewable Energy (EE/RE) investments include, but are not limited to, building retrofits; cool pavements and cool roofs (which reflect rather than absorb sunlight); kinetic tiles that provide energy when stepped on, utility-scale and community solar programs, and microgrids. Microgrids aggregate access to renewable energy and provide potential community ownership of the generation, distribution, and storage of power.

Design intervention table

S = SHORT TERM **L** = LONG TERM * = POLICY RECOMMENDATION

LOW CARBON VEHICLES		
	Reduce bus idling by installing signage	S
	Send out enforcement from the Air Resources Board	S
	Install low income EV car sharing on affordable housing parking lot	L
TRANSIT ORIENTED DEVELOPMENT +PUBLIC TRANSIT +ACTIVE TRANSPORTATION		
	Improve bus infrastructure (LED lighting, wifi, solar powered charging stations, real time transit information, seating, and shade structures)	L
	Install traffic calming measures (crosswalks, speed bumps, and curb extensions)	S
	Install bike share and bike repair station	L
	Increase connectivity to Rail to River by providing bike and pedestrian lanes	L
	Prevent double parking by repainting diagonal lines and sending out parking enforcement	S
ENERGY EFFICIENCY + RENEWABLE +WEATHERIZATION INCENTIVES		
	Install community solar	L
	Install cool roofs + cool pavements	L
	Install kinetic tiles on sidewalks	L
	Implement the weatherization of residential and commercial uses. Offer energy efficiency incentives to homes in project area eg:replacing refrigerators	L
	Place solar panels on qualifying multi-family housing in the project area	L
NATURAL RESOURCES		
	Insert bioswales, rain gardens, rain barrels and vertical gardens in appropriate areas to reduce run off in the area	L
	Place curb cuts + curb inlets into sidewalk	S
	Urban forestry (tree planting and management)	S
	Green alleyways (planting drought resistant plants, permeable and light colored pavements, traffic calming measures and lighting)	S
	Create pocket parks on empty lots	S
ECONOMIC + WORKFORCE DEVELOPMENT		
	Local hire in S+W construction, solar installation and Rail to River construction*	L
	Establish cooperative business in area*	S
	Regulate nuisance businesses	L

Natural Resource investments may include water conservation elements such as bioswales, curb cuts, rain barrels, rain gardens, and green alleyways. Bioswales and rain gardens are landscape elements that collect and infiltrate runoff water. Curb cuts are slits in the pavement that redirect drainage while also making it safer for visually impaired pedestrians to cross streets. The process for greening an alleyway usually includes planting drought tolerant plants, installing both permeable and light pavement, adding traffic calming measures, and installing informal seating to encourage social interaction among neighbors.

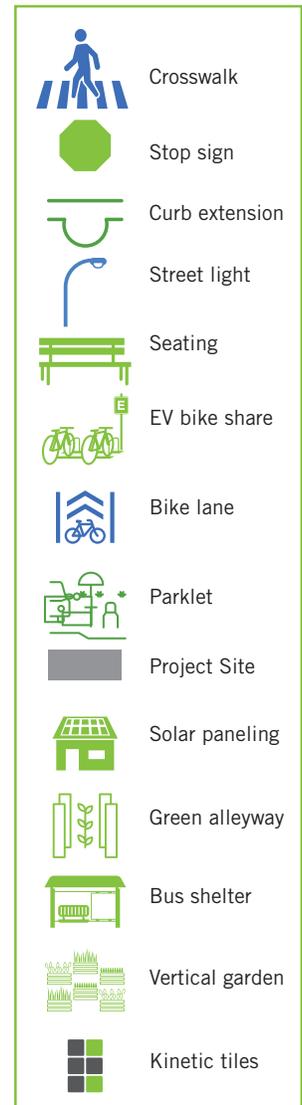
Economic and Workforce Development may include first-source hiring of workers facing barriers to employment in the Slauson and Wall construction and connecting infrastructure to the outlying community, as well as local purchasing programs that incorporate supplier diversity of businesses owned by people of color, women, and other disadvantaged categories. We also noted the potential benefits of establishing worker cooperatives and requiring stricter regulations of the nuisance businesses in the area, which include: pallet yards that leave pallets in the street creating mobility obstacles and public safety issues and auto shops that perform paint jobs and other similar services in the street. This causes harmful chemicals from the paint and other materials to permeate the air. Potential challenges that may surface with these recommendations are the difficulties that surround the implementation of a cooperative business model. In addition, regulations are difficult to enforce unless there is constant monitoring and enforcement of penalties.

We divided our interventions by short term and long-term goals. Short-term goals included interventions like installing crosswalks, speed bumps, no idling signs, and the greening of alleyways. These interventions were strategies community members could execute on their own, much like tactile urbanism, which is a process of implementing inexpensive temporary modifications to the environment. Long-term strategies included community solar, cool roofs, cool pavements, kinetic tiles, and EV car share. Most of these interventions would take some time to implement due to the complexity of the planning and installation involved.

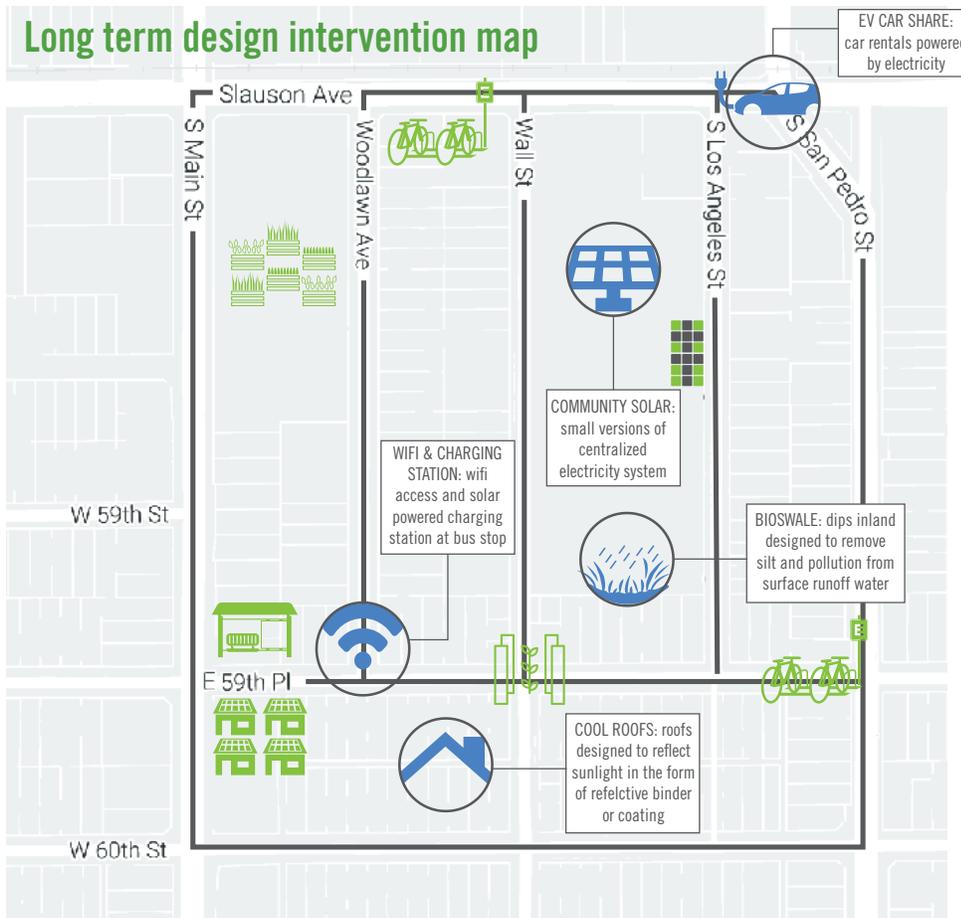
The locations of some of these interventions were intentional. Community members identified issues of runoff and the best places for interventions such as bioswales, rain gardens, and curb cuts. Residents also recommended placement of bikeshares and EV carshares in close proximity to transit stops to improve first and last mile connectivity. We placed stop signs and speed bumps at locations where the residents complained of reckless speeding. We made careful considerations when proposing interventions and took feasibility, community dynamics, the physical environment, and other factors into consideration. The diagrams below show our recommended short-term and long-term interventions in the project area:

We recommend not overlooking non-traditional climate investments when proposing climate investment strategies. Some stand-alone interventions like stop signs may not be explicit climate investments, but they improve street safety, which encourages active transportation. In order to secure community “buy-in” and cooperation, proposed interventions must reflect the immediate and long-term needs of the community.

Short term design intervention map



Long term design intervention map



Slauson & Wall Village: Key Takeaways from the Integrated Design Project

- When dealing with communities that lack basic city services, the need for public safety elements such as stop signs and bike lanes may eclipse more sophisticated elements like community solar.
- A lot of issues disadvantaged communities face are layered and complex and should be approached through multiple strategies.
- Time constraints can challenge the scale of projects. Usually, participatory design is a process that spans over months or in some cases, years. Trying to achieve grand goals in a short time period may be challenging.
- Informal workshops held with community residents require a level of flexibility due largely to the spontaneity of these meetings.
- When working with immigrant communities, high levels of linguistic isolation should be considered and accommodated.
- Proposed climate investments in disadvantaged communities should be mindful of the existing social fabric. These investments should not disrupt the community structure.
- Collaboration with the community is necessary for this process. This can be achieved through transparency and community input.
- Grassroots-led investments reduce the possibility of gentrification and displacement.
- Employing design techniques based on lived experiences avoids assumptive solutions that gloss over deeply-rooted issues.
- Shared ownership in the project can result in residents acting as stewards for the development.
- Expectations, limitations, and abilities must be grounded in reality and set forth as much as possible at the start to avoid resentment and distrust among the community.
- A level of flexibility must be adopted to accommodate sudden changes in plans.

Creating authentic community partnerships in CCI programs is an indispensable element to maximize equitable outcomes and inclusive practices in disadvantaged communities. Grassroots EJ CBOs are uniquely positioned to act as intermediaries in the formation of community partnerships and can bring resources and expertise to strengthen the equitable outcomes achieved by CCI programs.

3

Maximizing Equity: Discussion and Recommendations

Maximizing Equity: Discussion and Recommendations

Placing Community at the Center
Ensuring Authentic Participation
Establishing a Community Participation Metric
Conclusion

Maximizing Equity: Discussion and Recommendations

In Section 1 of this report, we put forth several recommendations for CCI program administrators to achieve a more equitable distribution of resources, increase the significance of benefits, and prioritize community inclusivity. In Section 2, we studied the work and expertise of several L.A.-based grassroots community-based organizations (CBOs) and how they provide model community representation and participation. We identified many best practices in community outreach, and revealed important ways that the organization’s approach to multi-benefit investment strategies could improve the equitable outcomes for CCI programs targeting disadvantaged community benefits, including the new Transformative Climate Communities (TCC) program.

In this final section, we combine our analysis of Los Angeles County Climate Investments and the experience and expertise of our featured grassroots CBOs to summarize our recommendations on how to increase community benefits and improve program outreach. We also provide additional analysis and recommendations to better inform state and local agencies about how to maximize disadvantaged community participation. These recommendations include how to identify community partners that best represent the concerns of local residents and possess the necessary expertise as community intermediaries and facilitators of participatory activities.

Placing Community at the Center

Community Representation: When we talk about model community participation practices, what are the principles we seek to identify? First of all, it is not feasible for an entire community to participate in any activity. Community members participate—not communities. So, it is important to establish that the people involved are representative of the community whose interests are at stake. In a public housing development, for example, business, faith-based, and nonprofit leaders designated as “community representatives” may not accurately or fully reflect most directly the interests and opinions of the public housing tenants who will be affected by the decisions.

The participation of directly impacted community members is only a part of an exemplary participatory model. A project must also be informed by people aware of what is at stake, the systems and operatives influencing outcomes, and a variety of strategies and interventions that may be applied to the development. For this reason, it also matters who is providing the participatory environment.

Community Intermediaries: For participatory activity, communities require an intermediary (or intermediaries) to facilitate the collaborative process. State or local government agencies may be able to provide some of this, but do not have the knowledge, skillsets, and structures to effectively engage disadvantaged communities. Grassroots organizations, on the other hand, provide an established history of organizing in their communities, active local leadership development, and formal structures holding them accountable to their communities. Staff and volunteers are usually hired primarily from the community and strive to be representative of its diversity (in terms of race, gender, age, sexual orientation). For these reasons, outreach services led by grassroots CBOs can be accomplished more quickly and efficiently, and community representation will be significantly deeper and wider than any organization external to the community would provide.

Ensuring Authentic Participation

FINDING 1

There are no criteria to establish model proposals reflecting strong community vision.

Recommendation: Require evidence of outreach methodologies, collaborative activities, and decision-making authority for community participation incentives.

The neighborhood-scale sustainability projects of grassroots organizations outlined earlier illustrate authentic community participation methodologies. These organizations provided five primary areas of expertise that form a set of **community driven participatory development criteria** for a model participatory environment:

- **Community Outreach** depends on strong local networks and establishes lines of communication and a structure for community representation. *CCI Benefits: Increases access to disadvantaged communities, overcomes barriers to low-income markets, increases the potential number of people who may participate.*
- **Leadership Development or Capacity Building** incorporates more community voices, builds organizational strength and community assets, and creates a stronger and more informed representation of the community's interest and vision. *CCI Benefits: Extends sphere of outreach, increases growth over time, creates more informed decision-making.*
- **Participatory Facilitation** creates a collaborative environment with mutual learning between an organization and community members. Activities may include research, conceptualization, mapmaking, project design, program development, planning, implementation, or other problem-solving activities. *CCI Benefits: Provides community experiences to improve program and project design, supports informed community decision making with technical expertise, increases likelihood that project benefits are meaningful to disadvantaged communities.*
- **Holistic Analysis** places a targeted outcome (affordable housing, active transportation, clean vehicles, solar retrofits) within an economic, social, environmental, and political context to understand how different systems created the inequity. *CCI Benefits: Provides insight into what economic, environmental, and social stressors co-occur with the production of GHG emissions, improves program evaluation, indicates areas of potential harm to avoid.*
- **Crosscutting Intervention Design** takes the holistic analysis and creates technical and/or policy-based solutions that address the primary issue along with other related problems. *CCI Benefits: Maximizes co-benefits alongside GHG reduction, improves program evaluation, indicates areas of potential harm to avoid, increases transformative power of investments.*

FINDING 2

Letter of support are not sufficient to establish a community partnership.

Recommendation: To establish authentic partnerships between public agencies or developers and communities, MOUs should be signed with organization(s) capable of providing community outreach, capacity building, participatory facilitation, holistic analysis, and/or crosscutting intervention design.

The most important distinction from the community consultation and collaboration levels, however, is that the terms of the partnership are set in contracted agreements, such as a Memorandum of Understanding (MOU). These documents should clearly define the roles, responsibilities, compensation, and authority of each partner, and establish how community leaders will be placed at the decision-making table and empowered to shape policies that result in a range of co-benefits alongside GHG-reduction strategies.

A case in point that stresses the need for contracted agreements was found during our research exploring community partnerships in CCI projects. We spoke with a primary applicant, partnering CBO, and grant administrators regarding what was supposed to be a model collaboration between the developer and a grassroots CBO with extensive experience in participatory design and community outreach. The CBO, that remains the only community partner on the project, signed a letter of support during the application process and performed a small portion of the initial planned outreach. However, they were terminated after receiving what amounted to 0.06% of the grant, even while their performance exceeded stated goals. Despite their experience, and ongoing need for outreach, the CBO provided no other role for the developer.

The TCC Program is an opportunity to provide robust community benefits and authentic community partnerships.

Recommendation: Require all TCC applications to provide MOUs establishing community partnerships and prioritize partnerships with CBOs with a deep understanding of economic, environmental, public health, and displacement threats.

FINDING 3

Because of the importance of the TCC program to provide co-benefits and establish meaningful community participation, the program cannot afford to provide funding for projects without a defined community partnership in place. Program administrators also should prioritize partnerships with CBOs who have experience creating crosscutting interventions addressing economic, environmental, public health issues, and anti-displacement problems and solutions. Projects that do not include these types of informed community partnerships may too easily be driven by special interests that do not reflect a community vision.

Establishing a Community Participation Metric

Agency guidelines on community engagement only require applicants to provide information to the public about project development to receive incentives.

Recommendation: Establish a metric that incentivizes community participation through four levels of progressive inclusivity: Consultation, Collaboration, Partnership, and Leadership.

FINDING 4

Community engagement, as it is currently incentivized, requires little more than holding public meetings. While these meetings technically engage a community, it says little about how communities participate. Public meetings provide information and usually time for public comment. Talking and listening represent an exchange of information, but not a commitment to incorporate the public's views. If we were to identify progressive levels of inclusion, establishing communication would be the first step. Community meetings should be an eligibility requirement for all CCI programs and should conform to basic guidelines, including sufficient notice, time for public comment, occurring at a time and place accessible to residents, and the provision of translation services.

Community participation incentives could increase competitiveness for projects that exceed a minimum threshold of open and accessible public meetings. We propose using the following four levels of community participation: Consultation, Collaboration, Partnership, and Leadership. To provide a significant enough incentive for inclusive practices, we recommend that project-based programs targeting investments in disadvantaged communities use ranking systems that dedicate the equivalent of eight out of 100 possible points to projects on a four-level

progressive scale of community consultation, collaboration partnership, and leadership. Each level should engage a broad representation of well-informed community members in the participation process. This should include a reasonable diversity of local residents and business owners, grassroots organizations, environmental justice and other social advocacy groups, local nonprofits, and institutions.

Community Consultation
25%
(2 out of 100 points)



Activity Examples Workshops, roundtable discussions, focus groups, surveys.

Requirements Documented record of activities and detailed notes of communication.
Evidence of how consultation influenced the final proposal.

Consultation does not require much more than a public meeting, but it does signify a willingness to change a project’s design based on community feedback. A community workshop encourages a back-and-forth discussion between community stakeholders and agency staff in place of static public comment. Roundtable discussions usually provide a more focused dialogue that ensures significant issues are discussed with community stakeholders, public agencies, and technical experts. Documentation of the conversation must then be provided, and (unless full support of the project is expressed) evidence of specific changes made to the project as a result of the conversation.

Community Collaboration
50%
(4 out of 100 points)



Activity Examples Design charrettes, groundtruthing, crowdsourcing, community mapmaking, participatory budgeting, participatory research, workshops, collective wayfinding.

Requirements Must occur prior to a fully envisioned project.
Evidence of mutual learning between the community and technical advisors.
A final design that is representative of the created collective vision.

Community collaboration involves the co-design or co-creation of projects where the decision-making authority is not necessarily held by the community, but where community insights were directly incorporated into the project. Unlike community consultation, local input is not in response to a complete project design. Instead, collaborative activities occur in earlier stages of project development that play a greater role in the formation of the design. There are a wide variety of collaborative activities, but one common characteristic is a mutual learning environment. The final design should also be in harmony with the overall vision of the community as presented during the collaboration.

Community partnerships should be established by a signed MOU clearly that defines the roles, responsibilities, compensation, and authority of each partner. The partnership should include either a shared decision-making authority, or delegation of duties directly responsible for project outcomes and implementation. This may be represented by a grassroots CBO conducting outreach and program evaluation for a statewide service provider, a CBA defining specific community benefits, or committees and advisory groups with community representation (but not necessarily control). CBAs should not only detail the community benefits, but should also have accompanying reporting requirements and consequences (often called clawback provisions) for failure to create the benefits promised as a condition of community support for the development.

Activity Examples	Community Benefits Agreements (CBA), advisory groups, citizen advisory committees, participatory budgeting, delegated actions and authority
Requirements	<p>Decision-making authority must be shared with community stakeholders.</p> <p>Occurs over multiple phases of project development or implementation.</p> <p>Targeted activities directly related to equitable outcomes.</p> <p>Contracted agreements, not stated intentions.</p> <p>Reporting requirements and clawback provisions for agreed-upon benefits.</p>

Community Partnerships
75%

(6 out of 100 points)



Although grassroots CBOs represent ideal community partners, projects may be located in an area without grassroots representation. Others may cover too broad of an area for a local CBO to be an appropriate partner. This should not prevent a project from establishing viable community partnerships. Instead, agencies could prioritize projects that establish partnerships with other organizations to fulfill as many of these needs as possible. On-the-ground organizing nonprofits (e.g., LA Voice [PICO], ACCE, Neighborhood Defense Fund), participatory development facilitation (e.g., Urban Semillas, SSG Research and Evaluation, community foundations), and issue/policy-based nonprofits with a history of supporting grassroots movements (e.g., Coalition for Clean Air, LAANE) can each provide support in their areas of expertise and combine to facilitate a community-driven participatory project.

Activity Examples	Any activities resulting in the creation of a project, provided they occur with a community-driven participatory development model
Requirements	<p>Final decision-making authority in the hands of the community.</p> <p>Support for a community-owned plan (e.g., assistance with funding grassroots participation, provision of technical assistance, aid in project implementation)</p>

Community Leadership
100%

(8 out of 100 points)



Establishing community leadership does not require any different activities than the other participatory tiers, but instead requires that throughout project development the process was guided by a community-driven participatory development model and that the final project has the formal “buy in” and approval of community residents. This model is expressed ideally in the five areas of expertise already named: Community Outreach; Leadership Development or Capacity Building; Participatory Facilitation; Holistic Analysis; and Crosscutting Intervention Design.

Community-driven participatory development should be easily identified. With the seven neighborhood-scale sustainability projects listed in the previous section, the grassroots CBOs documented their experiences, activities, and lessons learned along the way, sometimes resulting in the production of detailed reports. In the event of a public agency or other organization partnering with such a project, this highest participatory level means they agree to assist with funding grassroots participation, provide technical assistance, aid in project implementation, or otherwise support the community-owned plan.

Conclusion

Green Zones and Grassroots has reported on over \$225 million in GGRF proceeds officially implemented in Los Angeles County. At least that much again has been invested over the past year. Considering the magnitude of this investment, if California is going to set a new standard for climate change policies that aggressively attacks emissions and defends environmental justice communities, we must not shy away from asking how well the programs achieve these goals and where they need to improve.

Despite the global awareness of climate change, there are local health threats created by the largest producers of GHGs that are often not well understood outside of the communities most gravely affected. In Los Angeles, many low-income communities of color face “double jeopardy” disproportionate exposures to toxic contaminants and greater susceptibility to those hazards because of a lack of information and limited access to health care.

A threshold should be established for what benefits to achieve and what harms to avoid. Addressing high rates of asthma in children, inadequate housing, and restricted mobility while reducing California’s carbon footprint requires critical analysis and evaluation of the programs and the methods for prioritizing investments. Successful strategies will require better dissemination of information and resources, applying holistic measures that offer more comprehensive and crosscutting solutions, and ensuring that those whose daily lives are affected most by economic and environmental stressors are brought to the table to make decisions on how investments can better their lives.

A paradigm shift is required that places greater value in participatory development. For equitable outcomes to be truly realized as a goal of climate change mitigation programs, public sector investments must incorporate community engagement as an integral component that can be met with the involvement of grassroots community-based organizations (CBOs) which are adequately compensated for their services. This will require the ability to adopt practices and metrics that can accurately assess increasing levels of community influence over project developments and which organizations are most qualified to act as community intermediaries and in an advisory capacity for creating crosscutting GHG-reduction efforts that address the most significant community needs. This is especially important with the new Transformative Climate Communities (TCC) program, which seeks to present a model of inclusive and equitable climate investment maximizing economic, environmental, and public health co-benefits. With \$140 million statewide, and a proposed \$35 million for the City of Los Angeles, these investments need to leverage the expertise, skillsets, and on-the-ground abilities of grassroots CBOs to ensure neighborhood-scale transformation.

Improving dissemination of information, support, and resources to disadvantaged communities will most likely depend on how well outreach programs are funded and the quality of the strategies they employ. Combining these efforts, where feasible, into umbrella programs to avoid duplicate efforts in different programs is essential to create maximum change and the vital transformation of disadvantaged communities. The degree to which programs should be integrated should be considered within each investment strategy. Considerations might include combining clean vehicle rebates, vouchers and financial supports; or at the administrative level of all CCI programs, to build awareness of clean vehicle incentives, deep energy retrofits,

and information of relevant local projects (e.g., EV Carsharing, transit investment, and freight demonstrations). This would allow highly productive, time-intensive efforts like door-knocking to create benefits across multiple programs.

It is possible that these programs should be conducted at an even greater scale beyond CCI programs. There are many statewide mandates to determine how to increase disadvantaged community benefits and overcome obstacles to the penetration of low-income markets. For example, the Charge Ahead California Initiative calls for programs and incentives to increase clean vehicle acquisition in low-income households and disadvantaged communities; and a study mandated by SB 350 requires the Energy Commission to complete and publish a *Barriers Report* to better understand obstacles for low-income households to access all forms of Energy Efficiency/Renewable Energy (EE/RE) investments and benefit from contracting opportunities.³⁰ A second study is also planned to address low-income obstacles in the clean transportation sector. The California Energy Commission (CEC) acknowledges crosscutting needs for financing, education, and outreach between clean transportation and EE/RE.³¹

There may, therefore, be an impetus to coordinate outreach programs at an even larger scale. In addition to the potential benefits of coordinated outreach, education, and financing programs, it may be that it is more productive to provide a centralized statewide database for determining eligibility and pre-qualification for an array of programs across multiple sectors. The aggressive nature of California's commitment to carbon reduction and disadvantaged community benefits may require adoption of these and many other coordinating strategies to provide economies of scale for time-intensive outreach activities.

We hope that this report provides beginning considerations of how equitable outcomes may be achieved in the current context of California's push for a low-carbon future. By calling attention to grassroots CBO expertise in providing disadvantaged community outreach, and driving community-led participatory development projects, we hope that we have demonstrated the wisdom of leveraging these skillsets to advance the goals of SB 535, AB 1550, SB 32, and AB 197— each of which calls for linking the global benefits of carbon-reduction strategies with interventions protecting the health and advancing the interests of California's most vulnerable communities.

Green Zones and Grassroots: Summary of Recommendations

INCREASE COMMUNITY BENEFITS

Require applicants to provide documentation substantiating projected benefits and avoidance of harms.

Award points for project elements that create co-benefits exceeding program requirements, with strong emphasis on quality job creation accessible to disadvantaged workers and mandated reporting on achievement of targets.

Transit program administrators should require disadvantaged community investments to improve transit lines with heavy low-income ridership, such as local bus services.

Low-Carbon Transit Operations Program (LCTOP) administrators should prioritize funding for service and operations improvements on transit lines with fewer funding sources.

Increase transparency of projects and administrative decision making in all CCI programs, especially when public agencies directly receive funding.

Require open and accessible public meetings and letters of cross-sector support for all projects to qualify for disadvantaged community investments.

IMPROVE PROGRAM OUTREACH

Coordinate community outreach efforts of multiple programs to maximize productivity of time-intensive activities.

Create, fund, and implement targeted disadvantaged community outreach strategies with community-based organization (CBO) partners.

Provide people with a range of program options and provide on-site prequalification and application assistance.

Provide line item “use it or lose it” funds for outreach services rather than a percentage of the administrative budget.

MAXIMIZE PARTICIPATION

Sign MOUs between public agencies or developers and CBOs to provide community outreach, participatory input, holistic analysis, and/or crosscutting intervention design.

MOUs should clearly define the roles, responsibilities, compensation, and decision-making authority of each partner and establish how residents will be empowered to shape policies.

Adopt a community participation metric that recognizes and rewards increasing levels of community consultation, collaboration, partnership, and leadership.

Require all Transformative Climate Communities (TCC) applications to provide MOUs establishing community partnerships with CBOs with a comprehensive approach to economic, environmental, public health, and displacement impacts.

IDENTIFY COMMUNITY PARTNERS

Prioritize partnerships with organization(s) possessing expertise in conducting participatory activities and experience in designing multi-benefit projects.

Establish partnerships with CBOs that demonstrate a history of community organizing, ongoing membership activities, leadership development, and a staff/volunteer base of local residents who bring experience with:

- Door-to-door residential and business outreach;
- Facilitating discussions between administrators, technical experts, and community members;
- Conducting focus groups; and
- Connecting services and incentives to important needs of the community.

Abbreviations

AB	Assembly Bill	HVIP	Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project
ACCE	Alliance of Californians for Community Empowerment	IBEW	International Brotherhood of Electrical Workers
ADA	Americans with Disabilities Act	KIWA	Korean Immigrant Workforce Alliance
AEA	Association for Energy Affordability	KYCC	Korean Youth Community Center
AHSC	Affordable Housing and Sustainable Communities	LA DOT	Los Angeles Department of Transportation
AIR	Association of Irrigated Residents	LAANE	Los Angeles
ARB	California Air Resources Board	LACC	Los Angeles Conservation Corps
AT	Active Transportation	LADWP	Los Angeles Alliance for a New Economy
ATFD	Advanced Technology Freight Demonstrations	LBCAP	Long Beach Community Action Partnership
AVTA	Antelope Valley Transit Authority	LCT	Low Carbon Transportation
BEV	Battery Electric Vehicle	LCTOP	Low Carbon Transit Operations Program
BRT	Bus Rapid Transit	LI	Low-Income
CA7	Community Alternative 7	LIHEAP	Low Income Home Energy Assistance
CAL FIRE	California Department of Forestry and Fire Protection	LIWP	Low Income Weatherization Program
CALSTA	California State Transportation Agency	LMF	Large Multi-Family
Caltrans	California Department of Transportation	LOSSAN	Los Angeles–San Diego–San Luis Obispo Rail Corridor
CalIEPA	California Environmental Protection Agency	METRO	Los Angeles County Metropolitan Transportation Authority
CARE	Climate Adaptation and Resiliency Enhancement	MOU	Memorandum of Understanding
CBA	Community Benefits Agreements	MSF	Multi-Source Facility
CBE	Communities for a Better Environment	NEV	Neighborhood Electric Vehicle
CBO	Community-Based Organization	NTS	Norwalk Transportation System
CCEC	California Climate Equity Coalition	NZEV	Near-Zero-Emission Vehicle
CCI	California Climate Investment	OCTA	Antelope Valley Transit Authority
CEJA	California Environmental Justice Alliance	OEM	Original Equipment Manufacturers
CLT	Community Land Trust	PACE	Pacific Asian Consortium in Employment
CSD	California Department of Community Services and Development	PB	Pacoima Beautiful
CDBG	Community Development Block Grants	PHEV	Plug-In Hybrid Electric Vehicle
CEHAJ	Coalition for Environmental Health and Justice	PICO	People Improving Communities through Organizing
CEQA	California Environmental Quality Act	PV	Photo-Voltaic
CES	CalEnviroScreen	RCG	Rolland Curtis Gardens
CFASE	Communities for a Safe Environment	RCP	Redeemer Community Partnership
CRA/LA	Los Angeles City Community Redevelopment Agency	SAJE	Strategic Actions for a Just Economy
CSE	Center for Sustainable Energy	SB	Senate Bill
CUGU	Clean Up Green Up	SCAQMD	Southern California Air Quality Management District
CVRP	Clean Vehicle Rebate Program	SCOPE	Strategic Concepts in Organizing and Policy Education
DAC	Disadvantaged Community	SCS	Sustainable Community Strategy
EFMP	Enhanced Fleet Modernization Program	SGC	Strategic Growth Council
EE/RE	Energy Efficiency/Renewable Energy	SMI	State Median Income
EJ	Environmental Justice	STAND-LA	Stand Together Against Neighborhood Drilling
EJAC	Environmental Justice Advisory Committee	SUMC	Shared Use Mobility Cent
ELACC	East Los Angeles Community Corporation	SWOT	Strength, Weakness, Opportunity, Threat Analysis
ELI	Extremely Low-Income	TOD	Transit-Oriented Development
EPA	Environmental Protection Agency	T.R.U.S.T.	Tenemos que Reclamar y Unidos Salvar la Tierra-South L.A.
ESAP	Energy Saving Assistance Program	TCC	Transformative Climate Communities
EV	Electric Vehicle	TIRCP	Transit and Intercity Rail Capital Program
EYCEJ	East Yard Communities for Environmental Justice	UCLA	University of California, Los Angeles
FCEV	Fuel Cell Electric Vehicle	UCF	Urban and Community Forestry
FPL	Federal Poverty Level	UPCT	Utility Pre-Craft Trainee
FY	Fiscal Year	USC	University of Southern California
GGRF	Greenhouse Gas Reduction Fund	USGBC	US Green Building Council
GHG	Greenhouse Gas	UV	Union de Vecinos
GTGS	Green Trees for the Golden State	VLI	Very Low-Income
GTrans	Gardena Transportation Service	ZEM	Zero-Emission Motorcycle
GVWR	Gross Vehicle Weight Ratio	ZEV	Zero-Emission Vehicle
HCIDLA	Los Angeles Housing and Community Investment Department		
HUD	US Department of Housing and Urban Development		
HVAC	Heating, Ventilation and Air Conditioning		

Appendices: Los Angeles County California Climate Investment Narratives

Appendix A: Low-Income Weatherization Program (LIWP)

Solar and Weatherization Services in DACs

We spoke with contracted service providers in all three LIWP subprograms: Pacific Asian Consortium in Employment (PACE), an L.A. County service provider for the Single-Family and Small Multi-Family (SF/SMF) Weatherization Program; GRID Alternatives, the statewide administrator of the SF/SMF Solar Program; and the Association for Energy Affordability (AEA), which is in charge of the Large Multi-Family (LMF) Weatherization and Solar Program. LMF was launched much later than the other LIWP subprograms and has no implemented projects to date. As of the writing of this report, AEA has determined only four multi-family sites for future retrofits, with none in L.A. County

Equity Analysis

Co-Benefit Significance

Co-benefit priorities discussed by advocate groups include job-related benefits; lower utility costs; resilience against grid outages; improved health and safety from reduced heat-related illnesses, home improvements, and improved air quality. More efficient heating and cooling does not only provide economic supports for low-income households, but can also significantly reduce heat-related illnesses, especially in the Northeast San Fernando Valley where extreme heat is more pronounced than most other areas of L.A. County.

The **job-related component** of LIWP is a particular focus because of the potential for growth in the energy efficiency and renewable energy's (EE/RE) sector. Priorities include setting a wage floor; providing worker benefits such as health care and sick pay; clear career pathways; paid training or apprenticeships; first source hire for those with barriers to employment; and standardized tracking and reporting of individual jobs. The California Department of Community Services and Development (CSD), while requiring a workforce development component and supporting many of these goals in their guidelines, ultimately leaves the hiring decisions to the service providers themselves without any mandate for disadvantaged worker hiring or paid employment.

We obtained some information from each service provider about their workforce development programs. GRID Alternatives partners with official job training programs to provide field experience and classroom training; it can also sub-contract to trainees. However, GRID also uses a very informal volunteer model where interested people may show up to work on a roof for one day, with no prior experience and no commitment to return on subsequent days. GRID was not able to provide specific information of what percentage of their workforce is made up of such philanthropic volunteers.

PACE obtains referrals from its Workforce Center to fill positions for its weatherization services, but more funding is needed to promote the training aspect of the center to ensure that workers have the right skills. Also, like other service providers, PACE is restricted by the common assumption that there is a limited budget for workforce development because of the need to maintain a primary focus on direct GHG reductions.

CSD has instituted a job reporting requirement. Details on what will be reported include the number of hours worked, training hours, whether employees are disadvantaged community residents, whether employees face other barriers to employment, and the amount of LIWP funding used for job training and employment. However, because the reporting of data occurs in aggregate (as opposed to individual) jobs, it is unclear whether labor advocates will be able to assess issues of job quality, such as volunteer versus paid work and indications of trainees obtaining employment after the programs end. Finally, the workforce training requirements for the LMF program have not been finalized, but minimum hour baselines to train individual workers have been proposed to ensure adequate skillset development.

In addition to these co-benefit concerns, many advocates would like to see the qualifying types of EE/RE improvements expanded, with specific examples including energy storage, micro-grids, aggregated community projects for renters (community solar), and cool roofs. Micro-grids can increase community control over energy and increase resilience against traditional grid outages; cool roofs can double as a structural improvement to a home and a GHG-reduction method and can increase the efficiency of solar panels.³² CSD has taken positive steps to expand potential services in their LMF programs by explicitly including cool roofs in their guidelines and creating an “other” category to make unlisted upgrades eligible, provided they achieve quantifiable GHG reductions.

Strategies to Improve Community Engagement

Community uptake, or the degree to which low-income households are aware of and able to participate in a given program, is a primary consideration for LIWP. These issues revolve around effective outreach strategies in low-income communities; streamlined application processes and determination of eligibility; readiness of residential structures to receive improvements; and assured benefits for renters.

Employ Effective Outreach

First, effective outreach is a key to reaching potential beneficiaries. Best practices identified by advocates include partnering with local community-based organizations (CBOs), providing language translation, and developing a media strategy. According to service providers, many community-rooted outreach practices have been identified and utilized. For the solar PV program, building on outreach from existing single-family solar programs was helpful as well as creating partnerships with other organizations doing outreach to establish trust with the community. Word of mouth is also important, particularly the practice of identifying past clients or community advocates who can inform others about the program.

For the weatherization program, in-language marketing and education, outreach through community events and CBOs, appearing in media targeting potential beneficiaries, and non-traditional approaches (such as outreach to youth through comic/coloring books) were identified as effective techniques. Due to the constrained timeline of the LMF program, AEA and its sub-contractors took a more targeted approach through their networks, along with some mass mailings, but would have taken a different approach with a longer timeline.

Other barriers for the weatherization program for which increased outreach or education may help include: a lack of interest from potential applicants; the belief that improvements will disrupt the household; concern that the program is unaffordable; the lack of understanding of how upfront costs compare to long-term savings; and the notion that energy efficiency programs are less important than other home improvements and technology. This type of information may help potential recipients manage expectations of what the program will provide.

Streamline the Application Process

A streamlined application process is a second priority to increase program uptake. Such modifications would include a single application portal for direct-to-consumer programs and a centralized information database to limit the number of times residents are contacted. Determining eligibility could also be simplified by qualifying entire neighborhoods instead of individuals.

LIWP has made some steps towards more integration. For instance, the LMF program combines both energy efficiency improvements and solar PV provision into one program. However, a quick look at the maps on the preceding pages shows very little overlap between these two separated services. According to GRID Alternatives, the solar PV program could utilize a more integrated application and standardized income requirements for the next RFP round.³³

Increase Readiness for Improvements

Building conditions and potential out-of-pocket costs are also significant barriers to accessing LIWP. Roofs and electrical systems must be in a good enough condition to receive improvements, particularly for solar PV. Actions such as tree trimming may also be required. LIWP funds do not cover these types of expenses and potential program beneficiaries may not have money to cover these upgrades. Some advocates have recommended adding a low-interest loan component to the program to help finance deferred maintenance. These loans, often too small for larger banks to effectively provide, are usually better served by community development financial institutions (CDFIs) with microloan experience and direct connections to social networks in the communities they serve. Additionally, if a building has any illegal additions and a LIWP improvement requires the pulling of a permit, the improvement cannot be completed. The SF/SMF guidelines indicate that the Low-Income Heat and Energy Assistance Program (LIHEAP) funds can be used for improvements to meet required health and safety standards and one service provider mentioned offering assistance to participants to find outside funding for maintenance work. The LMF guidelines indicate that funding from the property owner may need to be used to pay for these costs; that program also requires a good-faith deposit up front. The full effects of the LMF requirements will not be known until project implementation is further underway.

Eligibility requirements also cut out key populations who could benefit from this type of program. First, small businesses and other commercial properties are not eligible to receive improvements. Second, for residences, information such as a social security number is required to apply for LIWP, which excludes key populations who would benefit from LIWP. Finding ways to expand the program and include these groups would boost program uptake.

Ensure Benefits for Renters

Finally, tenants may need specialized efforts to ensure that they are able to access LIWP. They can face barriers specific to renting, including absentee landlords that are hard to reach and only interested in doing the bare minimum for residents. One reason for this is a potential split incentive: If the tenants pay for utilities, the landlord may be less inclined to go through weatherization and renewable energy improvements. In any case, efforts must be made to ensure that landlords do not raise rents once improvements have been made; such increases would negate a possible economic co-benefit of the program for tenants who pay for utilities (increased discretionary income) and could potentially lead to decreased affordability and risk of displacement if these rent increases are not offset by energy cost savings. Advocates have recommended targeting rent-controlled apartments and engaging in long-term planning to mitigate displacement.

Other Recommendations

The L.A. County service providers with whom we spoke provided additional insights on program delivery and service provision aside from information related to equity priorities. Certain barriers to providing services included the need to coordinate between the SF/SMF Solar and Weatherization Programs. Restrictions also limited uptake by populations that could greatly benefit from LIWP such as low-income households outside of disadvantaged communities.³⁴ Additionally, LIWP is often inflexible because of restrictions placed on the federally funded LIHEAP program, which CSD leverages to include additional health and safety measures during the provision of LIWP services. According to advocates, this inflexibility may be self-imposed by CSD because there is no need to apply federal restrictions to an entire program when the usage of federal funds is clearly separated from other funding sources.

Appendix B: Clean Vehicle Rebate Project (CVRP) and Enhanced Fleet Modernization Project (EFMP)

Equity Analysis

Community advocacy focuses on two main issues with CVRP and EFMP: Making the programs financially feasible for low-income consumers and maximizing the number of disadvantaged community residents who receive benefits. Because of the differences between the two programs, the recommendations for addressing these issues differ. CVRP is a first-come first-served program for all Californians to purchase or lease new clean vehicles. EFMP Plus-Up is a combination of a statewide voucher for scrapping fossil-fuel vehicles (“Base” EFMP) with higher subsidies if that vehicle is replaced with an advanced technology vehicle less than 8 years old (EFMP Plus-Up).³⁵ For purposes of this report we will refer to this combination as EFMP.

Co-Benefit Significance

The co-benefits of CVRP and EFMP include reduced fuel costs, improved public health due to the reduction of criteria air pollutants, more reliable transportation, and—due to a transit and rideshare voucher option offered by EFMP when a vehicle is scrapped with no replacement—increased transit ridership. What becomes the more challenging issue, however, is how to maximize these benefits in disadvantaged communities (DACs). Providing the necessary financial incentives to make purchasing clean vehicles possible is, of course, the primary hurdle. Other concerns include the provision of charging infrastructure and how effectively more isolated, low-income markets are penetrated. These issues of equity have significant implications for GHG reduction since low-income consumers, in general, drive older—and thus more high-polluting—vehicles than those with greater means.³⁶

Aside from increased funding for light-duty clean vehicle programs (which has actually occurred in recent legislative appropriations), perhaps the greatest concern of advocates was expressed in the language of the Charge Ahead California Initiative (SB 1275, de León, 2014), which requires ARB to consider mechanisms for both prequalification and point-of-sale rebates for low-income households applying for the CVRP program. Unlike more affluent households, the burden of financing the purchase of a new clean vehicle is often too much to bear. This is not so much an issue with the EFMP program due to vouchers granted directly to dealers and the lower cost of many EFMP eligible vehicles which (unlike CVRP) may include conventional hybrids and vehicles up to 8 years old (Table B-1).

Another major point of contention was how ARB established DAC benefits. Obviously a car purchased by someone living in a DAC constitutes a benefit to that community. Less convincing is how a car purchased in a zip code that contains a DAC Census tract would constitute a “benefit to but not within” that community. Any improvement in air quality from a car purchased outside a DAC is not as strong and direct a benefit as improved air quality and improved mobility from a car purchased within the community.

The CVRP map (page 24) shows a pattern that may support this skepticism, as higher concentrations of rebate redemptions are seen in many affluent areas, such as the Hollywood Hills and Palos Verdes. Rebates redeemed in these tracts were four times greater than those received within DAC tracts. The EFMP map paints a slightly different picture. While one may still be skeptical of the benefits created by DAC-adjacent purchases, the number of rebates benefiting but not within DACs is under 15% of the total program benefit. It should be noted,

Table 3. Combinable Clean Vehicle Subsidies through EFMP, EFMP Plus-Up, and CVRP in the South Coast and San Joaquin Valley Air Districts, as of November 1, 2016*

Income Eligibility % of Federal Poverty Level (FPL)**	Program	Replacement Options					Alternative Transportation Mobility Options: Public Transit or Rideshare
		2008 or Newer Conventional Hybrids 20+ MPG	2008 or Newer Conventional Hybrids 35+ MPG	New Plug-In Hybrid Electric Vehicles (PHEVs)	New Battery Electric Vehicles (BEVs)***	New Fuel Cell Electric Vehicles (FCEVs)	
Low Income <225% FPL	EFMP	\$4,000	\$4,500	\$4,500	\$4,500	\$4,500	\$4,500 Face Value
	EFMP Plus-up	\$2,500	\$2,500	\$5,000	\$5,000	\$5,000	Not Available
	CVRP	Not Available	Not Available	\$3,500	\$4,500	\$7,000	Not Available
	Total	\$6,500	\$7,000	\$13,000	\$14,000	\$16,500	\$4,500
Moderate Income <300% FPL	EFMP	Not Available	\$3,500	\$3,500	\$3,500	\$3,500	\$3,500 Face Value
	EFMP Plus-up	Not Available	\$1,500	\$4,000	\$4,000	\$4,000	Not Available
	CVRP	Not Available	Not Available	\$3,500	\$4,500	\$7,000	Not Available
	Total	Not Available	\$5,000	\$11,000	\$12,000	\$14,500	\$3,500
Above Moderate Income <400% FPL	EFMP	Not Available	Not Available	\$2,500	\$2,500	\$2,500	\$2,500 Face Value
	EFMP Plus-up	Not Available	Not Available	\$3,000	\$3,000	\$3,000	Not Available
	CVRP	Not Available	Not Available	\$1,500	\$2,500	\$5,000	Not Available
	Total	Not Available	Not Available	\$7,000	\$8,000	\$10,500	\$2,500

* ARB expects program to be expanded during FY16/17 to the Bay Area and Sacramento Metro air districts.

**2016 Federal Poverty Levels – Individual: \$11,880; Family of 2: \$16,020; Family of 3: \$20,160; Family of 4: \$24,300; Family of 5: \$28,440

***For new Battery Electric Vehicles an additional \$2,000 is available through EFMP for a home charging unit.

however, that AB 1550 (Gomez, 2016) now defines DAC benefits as only those created within a qualifying tract, which should greatly mitigate, if not entirely remove, these concerns.

Both maps also show large white areas that signify no investments in DACs, and even more light green areas where five or fewer rebates were redeemed. In fact, with CVRP, 34% of DACs had no rebates redeemed, 80% had fewer than four, and only 2% had over 10. In all tracts not defined as DACs, only 6% received no rebate, while 37% received 11 or more. Given the density in DACs, we also do not think it is a question of population that affected the number of rebates. This confirms the difficulties of penetrating more isolated markets, and areas that often have language barriers and lack access to information about available programs. The pattern of DAC investment across both maps clearly shows a denser peripheral ring around the largest concentration of DACs in the center of the County, indicating a greater uptake in areas that are less polluted and socioeconomically burdened.

Job creation has not been a priority issue with CVRP and EFMP. Benefits exist mostly in the development and manufacturing of advanced technology vehicles. However, one potential jobs co-benefit related directly to the provision of these rebates is the need for community outreach to maximize program uptake in DACs.

Guideline Improvements

Many steps have been taken to address greater use of the CVRP and EFMP programs in DACs. AB 1275 sets targets of an additional one million zero-emission vehicles (ZEV) or near-zero-emission vehicles (NZEV) to be purchased in California by 2023 and prioritizes increasing those purchases by DAC residents. Many of the changes made by ARB to the CVRP program, and their creation of EFMP and other light duty DAC programs, including separate financing and EV carsharing pilots, come directly from directives of SB 1275.³⁷

Beginning in 2016, ARB has implemented measures incentivizing low-income uptake of CVRP (Table B-2), including income caps limiting rebate eligibility only to those under a certain income and higher rebates for households earning under 300% of the federal poverty level (FPL). Also, ARB is planning a Spring 2017 implementation of a CVRP prequalification mechanism for low-income households, the specifics of which will be determined by the new CVRP provider (yet to be determined), whose contract will begin in 2017.

However, considering that CVRP is under consistent pressure to receive additional funding to match the demand for the rebates it provides, perhaps more can be done to prioritize the issuance of rebates to low-income households where the need for subsidy is greatest. At the very least, all funding for community outreach should be conducted only within DACs, as the program is widely known and utilized elsewhere yet vastly underutilized in DACs. As long as the demand for CVRP continues to exceed available funding, further lowering the income cap would not reduce the number of ZEVs or NZEVs purchased, as at least some affluent households would still purchase clean vehicles without the rebate.

Table B-2 CVRP Low-Income Incentives

Tiered Rebates			
	2014	Apr-16	Sep-16
FCEV	\$5,000	\$5,000	\$5,000
FCEV-Under 300% FPL*	\$5,000	\$6,500	\$7,000
BEV	\$2,500	\$2,500	\$2,500
BEV-Under 300% FPL	\$2,500	\$4,000	\$4,500
PHEV	\$1,500	\$1,500	\$1,500
PHEV-Under 300% FPL	\$1,500	\$3,000	\$3,500
Income Caps			
	2014	Apr-16	Sep-16
Single Filers	NONE	\$250,000	\$150,000
Head of Household Filers	NONE	\$340,000	\$204,000
Joint Filers	NONE	\$500,000	\$300,000

*2016 Federal Poverty Levels – Individual: \$11,880; Family of 2: \$16,020; Family of 3: \$20,160;
Family of 4: \$24,300; Family of 5: \$28,440

Also, although ARB is currently considering point-of-sale rebates, it is concerned that without continual funding it would be hard to ensure such a mechanism will work effectively because of the difficulty of notifying dealers and the public when funding is running low. ARB staff also suggest that if implemented, a point-of-sale rebate would need to be made available for all eligible applicants, not only those under a certain income, because of the complexity it would add to the program and the increase in dealer responsibilities that would result. However, this would likely further imbalance the redemption of rebates to more affluent households who already have greater access to information.

Strategies to Improve Community Engagement

The networks of grassroots community-based organizations (CBOs) can play a pivotal role increasing program awareness, providing language-appropriate information, educating people on available technologies and how they might benefit, helping low-income households prequalify, and navigating CVRP and EFMP and how their benefits may be combined (Table 3) if purchasing vehicles eligible in both programs. These types of awareness campaigns involve door-to-door activity, participation in local events, community meetings, application fairs, and other time-intensive efforts to succeed.

Engage and Compensate Community-Based Organizations

In Los Angeles County, little to no effort has been made to engage communities through grassroots intermediaries. After speaking with representatives of administrators of both programs—for CVRP, the Center for Sustainable Energy (CSE); for EFMP, the South Coast Air Quality Management District (AQMD)—we were able to establish that only one CBO, Communities for a Better Environment (CBE), was contacted for outreach assistance. In spite of the value CBE provided to connect the providers to low-income markets, due to limited outreach budgets CBE was not compensated for time spent partnering on community meetings. Working with a compensated CBO could provide greater access to these hard-to-reach markets.

Develop Coordinated Outreach Programs

Currently CVRP, EFMP, and the financing and EV carshare pilots undertake separate community outreach programs. A more coordinated approach would seem advisable to better overcome the persistent barriers to DAC uptake of light-duty clean vehicle programs. This will be even more important as the financing assistance in DACs goes statewide with a goal of increasing the affordability of EV purchases by low-income households. One outreach program, overseen either by ARB directly or by the administrator of the CVRP program, would be able to coordinate these complementary programs to more fully assess eligibility and provide deeper benefits where possible. ARB has indicated the need to improve outreach efforts both with their 2015 hiring of a DAC liaison and by changing the RFP for the renewing CVRP contract, stating that up to 50% of program administrative costs may be allocated for outreach.

Appendix C: Affordable Housing and Sustainable Communities (AHSC)

Equity Analysis

Advocates focus on three primary issues: co-benefits, forced displacement, and community engagement. Concerns about the quality and quantity of co-benefits span a wide range of issues, including: improved access to economic opportunity; local connectivity; adequate provisions of walking, biking, and greening elements; addressing existing environmental hazards; deep affordability of units; increased mobility; and job creation.

Co-Benefit Significance

The AHSC potential for co-benefits is very large, perhaps the most of any other CCI program. The provision of affordable housing in what are often gentrifying areas; increased access to transit; the opportunities for commercial/residential mixed-use development; and on-site programming that may be tailored to residents' needs all add up to incredible gains for residents if done well. Valuable entry-level positions in the construction industry may provide sought-after skillsets through training and apprenticeships. Although construction-related jobs are usually only for the length of project development, the experience gained may lead to well-paid, permanent employment. Additionally, AHSC incorporates optional elements of bicycle and pedestrian amenities, green infrastructure, and transit stop and station upgrades. Because of how these investments may provide healthy lifestyle, resource conservation, neighborhood beautification, and mobility benefits they offer the greatest ability to provide multiple, crosscutting strategies of any CCI program (prior to the new Transformative Climate Communities program, which is expected to issue its first awards in 2017).

The first funding guidelines of the AHSC program, which have since been revised, disincentivized co-benefits by determining 55 out of 100 points in each proposal by a ratio of GHG reduction to dollars requested. A maximum of 6.5 points could be awarded if three co-benefits were provided. Any proposal that provided more than three co-benefits or included costly co-benefits that did not directly reduce GHGs, such as job creation or soil remediation, thus made a project less competitive.

Thanks to online access of all applications, we were able to take a deeper look at AHSC applications than some other programs. SGC summarized three qualifying co-benefits for each of the 10 L.A. County projects (Table C-1). It is not clear if some of these qualified for a portion of the 6.5 possible points or if all received a maximum allocation. However, comparing proposals, we identified significant differences in both quantity and quality of co-benefits claimed. Some projects' claims were based on the location's proximity to features such as green space, active transportation, and jobs, while others cited the creation of jobs and infrastructure. Some went little further than listing mandatory features for AHSC eligibility, such as improved access to transit and the provision of affordable housing, while others included features like: free and discounted Metro passes for each household, dedicated car-share parking spaces, community centers and children's play areas, sustainable energy and water improvements, access to specialized services or programming for residents, and installation of improved air filters.³⁸

Regarding job creation, there were also a wide variety of benefits claimed. All projects mentioned improved access to jobs either through nearby opportunities for tenants or improved transit connectivity. Most, but not all, also mentioned the creation of temporary jobs during construction. Most of these did not specify a specific number of jobs, while Crenshaw Villas

Table C-1. AHSC Project Co-Benefits in Los Angeles County, FY15/16

Project Name	Co-Benefit #1	Co-Benefit #2	Co-Benefit #3
1st and Soto TOD Apartments, Phase 2	Reduce health harms	Improve social relationships	Create jobs
127th Street Apartments	Reduce housing costs	Reduce overcrowding	Provide access to parks
Anchor Place	Reduce housing costs	Increase walk/bike access	Reduce transportation costs
Crenshaw Villas	Reduce housing costs	Increase walk/bike access	Reduce energy building use
El Segundo Family Apartments	Reduce housing costs	Reduce overcrowding	Provide access to parks
Jordan Downs, Phase 1	Reduce obesity	Increase access to jobs	Improve air quality
MacArthur Park Apartments Phase B	Reduce housing costs	Reduce transportation costs	Improve access to transit
Mosaic Gardens at Westlake	Reduce housing costs	Reduce air pollution	Create jobs
Rolland Curtis	Reduce housing costs	Bring housing closer to jobs	Reduce air pollution
Sylmar Court Apartments	Reduce housing costs	Reduce overcrowding	Provide access to parks

Source: <http://www.hcd.ca.gov/financial-assistance/affordable-housing-and-sustainable-communities/>

mentioned “hundreds.” The East Los Angeles Community Corporation was the only applicant to project priority hiring for workers facing barriers to employment—an estimated 30% of total jobs—for the 1st and Soto development. Meta Housing, which received three awards in L.A. County, calculated full-time construction jobs according to statistics from the National Association of Home Builders, estimating 93 for its 127th St. Apartments project, 82 for El Segundo Family Apartments, and 111 for Sylmar Court—but made no mention of targeted hire or disadvantaged community benefits. Others mentioned resident services coordinators, on-going maintenance, and property management as jobs to be created, with Crenshaw Villas stating an intent to purchase materials from local suppliers where possible.

The Strategic Growth Council (SGC) has responded in many ways to prioritize co-benefit creation in their 2015/16 guidelines, which were adopted in December 2016, most importantly by lowering GHG reduction points to 30 with only half of them subjected to a GHG-to-dollar ratio. Other priorities such as local connectivity and public health benefits were addressed by increasing points related to active transportation related from 8.5 to 16³⁹ and awarding a potential 10 points to a new water, energy, and greening category. Additionally, the only co-benefits that will be considered for scoring criteria are those that go beyond the minimum program requirements (such as the creation of affordable housing) and provide additional elements (e.g., local hiring requirements, enhanced green space, or active transportation) to address community needs.

Table C-2. Level of Affordability for AHSC Project in Los Angeles County, FY15/16

Project Name	Affordable Units	# Extremely Low Income (ELI) Units	% ELI	#Very Low Income (VLI) Units	% VLI	#Low Income (LI) Units	% LI	Senior	Supportive	Transitional	Veteran
1st and Soto TOD Apartments, Phase 2	30	4	13%	8	27%	18	60%	0	0	0	0
127th Street Apartments	85	84	99%	0	0%	1	1%	0	84	0	0
Anchor Place	119	79	66%	40	34%	0	0%	0	93	0	75
Crenshaw Villas	50	5	10%	18	36%	26	52%	49	0	0	0
El Segundo Family Apartments	75	37	49%	37	49%	1	1%	0	37	0	20
Jordan Downs, Phase 1	100	43	43%	36	36%	21	21%	0	0	0	0
MacArthur Park Apartments Phase B	82	9	11%	36	44%	37	45%	0	0	0	0
Mosaic Gardens at Westlake	123	50	41%	38	31%	35	28	56	63	0	0
Rolland Curtis East	70	14	20%	35	50%	20	29%	0	0	0	0
Sylmar Court Apartments	101	25	25%	35	35%	41	41%	0	0	25	0
	835	350	42%	283	34%	200	24%	105	277	25	95

Co-benefits now may be awarded up to five points through the community benefits category.⁴⁰ This is a decrease from the 6.5 points in the original guidelines, but consideration should be taken for the additional 17.5 points made available for greening and active transportation features as a separate category. Workforce development strategies are now better defined⁴¹ and may earn points under co-benefits and also earn up to three points under the economic displacement category. Advocates, still concerned this is not enough, suggest further prioritization of workforce development by giving it its own section with designated points, rather than allowing it as an option for scoring criteria that may be fulfilled by other types of benefits.

Economic resilience depends on family income relative to the costs of living. Housing can qualify as “affordable” in the AHSC program if a household earns under 80% of the 2015 state median income (SMI) of \$64,500; however, families threatened most by displacement make far less than \$51,600 (80% of SMI for a family of four). Very low-income households (VLI) make less than 50% of SMI (or \$32,250 for a family of four), and extremely low-income households (ELI) make less than 30% (or \$19,350). Therefore, a key issue to prevent displacement for the most vulnerable populations is the depth of affordability provided by the supplied residential units. Table C-2 shows all Los Angeles County projects and the LI, VLI and ELI units they provide. We see that deeper levels of affordability are being provided extremely well with some projects, but less so with others.

Concern about Displacement

In addition to access to quality jobs and level of affordability with AHSC project, displacement is another primary concern for community advocates—both direct displacement caused by the

removal of affordable rental units and economic displacement caused by an increased cost of living associated with neighborhood improvements. Advocates support many strategies including prioritizing inclusive housing strategies (right of return, tenure, etc.), longer market-rate conversion terms, and local business support strategies.

As part of the AHSC application, applicants described anti-displacement strategies they would employ or explained why no strategies were necessary. Six of the 10 L.A. County projects claimed no displacement of residents or businesses, often due to being built on vacant land or infrastructure; many of the remaining projects discussed physical displacement, citing strategies involving relocation assistance and right of first return for existing tenants. And while very few applicants addressed economic displacement, some did include targeted low-income hiring, local small business incubation, micro-lending, technical assistance, and other economic resilience measures without mentioning their ability to counter economic displacement and despite no prompting in the AHSC guidelines.

The original AHSC guidelines allocated only two out of 100 points for anti-displacement strategies. In the updated AHSC guidelines, four points are awarded to a new “Anti-Displacement and Workforce Training” strategy. One point is available for protecting business displacement and three more for combatting residential displacement or creating workforce development.

Nonetheless, advocates still point to several issues that remain, such as prioritizing projects where inclusive ordinances exist, modifying criteria to target small and diverse-owned businesses, and supplier diversity programs. Another recommendation is to split the Anti-Displacement and Workforce Training strategy into two categories, each awarded four points, to address the significant measures that will be needed to keep low-income communities near transit in the wake of gentrification.

Strategies to Improve Community Engagement

Authentic community engagement is also a very important consideration for AHSC projects. Due to the significant impact that AHSC projects can have on the surrounding community, advocates are not only concerned with the engagement of low-income stakeholders but also that there is community participation and shared decision making during project design and development.

Having community-based organizations (CBOs) engaged in the process can aid community engagement. Some have successfully partnered with nonprofit developers (see Rolland Curtis Gardens inset, page 104). Nonetheless, in the 2014-15 AHSC application, only two points were awarded for community engagement and very relaxed requirements were set for obtaining those points.⁴² However, the 2015-2016 guidelines moved in a positive direction, setting higher expectations of how communities should be engaged, including: providing translation services at meetings, providing letters of recommendation from local stakeholders, and consideration of whether or not community members were involved in decision making or contributed to project design. Still, even though the new guidelines increased the point total from two to three, as with the points allotted for displacement, there remain concerns that projects may be competitive without engaging communities at all.

Project applications described different levels of community outreach with varying levels of details on their efforts. A number reached out to neighborhood councils, as well as more issue-based nonprofits. Community engagement for many of these projects seems based on meetings or conversations with community members to gain input on or approval of a project proposal. Yet, explicit mention of deeper involvement of the community in planning and design was rarely mentioned.

Project Highlight: Rolland Curtis Gardens

Abode Communities' Rolland Curtis East application included significant efforts to combat both physical and economic displacement, and detailed a project that, from its very inception, ensured authentic community engagement and participatory processes as defining characteristics.

The organization behind this inclusionary model is T.R.U.S.T. South LA (T.R.U.S.T.) a grassroots community-led organization dedicated to the preservation of land control for low-income communities. T.R.U.S.T. is a long-time development partner of Abode Communities whose charter demands that decisions related to the property it owns be determined by land stewardship principles that preserve the affordability of units in perpetuity.

The property is held under the principles of a Community Land Trust (CLT), in which the land is owned and community-controlled by T.R.U.S.T. and the improvements leased to Abode Communities. The relationship is governed by a renewable 99-year ground lease that protects the community interest. Because of this, RCG is a community asset protecting against the economic forces that have already displaced numerous low-income households in the rapidly gentrifying area near USC, Exposition Park, and the Expo Rail Line. Long-term affordability is further safeguarded by its Board of Directors, which is majority-controlled by elected Regular Members, all of whom must be local low-income residents or workers.

Great attention was paid to the direct displacement issues caused by building reconstruction. Abode Communities submitted a 40-page relocation plan report assessing resident demographics, replacement housing needs, preferred relocation areas, resources available, and a detailed description of the relocation plan. Another project feature is the development of a lending circle, which provides financial education and credit repair for T.R.U.S.T. members. However, even with all of these safeguards, some RCG residents are struggling to find satisfactory replacement housing in the area because of the unwillingness of many landlords to accept Section 8 housing vouchers. This points to a problem with the provision of affordable housing at a macro level and underlines the need for the proactive measures T.R.U.S.T. employs.

Project History

T.R.U.S.T. began working with RCG tenants in the spring of 2011, when then-owner billionaire Jeff Greene was attempting to displace them in favor of renting to USC students. After winning several victories uncovering improper procedures of eviction and over 300 needed repairs to the property, the owner finally agreed to sell the property to Abode Communities. The sale contained financing that allowed some rehabilitation to improve the existing 48 units on the property, but it was shortly determined that the building would need to be demolished and rebuilt. T.R.U.S.T. then undertook an extensive outreach campaign with the current residents and neighbors within a half-mile around the property through door-to-door canvassing. They reached over 550 households and 18 nearby faith-based, education, and community organizations.

This was followed by a participatory planning process attended by over 90 residents and community stakeholders that involved: popular education for residents on transit-oriented development; comparable site visits; an extensive visioning process; feasibility studies; careful evaluation of a number of different collaborative proposals; creation of site plans; and a community action plan to determine next steps in the development process, how to respond to potential obstacles, and an expected timeline of outcomes.

This process resulted in designs for a mixed-use commercial and residential development. The project nearly triples the number of affordable units to 140, with 114 parking spaces for cars and 154 for bicycles, on-site property management, community rooms, children's areas, walking paths, and common area barbecues. Also planned are 8,000 square feet of commercial space, with 18 parking spaces including two dedicated car-share spaces and 10 bicycle spaces.

Appendix D: Transit and Intercity Rail Capital Program (TIRCP) and Low-Carbon Transit Operations Program (LCTOP)

Equity Analysis

TIRCP and LCTOP are transportation programs that focus on capital projects and operational enhancements. The equity priorities of advocates include: increasing access and mobility of disadvantaged communities (DACs); prioritizing areas with low-income households and high ridership; robust funding for active transportation (AT); alternative shared mobility features; and ensuring affordability of transit fares and nearby housing. Additional concerns relate to the processes employed by transit agencies including methods of community engagement and levels of transparency.

Statutory requirements (SB 862, 2014) for LCTOP mandate transit agencies to dedicate 50% of their funding for DACs if their service area contains a qualified Census tract. LCTOP guidelines refer to ARB's interim guidelines to define DAC benefits, but provide no additional information of how those benefits would be determined.

Co-Benefit Significance

Transit projects, in order to ensure **co-benefits** in disadvantaged communities, need to provide increased accessibility to modes of transportation that serve DAC needs. Advocates argue that benefits cannot be determined merely by the proximity of a service, but must consider the connectivity, financial feasibility, and usefulness of the destinations to the targeted population. Priority should therefore be given to investments that focus on equitable outcomes that complement GHG-reduction goals, including: Affordability for low-income riders with fare thresholds or transit passes; a reduced emphasis on rail in favor of bus service expansion; the promotion of AT, vanpool, and shuttle services; prioritizing areas with high ridership by low-income households; and ensuring sufficient funding for transit operations by explicitly linking eligible project types to enhanced and expanded service in DACs.

Eligible project types vary between the two programs. LCTOP reflects advocate priorities in its eligible uses, which include: transit vouchers for free or reduced fares; projects involving low- or zero-emission alternative transit such as vanpool, shuttle, and bikeshare; and projects incorporating AT elements. TIRCP does not include AT as an eligible project type, but does consider it in its secondary evaluation criteria.

Of the five TIRCP applicants in Los Angeles County, four were within a DAC and one qualified for benefiting a DAC. Improved service and transit connectivity for DACs were the most frequent reasons given for determining SB 535 eligibility. Other reasons mentioned included improved connectivity between modes, reduced air pollution, greater mobility, and increased access to clean transportation.

All but one LCTOP project qualified for SB 535 funding; of those that qualified, only one was not located within a DAC. The most frequently cited reason for qualifying for SB 535 designation was improved transit service in or near DACs (cited in three out of the six applications).

In terms of co-benefits regarding TIRCP, our findings indicate that all but one project claimed to meet the primary evaluation requirements aside from GHG reduction: increase

Notes of Methodology for Analysis of TIRCP/LCTOP Projects in Los Angeles County

While we focused on first-round TIRCP and LCTOP projects, both programs released a second set of funded projects during the writing of this report. We were therefore limited in our analysis of this second round, but their descriptions are included in the appendix.

Neither CalSTA nor Caltrans posted their first-round applications online. We reached out to the transit agencies in Los Angeles County who had received funding in the first year of the programs. We requested details on the designation of benefiting or being located within disadvantaged communities, if applicable; co-benefits of the projects (for TIRCP we emphasized primary and secondary evaluation criteria of the program); location details; and implementation status. Of those who responded, some agencies provided a copy of the original application, while others provided responses to our areas of interest.

Of the five transit agencies who received first round TIRCP funding for projects in Los Angeles County, we obtained information from four. For the fifth, we found an initial study on the project that provided some details on project benefits and co-benefits comparable to those set out in the program application.⁴³ Regarding LCTOP, we only received responses from six of twelve transit agencies that received 2014/15 funding.⁴⁴ The analysis of these materials is incorporated into the Equity Analysis discussion.

ridership through expanded and improved rail and transit service, integrate the services of the state's various rail and transit operators, and improve safety. All of the projects indicated that they would facilitate a connection to high-speed rail.

Sustainable Community Strategy (SCS) priorities that are part of TIRCP's secondary evaluation criteria and that relate considerably to equity concerns (they are now referred to as "co-benefits" in the new guidelines) were cited more than once among the applications. These include:

- Reduced auto vehicle miles traveled through growth in transit and intercity rail ridership;
- Expanding existing rail and public transit systems;
- Improving public health;
- Implementing clean vehicle technology;
- Promoting AT by increasing the proportion of trips accomplished by biking and walking or increasing the safety and mobility of bicyclists and pedestrians; and
- Promoting housing development and employment near transit development.

The most cited co-benefits in LCTOP projects were increased system reliability and coordination with educational institutions (in three out of six of the applications). Improved safety, improved public health, and promotion of integration with other modes of transit were cited twice among applications.

Two TIRCP grant recipients indicated that roughly a third of their regional rail or commuter service riders had lower incomes (based on varying measures), but it may be that even more lower income riders would use these services with increased affordability. Additionally, as with the Affordable Housing and Sustainable Communities program, some of the claimed co-benefits seemed to result from meeting basic program requirements or lacked robust reasoning for why a benefit would result. For example, some applicants claimed benefits such as the promotion of housing and jobs or AT simply due to improved transit service. If these issues were not addressed in the full application materials (which were not available), more details may be needed in guidelines to incentivize effective provision of targeted co-benefits.

Guideline Updates

CalSTA has added stronger language to determine disadvantaged community benefits in TIRCP's updated guidelines. Applicants must document the manner in which projects provide this benefit, including the nature of its use by and relevance to DAC members. The new guidelines state that "consideration should be given to identifying the most disadvantaged communities in an applicant's service area and identifying benefits specific to those communities."⁴⁵ For its Additionally, CalSTA has added an explicit focus on underserved communities in TIRCP secondary evaluation criterion with the intention of achieving greater geographic equity.⁴⁶

Between the two programs, many co-benefits now identified would align with advocate interests if geared towards low-income communities and concerns of displacement. Examples include: increased transit ridership, housing development, attractiveness for jobs and housing, connectivity between modes and transit systems, clean vehicles, AT, public health, air quality, coordination with educational institutions, and system reliability. Reduced operating and maintenance costs could also indirectly support these goals depending on how agencies utilized savings.

Concerns about Displacement

Anti-displacement protections are also crucial with programs involving larger projects. Advocates have called for physical and economic displacement protections as an eligibility requirement on all TIRCP projects so that projects would be selected from areas with such protections in place. Examples of such protections include: ensuring no net loss in affordable units; the use of Enhanced Infrastructure Financing Districts that assess taxes on property value increases due to transit investments; public land acquisition strategies; development of community land trusts; business disruption mitigations; and local and/or diversity purchasing programs.

TIRCP guidelines have included physical displacement mitigation from the start for projects benefiting or located within DACs, yet anti-displacement is not explicitly mentioned in evaluation requirements for LCTOP projects.

Strategies to Strengthen Community Engagement

Include Communities in Decision-making Processes

Authentic community engagement is an important consideration for achieving benefits and avoiding displacement. In line with advocate recommendations, TIRCP has strengthened guideline language stating project applicants should be “explicit on deliberate steps” taken to achieve a meaningful level of participation from disadvantaged communities in planning and designing projects intended to address community-identified priorities and needs. This participation upfront in the process is preferable to input or approval after planning and design has been largely completed. TIRCP has taken other positive steps in requiring consultation with host communities when displacement may occur due to demolition or rehabilitation of existing units (although, as mentioned before, this requirement could be expanded more clearly to apply to all projects). TIRCP has also added community members as stakeholders from whom applicants should get letters of support.

On the other hand, LCTOP encourages working with affected communities and disadvantaged communities, but no specific baseline requirements are mentioned in eligibility criteria (which would be in addition to any engagement required aside from program guidelines).

Increase Transparency

Transparency allows the community to engage with the program process. Advocates have recommended a scoring system and explanations of project selection to clarify how sometimes vague benefits are evaluated. Another priority is for publicly accessible displacement reports for five years that include units lost and relocation and replacement documentation. Both TIRCP and LCTOP have made changes that respond to these issues. TIRCP has included a rating system for different project evaluation criteria; CalSTA now includes how it rated each of these items for all the projects that received funding. Regarding LCTOP, CalTrans has started posting submitted applications online and also included in its latest guidelines a note on “Phase 2” reporting, which involves follow-up reports submitted by CalTrans every two years after project completion for four years. However, it appears to focus only on demonstrated GHG reductions.

The need for further transparency became particularly evident during a quick preliminary review of the 2016/17 TIRCP awards issued at the close of the writing of this report. We found that CalSTA designated 14 of 15 projects for SB 535 funding. The lowest score received across the applications was a “medium-low” disadvantaged community benefit, which three applicants received (the San Francisco Municipal Transportation Agency, San Joaquin Regional Rail Commission, and Capitol Corridor Joint Powers Authority). It is unclear what differed between the three evaluations to determine two of the three eligible.⁴⁷

Appendix E: Urban and Community Forestry (UCF)

UCF Projects in Los Angeles County

Supplementary information for this section was obtained through the original applications for each CAL FIRE grant, additional project summaries from CAL FIRE and the subgrants California ReLeaf awarded, and direct communication with grantees for 8 out of the 11 projects.

Equity Analysis

Advocacy priorities related to the Urban and Community Forestry (UCF) program include issues typical of project-based programs, such as those related to co-benefits, community engagement, and displacement and site disruption—but also others such as limited capacity of grant recipients to fulfill program requirements, program expansion, and application clarity and program transparency.

Co-Benefit Significance

Advocates have identified a number of co-benefits, or potential co-benefits, of the program, many of which the program guidelines recognized. These include:

- Economic co-benefits: Increased skills and education in communities through local hiring; decreased energy bills due to the cooling effect of trees; and procurement of goods from diverse suppliers and suppliers located in disadvantaged communities.
- Environmental co-benefits: Storm water capture; water conservation; reduced heat island effect; groundwater cleaning and recharge; and reduced air contaminants.
- Social co-benefits: Lower incidences of heat-related illnesses; more active communities; education about trees, environmental stewardship, and healthy communities; possible food production; increased safety, beauty, and community pride; reduced crime, and more connection and sense of belonging.⁴⁸

Some methods to achieve valuable co-benefits were either ineligible or insufficiently prioritized in program guidelines, such as permeable paving, green roofs, community gardens, street furniture, healthy foods, maintenance of or upgrades to existing green space, and green alleys and other means of promoting active transportation along safe routes. Some of these improvements may not directly include tree planting or vegetation, but are highly complementary to vegetation and can still result in GHG reduction. For example, permeable pavement can help clean and recharge local groundwater, aligning with the City of Los Angeles' plans to clean the San Fernando Groundwater Basin aquifer for use.⁴⁹ Relying on local water in turn reduces the need for the energy-intensive transportation of water from elsewhere in the State. Street furniture is also important as it provides social congregation areas that can build community connections and the potential for organizing against the forces of displacement.

Some tree and vegetation investments desired by a community (e.g., fruit trees, green roofs, and community gardens) reduce project competitiveness if they do not achieve deep GHG reductions. This is largely responsible for the lack of innovative green infrastructure CAL FIRE funded in its Green Innovations grant.⁵⁰ During the course of our research we found only one project with either a green roof or a community garden. An insufficient prioritization of co-benefits in relationship to GHG reduction may explain this finding, but we were not able to obtain any information of how CAL FIRE specifically ranks projects to verify it.

Quantifying co-benefits also posed some difficulties. First, although shade-producing trees will lower heat island indexes and, in turn, the need to cool nearby buildings, canopy is not provided when trees are planted, but instead is developed over several years as the trees mature. Second, although the program guidelines identified job creation as a co-benefit

and an eligible project, they do not contain a workforce development mandate as some other CCI program guidelines do (see LIWP).

Many L.A. County funded projects, however, did include local job training and hire, particularly for at-risk youth. But, perhaps most importantly, while we received information about the creation of part-time jobs and youth stipends, we were only informed of the creation of one full-time job, and were unable to acquire any specific data on wages or stipend amounts. Most “workforce development” was represented by youth volunteers. As is the case with many other programs, the tracking and reporting of employment data is critical to understanding the specific benefits provided and the ability to find ways to close the gap between volunteer and the prevailing wage work mandated on public works projects.⁵¹

Another concern of advocates is the lack of ability to qualify projects in densely developed communities that lack sufficient space for large trees. Indeed, these areas are usually the places most in need of additional tree canopy and greening. Minimum grants of \$150,000 and the lack of recognition of the GHG-reducing potential of green infrastructure do not allow for the flexible type of development needed to create viable projects in dense urban areas. With these limitations, money will most likely flow to places that already have nearby open space sufficient to accommodate additional trees.

Concerns about Displacement

Adding anti-displacement measures to program requirements is another advocate priority, especially in neighborhoods with high proportions of renters. Concerns that the “greening” of a neighborhood will do little more than make a community more attractive to developers and consequently raise property values and push out long-time low-income residents are not uncommon. In addition to workforce development, recommendations to mitigate these forces of displacement include: inclusive community-driven process, projects located at or near affordable housing sites, the inclusion of street furniture, the incorporation of open space, and other design considerations to maximize social activity. But as discussed previously, many of these considerations may not even be eligible for funding—and if they are, may not increase competitiveness.

Other economic concerns include the consideration of local businesses. Similar to the AHSC, TIRCP, and LCTOP programs, economic justice organizations have expressed the need for local and/or diversity purchasing programs that ensure certain percentages of needed materials are purchased from at-risk businesses. Although we expected local businesses to support the greening of commercial corridors, we were told by several grantees that many businesses resist such improvements for fear of trees blocking their signage and maintenance responsibilities.

Strategies to Strengthen Community Engagement

UCF is one of the few programs to which community-based organizations (CBOs) are able to directly apply. It also poses less challenging capacity issues than other programs accessible to CBOs, such as the AHSC program, in which real estate development, liability concerns, and jurisdictional partnerships greatly complicate the ability to lead a project. As such, this program is the most likely avenue for communities or CBOs to exert direct influence or control. Therefore, a major priority for equity advocates is to maximize the involvement of local stakeholders and ensure inclusive practices throughout the development and implementation of projects.

Both UCF grant programs state the importance of public involvement in project implementation. An educational component, as well as active participation from a local entity, is a requirement for eligibility. Guidelines state also that extra consideration can be granted for authentic community involvement above and beyond these requirements, but the extent of that is not disclosed.

The applications we accessed indicate that it was fairly common to engage residents in the implementation process of these projects, especially through volunteer community planting events. Nearly half the projects mention outreach to residents to gain individual consent or maintenance agreements with property owners, and roughly the same number mention some degree of community engagement in the planning and design process—which might include choosing tree species and location decisions. Whether tree plantings are concentrated at a specific site or dispersed throughout an area (such as along a business corridor or residential parkway strips) may also dictate the type of outreach conducted. Participants in two projects with a stronger focus on individual sites mentioned community member engagement in the design process; another more dispersed project employed a “snowball” outreach strategy that relied on residents to engage with other residents, ultimately to better understand any resistance to tree planting and incorporate these concerns into the project strategy.

As mentioned several times in this discussion, there is an issue of transparency with how CAL FIRE weights criteria in the evaluation of projects. Because of this, it is not easy to critique what may or may not be working to maximize co-benefits and community engagement in a specific manner. Yet there likely are missed opportunities for administrators to recognize the GHG-reduction potential of green infrastructure and further prioritize robust community engagement, among other potential improvements.

Finally, because the demand for funds far outpaced UCF appropriations, additional consideration for greater funding is a priority. In September 2016, \$94 million in additional funding was appropriated for urban forestry and greening. This was the first funding in over two years (since the original \$18 million in FY14/15). However, CAL FIRE is only receiving \$14 million to continue their urban forestry programs, while \$80 million will go to the California Natural Resources Agency for a new urban greening program. Whether or not this new program will have similar issues maximizing green infrastructure components remains to be seen.

Endnotes

1. Lara J. Cushing, Madeline Wander, Rachel Morello-Frosch, Manuel Pastor, Allen Zhu, and James Sadd. A Preliminary Environmental Equity Assessment Of California's Cap-and-Trade Program, 9/14/16.
2. 2016 Annual Report to the Legislature on Cap-and-Trade Auction Proceeds. DOF in coordination with ARB; California GGRF Project Map. Available online: <http://arb.ca.gov/cc/capandtrade/auctionproceeds/auctionproceedsmap.htm>
3. Interim Funding Guidelines for disadvantaged community investments. November 3, 2014. ARB. Page 12.
4. Cap-and-Trade Auction Proceeds: Funding Guidelines for Agencies that Administer California Climate Investments. December 21, 2015. Section 1, page 39.
5. Ibid. Section 2, page 6, in footnote.
6. Ibid. Section 2, pages 13-14. Table 2-2 Illustrative Examples of Common Needs of Disadvantaged Communities (as Identified by Community Advocates).
7. Three programs that received funding and created investments in L.A. County were not included in this report: Waste Diversion (CalRecycle), State Water and Energy Efficiency Program (CDFA), and Water and Energy Efficiency Rebates (DWR). Other programs were not included because they did not create investments in L.A. County, such as High-Speed Rail (HSRA), Dairy Digesters (CDFA), Healthy Forests (CAL FIRE), Wetlands and Watershed Restoration (DFW), and EV Financing in DACs Pilot (ARB).
8. The Urban Displacement Project. Mapping Neighborhood Change in Los Angeles County. Accessed online Dec 12, 2016: <http://www.urbandisplacement.org/map/la>
9. Ibid.
10. Gregory L. Newmark; Melissa C. Schramm; The Carsharing-Transit Card: Is It Good for Public Transportation? Transportation Research Board 94th Annual Meeting. 2015.
11. Urban and Regional Policy. 2010; and "Getting More with Less: Managing Residential Parking in Urban Developments with Carsharing and Unbundling. City CarShare and Nelson\Nygaard Consulting Associates. 2011.
12. At the close of the writing of this report, SGC staff released recommendations for 25 projects statewide totaling \$289 million in AHSC 2015-16 awards. Of those recommendations, six are in Los Angeles County (all in the City of LA) totaling \$65 million. These projects include second phases of Rolland Curtis Gardens and Jordan Downs, as well as projects in East Hollywood, Skid Row, Sun Valley, and Westlake. Information is available online at <http://sgc.ca.gov/resource%20files/10112016AHSC1516AppendixA1&2.pdf>
13. Of the three other Urban and Community Forestry sub-programs, five total grants were issued: Four awards were granted under Urban Forestry Management in San Diego, National City, Atwater, and Patterson; and one Urban Wood and Biomass grant was awarded in Sacramento. Woods in the Neighborhood, a program focusing on purchasing and repurposing vacant land and blighted urban properties, issued no awards.
14. FY 2016-17 TIRCP Detailed Project Award Summary. Available online: <http://www.dot.ca.gov/hq/MassTrans/Docs-Pdfs/Cap&Trade/detailed.project.award.summary.pdf>. LCTOP FY15/16 Project List. Available online: <http://dot.ca.gov/hq/MassTrans/Docs-Pdfs/Cap&Trade/lctop.projectlist.1516.pdf> SGC Staff Recommendations for FY 15/16 AHSC Awards. Available Online: <http://sgc.ca.gov/resource%20files/10112016AHSC1516AppendixA1&2.pdf>
15. AB 1550 sets baseline terms for 35% of the GGRF as follows: 25% within the boundaries of, and benefiting individuals living in, disadvantaged communities; 5% to benefit low-income households or located within the boundaries of, and benefiting individuals living in, low-income communities located anywhere in the state; and 5% to benefit low-income households that are outside of, but within a 1/2 mile of, disadvantaged communities, or to projects located within the boundaries of, and benefiting individuals living in, low-income communities that are outside of, but within a 1/2 mile of, disadvantaged communities.
16. Telephone conversation with Lisa MacCumber, Graciela Garcia and Sarah Dastoum of ARB. November 15, 2016.
17. Ibid. Of the \$133 million appropriated to CVRP in September 2016, \$55 million has been paid to waitlisted rebates with \$78 million forwarded to FY16/17. Administrative costs must be under 7% of total budget, 50% of which may be spent on outreach. Our figure is based on 3.5% of \$81 million, a figure that includes the \$3 million allocated to the public fleets program which is jointly administered with CVRP.

18. http://www.foothillgoldline.org/construction_phases/pasadena_to_azusa/
19. Personal communication with Creighton Randall and Rani Narula-Woods of SUMC. 4/27/16.
20. Carol Zabin, Don Vial Center for Employment at UC Berkeley, speaking on a press call for report release: Building Equity, Reducing Emissions: A New Social Contract for California's Climate Transition. September 13, 2016
21. http://www.energy.ca.gov/efficiency/proposition39/citizens_oversight_board/documents/2016-04-04_Citizen_Oversight_Board_California_Clean_Energy_Jobs_Act_2015_Report.pdf
22. Key finding from UCLA researchers for upcoming report with UC Berkeley. Accessed online at: <http://www.urbandisplacement.org/map/la>
23. Definitions for grassroots terminology were determined through field experience and numerous conversations with community organizers.
24. Greg Karras, Combustion Emissions from Refining Lower Quality Oil: What Is the Global Warming Potential? Environmental Science and Technology, vol. 44 no. 24, pp. 9584-9589 (2010).
25. Association of Irrigated Residents v. State Air Resources Bd., 206 Cal. App. 4th 1487, 143 Cal. Rptr. 3d 65 (Ct. App. 2012).
26. California Environmental Justice Alliance. 2015. Green Zones across California: Transforming Toxic Hotspots into Healthy Hoods. Page 2.
27. CEHAJ Members: CBE, EYCEJ, Long Beach Alliance for Children with Asthma. CEHAJ Supporters: Natural Resources Defense Council, Coalition for Clean Air, Legal Aid Foundation of Los Angeles, and Physicians for Social Responsibility-LA.
28. Martha Matsuoka. 2014. Democratizing Planning: How Communities are Raising Their Voices to Transform the I-710 Corridor Project. Occidental College.
29. CEHAJ's DEIR comments regarding the CA7: http://docs.nrdc.org/smartGrowth/files/sma_12100301a.pdf
30. Jordan Scarvo, Suzanne Korosec, Esteban Guerrero, and Bill Pennington. 2016. A Study of Barriers and Solutions to Energy Efficiency, Renewables, and Contracting Opportunities Among Low-Income Customers and Disadvantaged Communities. California Energy Commission. Publication Number: CEC-300-2016-009-SD.
31. Ibid. Page 5.
32. Noah Garrison, Cara Horowitz and Chris Ann Lunghino. 2012. Natural Resources Defense Council. Looking Up: How Green Roofs and Cool Roofs Can Reduce Energy Use, Address Climate Change, and Protect Water Resources in Southern California.
33. Conversation with Dan Dumovich, a GRID program manager.
34. The adoption of AB 1550 which requires 10% of the GGRF to be spent on low-income households and communities not necessarily within disadvantaged community Census tracts would indicate potential for adoption of this proposed program change. See endnote 14 for AB 1550's specific requirements.
35. "Base" EFMP is a statewide vehicle retirement-only program administered by the Bureau of Automotive Repair for ARB. The program issues \$1,000 vouchers (\$1,500 for low-income households) for the scrapping of older polluting vehicles that meet certain eligibility guidelines. Approximately \$30 million is available annually to fund Base EFMP via a \$1 increase in vehicle registration fees. Under the EFMP Plus-Up program, Base EFMP benefits are significantly increased in pilot areas. The GGRF covers all expenses added to the Base EFMP voucher. See the table on Stackable Clean Vehicle Subsidies on page 97 for the specifics granted under the EFMP and EFMP Plus-Up programs. For complete eligibility information for the statewide retirement-only program visit the BAR website at: http://www.smogcheck.ca.gov/Consumer/Consumer_Assistance_Program/index.html
36. DeShazo, J.R. "Improving Incentives for Clean Vehicle Purchases in the United States: Challenges and Opportunities." Review of Environmental Economics and Policy, volume 10, issue 1 (2016): Pp. 149 – 165. doi:10.1093/leep/rev022.
37. SB 1275 – California Health and Safety Code §44258.4.(c)(4)(A) Establish programs that further increase access to and direct benefits for disadvantaged, low-income, and moderate-income communities and consumers from electric transportation, including, but not limited to, any of the following: (i) Financing mechanisms, including, but not limited to, a loan or loan-loss reserve credit enhancement program to increase consumer access to zero-emission and near-zero-emission vehicle financing and leasing options that can help lower expenditures on transportation and prequalification or point-of-sale rebates or other methods to increase participation rates among low- and moderate-income consumers. (ii) Car sharing programs that serve disadvantaged communities and utilize zero-emission and near-zero-emission vehicles. (iii) Deployment of charging infrastructure in multiunit dwellings in disadvantaged communities to remove barriers to zero-emission and near-zero-emission vehicle adoption

by those who do not live in detached homes. This clause does not preclude the Public Utilities Commission from acting within the scope of its jurisdiction. (iv) Additional incentives for zero-emission, near-zero-emission, or high-efficiency replacement vehicles or a mobility option available to participants in the enhanced fleet modernization program, established pursuant to Article 11 (commencing with Section 44125) of Chapter 5. (B) Programs implemented pursuant to this paragraph shall provide adequate outreach to disadvantaged, low-income, and moderate-income communities and consumers, including partnering with community-based organizations.

38. The Clean Up Green Up City of L.A. ordinance (see page 67 in this report) mandates Merv 13 air filters or better. The Jordan Downs application, which was filed before CUGU went into effect states Merv 8 or better.
39. The initial AHSC guidelines, adopted 1/20/15, assigned a potential 5.5 points for safe, accessible, walkable corridors and 3 points for bicycle paths and amenities. The 2015-2016 guidelines assign 10 points for active transportation features and an additional 6 points for a “walkscore” methodology that ranks the effectiveness and impact of pedestrian and bicycle amenities.
40. This is based on 1.66 points for each benefit (e.g. creating jobs, lowered energy bills, and improved access to employment opportunities), up to a maximum of three, under the community benefits category. Other co-benefits in excess of any active transportation, greening, or other benefit awarded elsewhere may also qualify.
41. Strategies listed in the 2014-2015 guidelines include: Project labor agreements with targeted hire commitments; community workforce agreements; and partnerships with established workforce development and job training entities, pre-apprenticeship and registered apprenticeship programs, and local Workforce Investment Boards.
42. Requirements for obtaining the 2 community engagement points in AHSC’s initial guidelines were: mentioning community organizations supporting the project; providing dates, times, locations and accessibility of meetings and any accommodations provided; and describing how public feedback was considered or addressed.
43. We obtained information directly from OCTA, including representatives associated with LOSSAN; AVTA; and Metrolink. Metro did not respond to our requests, but we reference Metro and Caltrans’ Willowbrook/Rosa Parks Station Improvement Project: Initial Study/Documented Categorical Exclusion (May 8, 2015).
44. We obtained LCTOP information from AVTA, Culver City, Long Beach, Metrolink, Norwalk, and Santa Monica.
45. 2016 Transit and Intercity Rail Capital Program Guidelines. California State Transportation Authority. February 4, 2016. Page 10.
46. Ibid. Page 11.
47. FY 2016-17 TIRCP Detailed Project Award Summary. Accessed online 10/26/2016. <http://www.dot.ca.gov/hq/MassTrans/Docs-Pdfs/Cap&Trade/detailed.project.award.summary.pdf>
48. Alvaro S. Sanchez. 2015. California Climate Investments: 10 Case Studies Reducing Poverty and Pollution. The Greenlining Institute.
49. Los Angeles Sustainable City pLAn. https://www.lamayor.org/sites/g/files/wph446/f/landing_pages/files/The%20pLAn.pdf
50. Conversation with John Melvin, CAL FIRE program manager for Urban and Community Forestry. September 9, 2016.
51. CA Educ. Code § 17066. Prevailing wage requirements

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