

Allen Temple Baptist Church • Asian Immigrant Women Advocates • Asian Pacific Environmental Network • Asian and Pacific Islanders California Action Network • Asian Neighborhood Design • Asian Pacific Policy & Planning Council • California Black Chamber of Commerce • California ReLeaf • Central Valley Air Quality Coalition • Chicana/Latina Foundation • Coalition for Clean Air • El Concilio of San Mateo County • Environmental Health Coalition • Fresno Metro Ministry • GRID Alternatives • Latino Coalition for a Healthy California • Nail Salon Women Greening their Jobs and the Environment at CHAA • Pacific Isle Environmental Reserve • People's Community Organization for Reform and Empowerment • Public Advocates • The Greenlining Institute • The Trust for Public Land • Urban Habitat

March 8, 2013

Mary Nichols, Chairman
California Air Resources Board
1001 I Street
Sacramento, CA 95812-2815

RE: Investment Principles and Comments on Draft Concept Paper on Cap-and-Trade Auction Proceeds Investment Plan

Dear Chairman Nichols,

The members of the SB 535 Coalition respectfully submit the following comments on the Administration's February 15, 2013 Draft Concept Paper and public workshops regarding the Cap-and-Trade Auction Proceeds Investment Plan. Representing the co-sponsors and supporters of SB 535 (de León), we are enthusiastic and eager to realize the opportunity for investments that can help provide clean air, clean energy and revitalized communities, as has always been the intent of our efforts. As such, we greatly appreciate both the efforts and willingness of the Administration to engage with our coalition in this process. In general, we find the Draft Concept Paper is a positive first step and we offer suggestions for additional refinements to ensure the Investment Plan fulfills the intent of AB 32 (Pavley/Nunez), AB 1532 (Perez) and SB 535 (de León) to serve disadvantaged communities. Our comments are focused in the following areas:

(1) express support for the CalEnviroScreen as a tool to inform the identification of

disadvantaged communities; (2) provide more detail on the use of the overarching and “SB 535 Principles” that our coalition has developed and previously shared with the Administration; (3) identify the priority AB 32 programs that will effectively serve these communities and legal mandates; and (4) provide additional comments on the implementation considerations.

I. IDENTIFICATION OF DISADVANTAGED COMMUNITIES

We are pleased to support the Secretary for Cal/EPA’s use of the CalEnviroScreen as a tool to inform the identification of disadvantaged communities for the purposes of investing auction proceeds and meeting the requirements of SB 535 (de León). Identifying disadvantaged communities is one of the fundamental efforts we were seeking to accomplish with SB 535 (de Leon) and we are encouraged and pleased by the progress of Cal/EPA and OEHHA in their efforts to do so. On January 28, 2013, several members of the SB 535 Coalition submitted comments on the Second Draft Public Review Draft of the California Environmental Health Screening Tool (CalEnviroScreen).¹ In those comments, we expressed our support for using the tool to inform the investment of auction revenues pursuant to SB 535 and commended Cal/EPA for its efforts to ensure that the tool was informed closely by the community’s own reflections of its needs and characteristics. While we acknowledge room for improvement, we are encouraged by the commitments from the Agency to improve the tool. We continue to support the application of CalEnviroScreen in a variety of applications and are heartened to see the tool included in the Draft Concept Paper.

¹ Appendix A, CalEnviroScreen Comment Letter.

II. PRINCIPLES

While we are pleased to see the Draft Concept Paper's set of "Draft Investment Principles" and "Draft Implementation Principles", we recommend that the additional attached principles be incorporated: (1) specific principles regarding implementation of SB 535's (de León) requirements to ensure at least 25% of the investments benefit disadvantaged communities and at least 10% of projects are located in these neighborhoods; and (2) overarching principles for all allowance revenues.

SB 535 PRINCIPLES:

We urge CARB to adopt our coalition's SB 535 Principles,² which have been endorsed by nearly 50 organizations, to clearly define how SB 535-funded projects will deliver meaningful benefits to disadvantaged communities

We recommend that the SB 535 Principles be provided to implementing agencies as part of the guidelines for programs and projects funded to meet SB 535 requirements. Only those projects or programs that follow the principles should be eligible for investment. The three main principles are as follows:

1. Make the process inclusive, transparent and accountable. The Administration should ensure transparency, accountability and the robust public participation of disadvantaged communities in the process of developing and implementing an investment plan.

2. Invest in High Priority Needs. Disadvantaged communities have needs that are distinct from those of the general public; for instance, they are subject to well-documented disparities in health outcomes. Disadvantaged communities benefit when their distinctive needs are met. The benefits of each investment made with SB 535 funds should specifically address high priority needs of disadvantaged communities. The Administration should ensure that projects deliver significant benefits by meeting priority needs well. Eventually, the Administration should implement

² Appendix B, SB 535 Principles.

metrics to quantify the co-benefits to disadvantaged communities (e.g., cost savings, and improvements in housing, transit, employment and public health outcomes) of GHG-reducing projects. Setting performance measures will make the process more transparent while also facilitating DOF reporting on the outcomes of these investments.

3. Benefits Must Outweigh Burdens.³ There are many projects that, while considered beneficial to some, generate harmful impacts that are disproportionately concentrated in disadvantaged communities. The benefits of SB 535 investments on disadvantaged communities must significantly outweigh the burdens that the projects may impose on those communities.

OVERARCHING PRINCIPLES

While the focus of this letter is primarily on implementing SB 535 (de León), our organizations are united with colleagues in our continued broad support of an investment plan that includes a suite of environmentally-sound investment opportunities and adheres to the goals of AB 32, AB 1532 and SB 535. We believe that the investment plan should be a visionary document consistent with the guidance identified in these laws and our previous statements. Furthermore, we urge CARB to add investment principles to the draft plan to ensure that investments will result in GHG reductions that are supported by sound science, consistent accounting methods, and a level of transparency that ensures benefits outweigh potential adverse impacts.

III. PROGRAM PRIORITIES: NEAR-TERM & LONG-TERM PROJECTS

After Governor Brown's signing of SB 535 (de León) and AB 1532 (J. Perez) last fall, we very quickly shifted our focus towards implementation. In that regard, the SB 535 Coalition

³ Ensuring that projects do not, on balance, add to the burden already borne by impacted communities is a cornerstone of environmental justice. Environmental justice (EJ) is defined in California law as "the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws and policies." Government Code section 65040.12. This important principle remains noticeably absent from the list of principles articulated in the Concept Paper. The Legislature recognized the potential vulnerability of California's low-income and disadvantaged population and required that activities taken to comply with AB 32 do not disproportionately impact these communities.

quickly began the work of engaging grassroots, community-based organizations and individual and organizational supporters of the efforts from across the state to better understand the needs of disadvantaged communities in response to causes and effects of climate change. We have organized numerous webinars, regional and statewide meetings to both facilitate engagement in this public process and solicit ideas about programs and projects that should be considered for funding both in the near-term and long-term.

Near-Term Priorities:

Results from our surveying efforts have identified the following five existing statewide programs as high priorities for near-term investments (in alphabetical order):

- Community Greening - e.g., CalFire Urban and Community Forestry Program⁴
- Low-Income Energy Efficiency Programs - e.g., Energy Savings Assistance Program, Weatherization Assistance Program⁵
- Renewable Energy - e.g., Single and Multi-Family Affordable Solar Homes program (SASH/MASH)⁶
- Transit Operations - e.g., State Transit Assistance (STA)⁷
- Transit-Oriented Development (TOD) - e.g., Affordable TOD Housing program⁸

We have attached more detailed descriptions of these existing statewide programs in the appendices. In each description (or “test run”), we have included information about how these programs meet the greenhouse gas reduction nexus requirement and how they each follow our recommended SB 535 Principles. In some cases (e.g., State Transit Assistance and Affordable

⁴ Appendix C, SB 535 Principles Screen: Urban and Community Forestry.

⁵ Appendix D, SB 535 Principles Screen: Low-Income Energy Efficiency.

⁶ Appendix E, SB 535 Principles Screen: Single-Family Affordable Solar Homes/Multi-Family Affordable Solar Homes.

⁷ Appendix F, SB 535 Principles Screen: State Transit Assistance.

⁸ Appendix G, SB 535 Principles Screen: Transit Oriented Development.

TOD Housing), we have included recommendations about how the existing program should be modified to be effective investments.

All of the above program areas, when funded, can (1) have an immediate positive impact in these neighborhoods; (2) provide flexibility to accommodate the varying needs of communities across the state (e.g. rural vs. urban); (3) provide additional co-benefits (as detailed in the Appendices); and (4) are scalable. As a result, these are program areas that are enthusiastically supported by several communities.

Long-Term Priorities:

We strongly believe we should not let uncertainty surrounding future auction revenues undermine our long-term planning efforts and the need for big, bold, and visionary ideas for lasting change. We understand the logic of prioritizing existing statewide programs in the near-term implementation of the program, particularly when the program is very nascent and public awareness and support is at a critical stage of development. Low-income and communities of color, who are the majority of California, can be the catalyst for the culture shift needed to ensure the success of our State's climate programs. California's investment in their climate solutions is key to this shift and many of these efforts will require investments that may require further shaping of existing programs and new programs to meet these needs. We appreciate your inclusion of specific examples of programs and projects for the long-term. We must not waste time by failing to identify long-term investment opportunities, otherwise we will never prepare appropriately for them and will never accomplish the transformative changes that are necessary to adequately prepare for and address climate change.

Accordingly, our coalition has also solicited ideas for long-term investments. Our results identify a general list of categories of funding which we are working to refine, as we believe

many of these areas can be well-positioned for funding within the first three-year investment plan (depending on available funds) and beyond. The below list of mid- and long-term investment areas is not an exhaustive list, but represents some of the initial feedback we are receiving from communities regarding programs and projects that may require greater amounts of time, capital, further stakeholder processes and/or legislative authority to shape and position as compared to those identified as near-term opportunities. Among these priorities are:

Low-Carbon Transportation and Infrastructure

- **PASSENGER TRANSPORTATION:** Expand transit service operations, affordability and transit mode connectivity, and develop active transportation (biking, walking, etc) infrastructure in transportation hubs, as well as the jobs associated with these projects.
- **FREIGHT TRANSPORTATION:** Clean up and modernize existing system of ships, trucks, trains and other equipment. However, this needs to be shaped by multi-stakeholder effort (already being discussed), regional collaboration and private investment to fully transform this system. Additionally, these changes will need to incorporate and consider workforce needs, with provisions such as local hire, etc. Such investments will not only help to reduce greenhouse gas emissions, but help reduce a significant source of toxic, criteria and black carbon emissions particularly concentrated in most of the state's identified disadvantaged communities.

Strategic Planning for Sustainable Infrastructure

- Connect affordable transit-oriented developments with climate resilient infrastructure involving projects like energy efficiency, renewable energy, food production, water catchment, cooling centers, etc. We value the good green career pathways out of poverty that are created by these projects.

Energy Efficiency and Clean Energy

- Couple energy efficiency with renewable energy in buildings to get maximum GHG reduction. Increase access and benefit for low income residents to these energy programs by providing financing options like low/zero interest loans, PACE, On-Bill Repayment, rebates, feed-in-tariff, etc. Pilot microgrid infrastructure located in disadvantaged communities. Pair workforce training programs and targeted hiring from disadvantaged communities for these energy projects.
- Targeted programs for water-efficiency, particularly addressing any gaps in current efforts, such as addressing needs of rural communities.

Natural Resources

- Community greening, local parks and community gardens. Done well, these community greening efforts will help reduce heat-island effects, reduce energy bills, incorporate local workforce needs, improve water efficiency and/or provide additional health co-benefits, while benefiting neighborhoods that don't often have the luxury or benefit of these aesthetic improvements.

IV. OTHER IMPLEMENTATION CONSIDERATIONS

The Administration Should Exercise Extreme Caution When Offsetting General Fund Obligations.

We are encouraged to see that the Draft Concept Paper does not include the use of funds to offset or “backfill” existing general fund obligations. Experts have concluded that offsetting funding for pre-existing projects, even those that reduce greenhouse gas emissions, subjects the program to a greater degree of litigation risk as compared to other uses.⁹ We continue to see this moment as a pivotal opportunity to demonstrate that AB 32 can move the needle in our communities and we seek to deny polluters any occasion to allege otherwise. Additionally, as previously expressed, communities eagerly and enthusiastically await on-the-ground investments that can be seen and touched. Efforts to use these funds for General Fund obligations deny these communities such investments and would diminish faith in the process and overall AB 32 program at a time when it is critical to build support for the effort.

Conclusion

We are greatly encouraged by the Administration's initial attempt to establish a framework for maximizing the benefits of investment for disadvantaged communities. The long-term durability and support for our climate change efforts may very well hinge on communities

⁹ See C. Horowitz, M.R. Enion, S.B Hecht, and A. Carlson, *California's Cap-and-Trade Auction Revenue: Understanding the Sinclair Paint Risk Spectrum*, Emmett Center on Climate Change and the Environment, UCLA School of Law (March 2012) at 18.

experiencing program benefits that they can perceive and experience with their own senses and not just learn about from a press release. As such, we remain your steadfast partners in this endeavor and are committed to serving as an ongoing resource with the hope that implementation will fulfill the promises of AB 32 and SB 535 to protect and invigorate the communities that have disproportionately borne environmental burdens.

Sincerely,

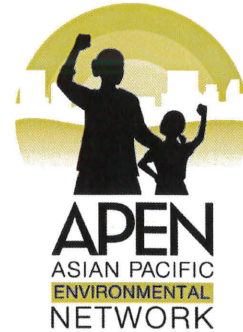
Allen Temple Baptist Church
Asian Immigrant Women Advocates
Asian Pacific Environmental Network
Asian and Pacific Islanders California Action Network
Asian Neighborhood Design
Asian Pacific Policy & Planning Council
California Black Chamber of Commerce
California ReLeaf
Central Valley Air Quality Coalition
Chicana/Latina Foundation
Coalition for Clean Air
El Concilio of San Mateo County
Environmental Health Coalition
Fresno Metro Ministry
GRID Alternatives
Latino Coalition for a Healthy California
Nail Salon Women Greening their Jobs and the Environment at CHAA
Pacific Isle Environmental Reserve
People's Community Organization for Reform and Empowerment
Public Advocates
The Greenlining Institute
The Trust for Public Land
Urban Habitat

Cc: Mr. Clifford Rechtschaffen, Senior Advisor, Office of Governor Edmund G. Brown, Jr.
Ms. Martha Guzman-Aceves, Deputy Legislative Affairs Secretary, Office of Governor Edmund G. Brown, Jr.
Mr. Matt Rodriguez, Secretary for Environmental Protection, California Environmental Protection Agency
Mr. Arsenio Mataka, Assistant Secretary for Environmental Justice and Tribal Affairs, California Environmental Protection Agency

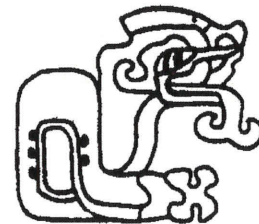
Appendix A



Allen Temple Baptist Church
Founded in 1919



CALIFORNIA BLACK
CHAMBER OF COMMERCE
"Dedicated to Economic Development"



January 28, 2013

John B. Faust, Ph.D., Chief
Community Assessment and Research Section
Office of Environmental Health Hazard Assessment
151 Clay St., Suite 1600
Oakland, CA 94612

Re: Comments on the Second Public Review Draft of the California Communities Environmental Health Screening Tool (CalEnviroScreen)

Dear Dr. Faust:

On behalf of the co-sponsors and supporters of SB 535 (de León, 2012), including The Greenlining Institute, Allen Temple Baptist Church, Asian Pacific Environmental Network, Rising Sun Energy Center, Public Advocates, Coalition for Clean Air, California Black Chamber of Commerce, Brightline Defense Project, TransForm, Natural Resources Defense Council, and Green Technical Education and Employment, we submit the following comments on the second public review draft of CalEnviroScreen. We appreciate the opportunity to share our perspectives on the tool and thank you for your efforts to develop this important resource. It is of critical importance to identify disadvantaged communities facing multiple pollution burdens so programs and funding can be targeted appropriately toward raising the economic and environmental status of the most affected communities. Developing a science-based tool ensures the fair treatment of all Californians, including diverse and low-income populations. As such, we support this initial version of CalEnviroScreen.

A Prime Example of Responsive Government

As organizations dedicated and wanting to ensure that grassroots leaders are participating in major policy decisions, we commend OEHHA's effort to engage the very communities this tool will impact the most. We appreciate your efforts to solicit input on previous drafts through a series of regional and stakeholder-specific public workshops. This version of the tool reflects that this input was given the serious consideration it merited. The current draft includes the use of factors such as linguistic isolation and exposure to diesel emissions. We support these additions as they are important indicators of social vulnerability and exposure.

It is Critical that Socioeconomic Factors Remain Central Elements of the Tool

To truly understand cumulative impacts and to identify the places and people especially vulnerable to the impacts of climate change, it is vital to include socioeconomic factors. As such, we support the continued use of crucial factors such as race and ethnicity, income, educational attainment as well as the weight they are afforded.

We Envision That the Tool Will Have Many Uses and Look Forward to Remaining Engaged

At this time, we are only scratching the surface of the variety of CalEnviroScreen's useful applications. As such we believe it premature to limit the potential uses of the CalEnviroScreen tool. At a minimum, we agree that the tool should closely inform the implementation of Senate Bill 535 (De León, Chapter 830, Statutes of 2012), which requires the CalEPA to identify disadvantaged communities in California for purposes of allocating revenue to those communities from the Greenhouse Gas Reduction Fund. Decisions about how the tool is applied in these revenue allocation decisions, including the thresholds selected (e.g., top 10%, top 20%), are also of critical importance. We look forward to remaining engaged and giving input as the public process around these decisions moves forward.

We expect that the tool will also prove a valuable resource to local and regional decision-makers tasked with realizing the most impact at a time of limited resources. Having access to such a science based tool

for resource allocation will enable our cities, counties, and regional bodies to maximize the co-benefits that accompany investments in improving environmental health. The direct impact of local government in people's lives cannot be understated. Building communities that are resilient to the impacts of climate change depends on informed decision-making.

This Tool Provides an Opportunity to Identify Priority Green Investment Zones

Some allege that by identifying California's most vulnerable and impacted communities, we risk providing a basis for even further disinvestment. We reject this notion. Instead of redlining, we see this tool as a great opportunity to enable the "Greenlining" of these communities. Certainly, its use under SB 535 is a very clear example.

Subsequent Versions Offer Opportunities to Improve the Tool

This version of the tool represents an important first step. We view this as an evolving tool and recommend that subsequent versions seek to improve indicators, use more granular data, and expand public accessibility. Priority improvements should include a time commitment for an analysis at the census tract level as well as regional level analysis.

Transparency and Accountability Should Continue to Be Prioritized

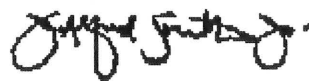
Transparency and public input into government decision-making and policy development are indeed the cornerstones of environmental justice. As such we thank you for making the underlying data accessible to the public. This is a practice that should be continued and expanded. In future iterations, both decision-makers and the wider public could benefit from an interactive online tool that allows stakeholders to understand how cumulative impacts affect their local constituencies.

Thank you for the opportunity to comment on this draft of the CalEnviroScreen and for the robust public participation opportunities that will undoubtedly strengthen its application. Please consider us partners in this important work.

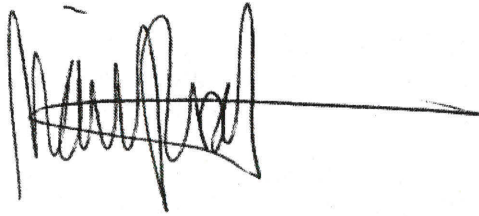
Very truly yours,



Ryan Briscoe Young
Legal Counsel
The Greenlining Institute



J. Alfred Smith, Jr.
Senior Pastor
Allen Temple Baptist Church



Mari Rose Taruc
State Organizing Director
Asian Pacific Environmental Director



Richard Marcantonio
Managing Attorney
Public Advocates



Jodi Pincus
Executive Director
Rising Sun Energy Center

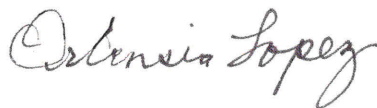


Nidia Bautista
Policy Director
Coalition for Clean Air



Aubry Stone
President and CEO
California Black Chamber of Commerce

Joshua Hardy Stark
State Campaign Director
TransForm



Ortensia Lopez
Executive Director
El Concilio of San Mateo County

Simeon Gant
Green Technical Education and Employment



Joshua Arce
Executive Director
Brightline Defense Project



Victoria Rome
California Legislative Director
Natural Resources Defense Council

Appendix B

Principles for Implementing SB 535 (de León) to Benefit Disadvantaged Communities

Submitted on behalf of all endorsing organizations listed on the reverse

Delivering benefits to disadvantaged communities in the course of reducing Greenhouse Gas emissions has been a consistent theme of the Legislature's GHG reduction efforts since the adoption of AB 32. Now, SB 535 has deepened the State's commitment to Environmental Justice communities by making it a core goal in the allocation of Cap and Trade revenues.

Cal/EPA must identify disadvantaged communities "based on geographic, socioeconomic, public health, and environmental hazard criteria," and ARB must ensure that at least 25% of auction revenues are set aside for investments in "projects that provide benefits to [these disadvantaged] communities," with at least 10% in projects "located within" these communities.

The following principles will help ensure that the Legislature's goals are achieved:

- 1. Make the process inclusive, transparent and accountable.** ARB should ensure transparency, accountability and the robust public participation of disadvantaged communities in the process of developing and implementing an investment plan:
 - Public participation of disadvantaged communities – a core principle of Environmental Justice – must be integrated into the implementation of SB 535, at both the state and regional/local level.
 - Proposed investments of SB 535 funds should be transparently itemized as falling under the 25 percent or 10 percent category.
 - All agencies (including local and regional agencies) responsible for carrying out projects funded with SB 535 funds should be held accountable to ensure that promised benefits are delivered, measured and reported.
- 2. Invest in High Priority Needs.** Disadvantaged communities have needs that are distinct from those of the general public; for instance, they are subject to well-documented disparities in health outcomes. Disadvantaged communities benefit when their distinctive needs are met. The benefits of each investment made with SB 535 funds should specifically address high priority needs of disadvantaged communities. ARB should ensure that projects deliver significant benefits by meeting priority needs well. Eventually, ARB should implement metrics to quantify the co-benefits to disadvantaged communities (e.g., improvements in housing, transit, job and public health outcomes) of GHG-reducing projects. Setting performance measures will make the process more transparent while also facilitating DOF reporting on the outcomes of these investments.
- 3. Benefits Must Outweigh Burdens.** There are many projects that, while considered beneficial to some, generate harmful impacts that are disproportionately concentrated in disadvantaged communities. The benefits of SB 535 investments on disadvantaged communities must significantly outweigh the burdens that the projects may impose on those communities.

For more information, please email Guillermo Mayer (gmayer@publicadvocates.org) or Parisa Fatehi-Weeks (pfatehi@publicadvocates.org).

Principles for Implementing SB 535 (de León) to Benefit Disadvantaged Communities

Endorsing organizations (as of March 8, 2013):

Asian and Pacific Islanders California Action Network (APIsCAN)	Greenlining Institute
Allen Temple Baptist Church	Housing California
Asian Pacific Environmental Network (APEN)	Kennedy Commission
Asian Immigrant Women Advocates	Leadership Counsel for Justice and Accountability
Asian Neighborhood Design	Marin Grassroots
Asian Pacific Policy & Planning Council (A3PCON)	Nail Salon Women Greening Their Jobs and the Environment
Bay Area Healthy 880 Communities	New Voices Are Rising Project (of the Rose Foundation for Communities and the Environment)
Bay Localize	North Bay Organizing Project
Breakthrough Communities	People's Community Organization for Reform and Empowerment (People's CORE)
CA ReLeaf	Public Advocates Inc.
California Housing Partnership Corporation (CHPC)	Public Interest Law Project / California Affordable Housing Law Project
California Rural Legal Assistance Foundation	Regional Asthma Management & Prevention (RAMP)
California Rural Legal Assistance, Inc.	Sacramento Housing Alliance (SHA)
California WALKS	Safe Routes to School National Partnership
Catholic Charities, Diocese of Stockton	Sierra Club California
Center for Sustainable Neighborhoods	The City Project
Chicana/Latina Foundation	TransForm
Coalition for Clean Air	Unitarian
East Bay Housing Organizations (EBHO)	Universalist Legislative Ministry California (UULMCA)
El Concilio of San Mateo County	Urban Habitat
EndOil / Communities for Clean Ports	WALKSacramento
Fresno Metro Ministries	Western Center on Law and Poverty
Environmental Justice Task Force of A3PCON	
Genesis	
Great Leap	
Green for All	

Appendix C

Urban and Community Forestry

Program Description:

The Urban and Community Forestry Program within the California Department of Forestry and Fire Protection (CAL FIRE) provides technical assistance and local assistance grants to support the goals and objectives of the Urban Forestry Act (PRC 4799.06 - 4799.12). This existing program is designed to significantly contribute to GHG reductions and energy efficiency, while serving disadvantaged communities, and providing numerous co-benefits in the urban areas that are home to 95 percent of Californians.

Proposed Use for Greenhouse Gas Reduction Fund (GRRF) Allocation:

To continue the Urban and Community Forestry Program technical assistance and local assistance grants as a mechanism to increase tree-planting, education, and proper tree management in furtherance of the goals of statewide GHG reductions and energy conservation, as identified within the Urban Forestry Act and mandated under the Global Warming Solutions Act (Health and Safety 38500 – 38599).

Statement of Need and GHG Nexus:

California's urban and community forests address all aspects of what is required of sound legitimate and legal investments of cap and trade allowance auction revenues, especially in the realm of energy conservation, GHG reductions, and environmental/economic co-benefits.

Urban and community forests play a vital role in helping the state meet its AB 32 implementation goals. According to the U.S. Forest Service, California's existing urban forest of 200 million trees reduces greenhouse gas emissions by 6.3 million metric tons annually through carbon sequestration, energy conservation, and reduced urban heat island effect.¹

In hot, dry climates, shade from trees can cut energy use for cooling by 30%.² In fact, the cooling power of California's existing urban trees lowers the state's energy consumption by about 7,300 GWh each year, which is equivalent to more than seven 100-megawatt power plants.³ In addition, by serving as a wind buffer, urban and community forests can save 10-25 percent in energy used for heating.⁴

The key to growing these benefits is growing more trees, and properly maintaining our existing urban and community forests. The US Forest Service estimates that there are 50 million "shovel-ready" tree-planting spaces available within our urban environments. More trees mean increased canopy, which translates to increased energy savings and greenhouse gas emission reductions.

Unfortunately, funding for this valuable CAL FIRE Program was exhausted with the final allocation of Proposition 84 dollars for urban and community forestry in the 2012-13 State Budget.

Co-benefits:

Urban and community forests can improve water quality, and increase local water supply. Water-related energy use consumes roughly 19% of the state's electricity. But investments in green infrastructure like trees to capture storm water for local water supply can reduce emissions related to imported water and encourage water conservation. In addition, urban forests provide flood attenuation benefits, which are anticipated to be increased in need for climate readiness. By capturing rainfall on leaves and branches, trees slow down rainfall in heavy events, making the threats of flooding less likely. One-hundred mature trees intercept approximately 250,000 gallons of rainwater per year.⁵

Urban and community forests also provide a source for job training to at-risk youth and access to nature and multi-modal learning for these youth. In 2009, California's urban and community forests supported more than 60,000 non-exportable jobs resulting in \$3.3 billion of individual income – jobs that ranged from urban planner to landscape architect to utility arborist. Urban and community forests also added \$3.6 billion in value to the state's economy during this same period⁶, and are commonly cited as a resource that raise residential property values by up to 10%.⁷

Finally, urban and community forests contribute to healthy people and communities. They create a desirable environment for outdoor physical activity; reduce symptoms or incidence of attention deficit disorder, asthma, and stress; reduce exposure to UV radiation; and create a setting for neighbors to interact, strengthen social ties and create more peaceful and less violent communities.

Benefits to Disadvantaged Communities

Disproportionately low-income and disadvantaged communities are commonly connected to those areas of California with alarmingly high levels of air pollution. For example, a 2012 American Lung Association report provides California with the dubious distinction of capturing the top 5 spots among the worst air polluted cities in the nation.⁸ The Office of Environmental Health Hazard Assessment has identified all of them as being within the top 10 percent of disadvantaged communities. Increasing canopy cover through creating and sustaining urban forests can reverse that trend by helping moderate the urban heat island effect and its associated energy use and health impacts. This is not only reflected in GHG reductions, but also the tens of thousands of metric tons of particulate matter captured by urban and community forests that filter nitrogen dioxide, sulfur dioxide, and particulate matter out of the air.

SB 535 Nexus and Proposed Use for Greenhouse Gas Reduction Fund (GRRF) Allocation

While SB 535 mandates that 25% of funds spent benefit residents of disadvantaged communities, we estimate most urban and community forest projects meet the more stringent mandate of 10% of these funds being expended within disadvantaged communities. Seventy percent of the most active urban forestry non-profit organizations operate and work within these communities. The strong partnerships that have formed between groups like Urban Tree Foundation and the City of Visalia, North East Trees and the City of LA's Million Trees Campaign, or Urban ReLeaf and the cities of Oakland and Richmond provide "boots-on-the-ground" that can immediately support the goals of SB 535 through shovel-ready projects that bring communities together through urban and community forests activities along transportation corridors, within schools, and in affordable housing developments.

Investing in urban and community forests will not only have the positive impacts described elsewhere in this document, but will make a significant difference in the economic and social well-being of these communities.

Principle 1: Open, inclusive and transparent decision-making process.

CAL FIRE's Urban and Community Forestry Program local assistance grants are delivered through an open and competitive process with a demonstrated record of success. Eligible grantees are primarily local governments and non-profit entities. CAL FIRE uses an explicit scoring system for ranking grant applications, drawing on the expertise and local knowledge of the State's Urban Forester and six regional foresters for determining which projects demonstrate the highest, best use of limited funds. Minimal modifications would be needed to adapt the current grant process to meet the legal thresholds of AB 32, AB 1532 and SB 535. For example, accounting for GHG reductions in the grant review process could be achieved through existing tools such as the carbon calculator for urban and community trees, along with changes to granting guidelines as needed to meet legal and programmatic needs of the new funding source. All of the current materials and guidelines supporting this program are available at http://calfire.ca.gov/resource_mgt/resource_mgt_urbanforestry.php.

Principle 2: Funds must address high priority needs.

Disadvantaged communities often lack adequate canopy cover. As an example, a study by the US Forest Service regarding canopy cover in Los Angeles demonstrates that neighborhoods like Bel Air and Studio City enjoy tree canopy exceeding 40%, while neighborhoods like south central and south east LA provide canopy cover as low as 7-10 percent.⁹

Funds directed to CAL FIRE's Urban and Community Forestry Program that are specifically programmed to meet the high priority needs of disadvantaged communities as mandated under SB 535 would address the critical canopy shortfall in these areas through tree planting, proper tree management, and hands-on resident education that can build communities that take ownership and pride in these resources.

Principle 3: Benefits must outweigh burdens.

Urban and community forests are natural resources, and therefore fall within the uncapped sector that contributes minimally to GHG emissions and associated adverse impacts. The most likely source of emissions stemming from propagation and management of urban and community forests would come from vehicles and equipment utilized to grow and maintain trees. Grant program requirements could be focused on the planting of large canopy trees that provide the most favorable rates of CO₂ sequestration, energy use reduction, and mitigation of heat island effects.

For more information, contact Chuck Mills, California ReLeaf, at cmills@californiareleaf.org or (916) 497-0035.

Sources

1. US Forest Service – McPherson EG (2012) Statistical analysis of GHG reductions and energy conservation benefits from California's existing urban forests.
2. US Forest Service – Forestry Report R8-FR 17 (1990)
3. US Forest Service - McPherson EG, Simpson JR (2003) "Potential energy savings in buildings by an urban tree planting program in California." *Urban Forestry & Urban Greening*. 2: 73-86.
4. US Forest Service – Forestry Report R8-FR 17 (1990)
5. City of Bainbridge Island – Community Forest Commission (revised 2010) *Community Forests Best Management Practices Manual*.
6. California Department of Forestry and Fire Protection (2009) "Urban and Community Forestry at a Glance"
7. US Forest Service – Forestry Report R8-FR 17 (1990)
8. American Lung Association (2012) *The State of the Air 2012*
9. U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station, Center for Urban Forest Research and Department of Land, Air, and Water Resources, University of California, Davis – McPherson EG, Simpson JR, Qingfu Xiao, Chunxia Wu (2011) "Million trees Los Angeles canopy cover and benefit assessment." *Landscape and Urban Planning*. 99: 40-50

Appendix D

Low-Income Energy Efficiency Programs

Program Description:

The Low-Income Weatherization Assistance Program (WAP) was created in 1976 to assist low-income families who lacked resources to invest in energy efficiency. The mission of the WAP is, “To reduce energy costs for low-income families, particularly for the elderly, people with disabilities, and children, by improving the energy efficiency of their homes while ensuring their health and safety.” All 50 states, including California, operate their own WAP programs.

The CPUC’s Energy Savings Assistance (ESA) Program provides no-cost weatherization services to low-income households who meet the CARE income guidelines.¹ Services provided include attic insulation, energy efficient refrigerators, energy efficient furnaces, weatherstripping, caulking, low-flow showerheads, waterheater blankets, and door and building envelope repairs which reduce air infiltration.

Proposed Use

Supplementing low-income energy efficiency programs with additional funding from allowance revenues will enable these programs to achieve greater energy savings and produce long-term, sustainable bill relief to low income customers. Using a methodology that values long term savings, GHG reductions, and co-benefits will help overcome any limitations of these programs existing cost-benefit methodologies. Additional funding can be used to expand the suite of efficiency measures available to all participating customers and explore pilots to reach customer segments currently underserved by these programs, including low income tenants in multi-family housing.

GHG Nexus

Retrofits and increased building performance are important resource for reducing greenhouse gas (GHG) emissions from the energy (electricity and natural gas) sector. Energy efficiency (EE) is particularly important because of its cost-effectiveness and as a result is the state’s top priority energy resource. California’s Energy Action Plan II states that, “energy efficiency is the least cost, most reliable, and most environmentally-sensitive resource, and minimizes our contribution to climate change.”²

Co-benefits.

In addition to being the least cost, most reliable, and most environmentally responsible energy resource, investments in EE also reduce localized air pollution from power plants; reduce reliance on capital intensive and environmentally disruptive electric transmission lines; create jobs carried out by California workers, businesses, and community based organizations; generate beneficial economic multiplier effects to local economies; and increase energy and climate engagement.

Benefit to Disadvantaged Communities

In addition to providing no-cost home energy solutions, energy efficiency programs can be structured to promote or provide job creation, workforce development and green jobs training

¹ Eligible customers are those whose total household income is at or below 200% of the federal poverty guidelines.

² CPUC and Energy Commission, Energy Action Plan II, adopted in 2005, available at http://www.energy.ca.gov/energy_action_plan/2005-09-21_EAP2_FINAL.PDF

opportunities. EE improves indoor air quality, making low-income homes more comfortable and safe for sensitive populations such as children and the elderly. Finally, EE can provide enduring long-term bill relief to disadvantaged communities, which spend a disproportionate percentage of their income on basic services like electricity, natural gas, and water. EE also provides opportunities to engage low-income communities on the relationship between their consumption and climate change, as well as steps they can take to address it.

SB 535 Nexus; Proposed Uses and Restrictions

To count towards SB 535, at least 25% of the funds must be targeted at communities that contain high concentrations of disadvantaged residents. A minimum of 10% of the funds must also be invested directly in those neighborhoods with the highest concentrations of disadvantaged residents.

Principle 1: Open, Inclusive and Transparent Process

These programs are subject to frequent reporting, which produces detailed information on the program's progress in California. These reports can be enhanced to report on metrics that describe GHG reductions and co-benefits such as job creation specific to GGRF funds. There is already an effort underway to determine the job creation impacts of ESA and this effort could be leveraged to track these co-benefits attributable to GGRF allocations. Implementing agencies should be required to hold accessible workshops in disadvantaged communities to solicit and consider input from residents. The workshops would occur early enough in the planning process to influence staff recommendations on how to invest GGRF allocations. California Public Utilities Code also allows certain individuals or groups that participate in proceedings before the California Public Utilities Commission to request compensation for the costs associated with that participation. This existing program lowers barriers to participation for citizens and community based organizations that would otherwise not be able to participate.

Principle 2: Address High Priority Needs

Standard rulemaking procedures coupled with robust public participation workshops in disadvantaged communities would identify high-priority locations and technologies. Implementing agencies should coordinate closely with Cal EPA and ARB to identify the highest priority neighborhoods.

Principle 3: Benefits Outweigh Burdens

Few burdens are associated with providing efficiency technologies to disadvantaged communities at low or no cost. Overall reductions in conventional dirty energy, bill relief, localized economic benefits, and increased energy/climate engagement greatly outweigh any nominal adverse impacts created by the construction of projects. Finally, because these projects are designed to not increase monthly expenses and are provided at no cost, residents are not saddled with additional financial burden.

Please contact Ryan Young (ryany@greenlining.org) with questions.

Appendix E

California Solar Initiative (CSI): Single-family Affordable Solar Homes (SASH) Program and Multi-family Affordable Solar Housing (MASH) Program

Program Description: CSI offers solar incentives for PG&E, SCE, and SDG&E electric utility customers. The \$2.2 billion CSI Program has a goal to install 1,940 MW of solar by the end of 2016. Ten percent of the CSI budget (\$216M) is directed toward the low-income affordable housing programs, SASH and MASH. Given the success of the SASH and MASH programs, incentive funding will be fully reserved well before the 2015 sunset date and supplemental funding will be needed in the near-term to continue making solar accessible to low-income families.

SASH: The SASH Program was established in 2008 with the overarching goal of decreasing electricity usage and bills without increasing monthly household expenses; basically, making solar cash flow positive from day-one.

The SASH Program is uniquely designed to be a comprehensive low-income solar program. SASH is structured to promote or provide:

- Solar incentives that encourage solar adoption by low-income households;
- Energy efficiency audits and services;
- Workforce development and green jobs training opportunities, and;
- Broad community engagement within low-income communities.

In 2008, the California Public Utilities Commission (PUC) selected GRID Alternatives, a non-profit solar contractor, to be the statewide Program Administrator for this first-of-its-kind solar program. There is no other solar program in California, or for that matter the country, that has such a diverse range of benefits for disadvantaged communities.

MASH: Established in 2008, the MASH Program provides solar incentives on qualifying multi-family affordable housing dwellings. The goals of the MASH program are to:

- Stimulate the adoption of solar power in the affordable housing sector;
- Improve energy utilization and overall quality of affordable housing;
- Decrease electricity use and costs without increasing monthly household expenses for affordable housing building occupants; and
- Increase awareness of the benefits of solar among housing occupants and developers.

MASH is administered by PG&E, SCE, and the California Center for Sustainable Energy.

Proposed Use for Greenhouse Gas Reduction Funds (GGRF)

The implementing agencies (i.e. CPUC, CEC, POU) would implement low-income solar programs that build upon the existing SASH or MASH program structures. This will maximize the benefits of GGRF funds by leveraging the infrastructure and efficiencies of California's already proven and successful low-income solar programs.

SASH and MASH are nearing the end of their funding, ahead of schedule, and are in need of near-term supplemental funding. The CPUC would provide funding for the SASH or MASH Programs in the investor-owned utility service territories. The CEC or specified publicly-owned utilities would establish an equivalent SASH/MASH program to expand low-income solar programming to municipal and publicly-owned utility service territories.

Please contact Ryan Young (ryany@greenlining.org) with questions.

Meeting the Investment Goals

Maximize economic, environmental, and public health benefits to the state.

California's solar policies and programs, including CSI, are driven by renewable energy's broad community benefits, including environmental benefits; local jobs and in-state economic growth; private investment in local industries; reduced electricity demand during peak periods; a diversified energy resource mix; and stabilizing the energy supply infrastructure. Making solar investments in low-income communities is a particularly impactful method of delivering these benefits since these communities often are the hardest hit with environmental pollution from traditional energy sources, high unemployment, and lack of private investment. As part of the California Solar Initiative, SASH/MASH have been designed and structured to help achieve all of these outcomes, as well as the State's long-term GHG reduction goals.

Foster job creation by promoting in-state GHG emission reduction projects carried out by California workers and businesses

The solar industry is one of the fastest growing industries in California. Rooftop solar projects are all local, and installed by local workers and businesses. Every solar system installed through the SASH Program incorporates a workforce development component.¹ Over 70 job training organizations in California have partnered with SASH's Program Administrator (GRID Alternatives) to get their students hands-on solar installation experience. Also, the SASH subcontractor program requires private contractors to hire a local job trainee for every SASH system they install. In 2012, over half of the participating subcontractors subsequently hired one of these job trainees for a full-time position.

Direct investment toward the most disadvantaged communities and households in the state.

The SASH Program primarily serves affordable housing located in Empowerment/Enterprise Zones, Targeted Employment Areas, or Qualified Census Tracts. These are typically areas of chronic economic distress and represent some of the most disadvantaged urban and rural communities in California. The MASH Program serves affordable housing primarily in urban disadvantaged communities.

Provide opportunities for businesses, public agencies, nonprofits, and community institutions to participate in and benefit from statewide efforts to reduce greenhouse gas emissions.

The SASH and MASH Programs are designed as public/private partnerships that provide opportunities for all of these stakeholders to participate and benefit. California's solar businesses benefit from new business opportunities that lead to increased job creation, and through an increased pool of trained, experienced workers. Affordable housing nonprofits and local government agencies benefit by lowering long-term housing costs for the families they serve, and local workforce development institutions benefit through access to hands-on solar training opportunities and assistance with job placement. As a non-profit organization, GRID Alternatives (SASH Program Administrator) also partners with solar equipment manufacturers and other private funders to leverage philanthropic resources that help public dollars stretch further.

SB 535 Nexus; Proposed Uses and Restrictions

To count towards SB 535, at least 25% of the funds must be targeted at communities that contain high concentrations of disadvantaged residents. A minimum of 10% of the funds must also be invested directly in those neighborhoods with the highest concentrations of disadvantaged

¹ Currently, the MASH Program does not have an equivalent workforce development or job trainee hire requirement.

residents. The SASH and MASH Programs already work in the disadvantaged communities identified by CalEPA so would be very easy to meet these requirements without any significant changes to their current marketing and outreach strategies.

Principle 1: Open, Inclusive and Transparent Process

The SASH/MASH programs are overseen by the CPUC and therefore comply with the CPUC's strict guidelines for open, inclusive, and transparent communications. The SASH and MASH programs were developed through the CPUC's standard, public rulemaking procedures with input from a broad range of stakeholders, including utility companies, non-profit and community-based organizations, affordable housing providers, solar companies, and related industry organizations. Subsequently, the CPUC hires a third-party to conduct bi-annual evaluations of SASH/MASH.

SASH and MASH project data is open to the public and is updated weekly on the California Solar Statistics website². Also, SASH is subject to quarterly progress reporting and MASH is subject to semi-annual progress reporting, which provide detailed information on the programs ongoing progress and are available on the CPUC³ website. These reports can include specific updates for GGRF funded projects.

Principle 2: Address High Priority Needs

California has set aggressive renewable energy goals and is making significant investments in the State's clean energy economy. Low-income families and communities should also benefit from these investments and have equitable access to solar energy and related jobs. As SASH/MASH funding nears its end, there is an immediate need to identify supplemental funding to ensure continued solar access for these communities. Since the CSI program is funded by PG&E, SCE, and SDG&E customers, SASH and MASH are currently only available to low-income families in their service territories. With GGRF investments, it would be very easy to expand low-income solar programs to municipal and publicly-owned utility territories and giving disadvantaged communities throughout the State an equal opportunity to participate in California's growing solar industry.

Principle 3: Benefits Outweigh Burdens

The benefits of these programs significantly address all of the goals outlined by CARB for GGRF investments, and having the option to leverage existing low-income solar programs all but eliminates the burdens of having to spend time and resources to design, test, and evaluate a new program. With SASH and MASH, the infrastructures are in place to immediately implement programming, the public/private partnerships are well established, and there is an extensive statewide network of existing partnerships between stakeholders in the communities being served and the implementing agencies.

Finally, because these projects are designed to significantly decrease monthly household expenses from day-one, low-income residents are not saddled with additional financial burdens.

² <http://www.californiasolarstatistics.ca.gov/>

³ <http://www.cpuc.ca.gov/PUC/energy/Solar/legreports.htm>

Appendix F

State Transit Assistance

Program Description:

STA provides funding to local transit operators and regional transportation planning agencies to fund a portion of the operations and capital costs associated with local mass transportation programs. Agency: Business, Transportation and Housing.

Proposed Use for Greenhouse Gas Reduction Fund (GGRF) Revenues:

To increase transit ridership and reduce GHG emissions statewide, a portion of GGRF revenues would be allocated to the STA program. Funds would be targeted at operating increased levels of transit service and implementing fare reduction strategies that incentivize greater transit utilization. Changes to the program (discussed below) would be made to accomplish these objectives.

Statement of Need and GHG Nexus:

Reducing driving through increased use of public transit is a necessary component of an effective strategy to meet AB 32 goals. California's transportation sector is responsible for the most GHG emissions of any sector – 38% – and private vehicle use is the largest contributor to a household's carbon footprint.¹ Public transit provides Californians with a low-carbon alternative to driving. Studies show that public transit reduces automobile use,² produces significantly lower GHG emissions compared to single-occupant vehicle use,³ and facilitates higher density development⁴ and travel patterns with lower carbon impacts.⁵

Using public transit is one of the most significant steps individuals can take to reduce household GHG emissions.⁶ By taking public transit to work instead of driving, an individual with a 20-mile round trip commute will reduce his or her CO₂ emissions by approximately 4,800 pounds per year.⁷ This represents a 10% reduction of *all* GHG emissions for a typical two-adult two-car household.⁸ If a two-car household eliminated one car and used public transit instead, it could potentially see a 30% reduction in its GHG emissions.⁹

While transit ridership has reached record levels in recent years and demand continues to rise, transit systems have struggled to maintain existing service levels due to insufficient funds to pay for operating expenses. The recession's impact on local revenues combined with diversions of transit operating funds by the State between 2000 and 2009, forced nearly every transit agency to implement deep service cuts and fare increases. Operating funds are desperately needed as California already has an estimated \$22 billion transit operating shortfall through 2020.¹⁰

Co-benefits:

Public transit reduces localized air pollution, creates jobs carried out by California workers (e.g., bus and train operators, mechanics) and businesses,¹¹ generates beneficial economic multiplier effects to local economies,¹² and increases mobility for disadvantaged communities.

Benefit to Disadvantaged Communities:

Transit riders are disproportionately low-income and live in households that have lower automobile ownership rates than the rest of the population. Public transit also serves high concentrations of people of color, the elderly, persons with disabilities, immigrants and youth. Increasing transit service can be a powerful anti-poverty strategy as very-low-income households can spend up to 55% of their budget on transportation.¹³ Households that use public transit save an average of \$6,251 per year.¹⁴

SB 535 Nexus:

To count towards the SB 535 25% minimum for funds spent to benefit residents of disadvantaged communities, GGRF revenues should be used to improve service on transit routes that carry high proportions of residents from disadvantaged communities or implement fare reduction programs that benefit such residents. To count toward the 10% minimum for funds that are spent within disadvantaged communities, GGRF revenues should provide increased service on routes that run through disadvantaged communities and carry high proportions of riders who live in those communities.

Modifications to the STA Program: To ensure that GGRF revenues allocated to the STA program maximize GHG reductions and co-benefits, including benefits to disadvantaged communities, the STA program in Pub. Util. Code, Article 6.5, beginning with § 99310, should be modified as follows:

- Provide for a transfer of funds from the GGRF to the Public Transportation Account. All of the GGRF funds would be allocated to transit operators using existing STA revenue-based formulas. (For the 2013-14 and 2014-2015 fiscal years, however, regional transportation agencies and county transportation commissions would be allowed to allocate GGRF revenues to transit operators for demonstration projects.)
- The use of GGRF revenues would be restricted to increasing transit ridership by (1) operating greater levels of transit service, (2) addressing transit capital needs associated with increased service levels, and (3) implementing fare reduction programs that incentivize greater transit utilization.
- Transit operators would be required to provide meaningful opportunities for public input early in the planning and budgeting process, including opportunities for disadvantaged communities to identify service improvements and fare reduction programs that would benefit them.
- Transit operators would be required to annually report: (1) how the GGRF revenues were spent, (2) changes in ridership and service levels (using metrics by which agencies report to the National Transit Database) attributable to such expenditures, and (3) the specific service improvements and/or fare reduction programs that benefited disadvantaged communities.

Principle 1: Open, inclusive and transparent decision-making process:

The Controller's annual STA allocation estimate should specify the minimum proportion of GGRF dollars that must be allocated by each transportation planning agency or county transportation commission to benefit disadvantaged communities. Transit operators would be required to hold accessible workshops to solicit and consider input from residents of disadvantaged communities to identify priority investments. The workshops should occur early enough in the planning process to influence staff recommendations on how to invest GGRF revenues.

Principle 2: Funds must address high priority needs:

Disadvantaged communities often lack access to public transit or suffer from inadequate service levels and high fares. For many of their residents, public transit is the primary way to access employment, education, health care, grocery stores and other vital necessities. Cuts to public transit services throughout California over the past decade have fallen hardest on low-income residents, people of color, seniors, and persons with disabilities. In Los Angeles alone, nearly 1 million hours of bus service were eliminated between 2007 and 2011, affecting a ridership population that is overwhelmingly low-income and 90 percent African American, Latino, and Asian Pacific Islander.¹⁵ The average income of an LA Metro bus rider is just under \$14,000.¹⁶

Principle 3: Benefits must outweigh burdens:

Few burdens are associated with operating greater levels of transit service. Nominal increases in traffic and emissions resulting from additional transit vehicles in service are offset by overall reductions in traffic and emissions from reduced automobile use. In contrast, transit capital expansion projects can involve construction and activities that displace or otherwise negatively impact surrounding neighborhood residents and local businesses. The benefits associated with fare reduction programs targeted at disadvantaged communities include cost savings and increased mobility as a result of greater transit utilization.

For more information, please contact Guillermo Mayer, Public Advocates, at gmayer@publicadvocates.org or (415) 625-8456.

1 American Public Transit Association (hereafter "APTA"), Public Transportation Reduces Greenhouse Gases and Conserves Energy 2 (Feb. 2008), available at <http://www.apta.com/resources/reportsandpublications/Pages/EnergyEnvironment.aspx>.

2 Id.

3 Id.

4 Id. at 3 ("Higher density development—including transit-oriented development (TOD), multi-use buildings, and compact apartments and office space—is more energy efficient and extends public transportation's contribution by integrating it with other sectors of our economy.").

5 Id.

6 Id. See also Science Applications International Corporation, Public Transportation's Contribution to U.S. Greenhouse Gas Reduction (Sept. 2007), available at <http://www.apta.com/resources/reportsandpublications/Pages/EnergyEnvironment.aspx>.

7 Id.

8 Id.

9 Id.

10 Yonel Grant and Josh Shaw, "Unmet Transit Funding Needs in California: FY2011-2020." (Lecture, Ninth National Conference of Transportation Asset Management, San Diego, CA, April 17, 2012).

11 Transit operating investments create 70 percent more jobs than transit capital investments. See Economic Development Research Group Inc., *Economic Impact of Public Transportation Investment 30* (prepared for APTA) (Oct. 2009) (finding that 41,000 jobs are created per billion dollars spent on operating expenses compared to 24,000 jobs created per billion dollars spent on capital investments).

12 "[E]very \$10 million in operating investment in public transportation yields \$32 million in increased business sales." APTA, *Public Transportation Benefits*, available at <http://bit.ly/d9O3hC>. See also P. Haas, B. Taylor, S. Van Beek, K. Samples, J. Li & D. Lewis, *Capital and Operating Grants for Transit in California: The Effects of Outlays and Expenditures* (July 1997) (finding that "operating expenditures generate more employment and economic growth than do capital expenditures.").

13 Reconnecting America, *Mixed-Income Housing near Transit: Increasing Affordability With Location Efficiency* (2009), available at <http://bit.ly/10A9c15>.

14 H.R. 6052, introduced on May 14, 2008.

15 Bus Riders Union, et al., *Transit Civil Rights and Economic Survival in Los Angeles 4* (Oct. 2011), available at <http://bit.ly/IWDUrO>.

16 Id.

Appendix G

Transit-Oriented Development (TOD) Housing Program

Program Description: The state's Transit-Oriented Development (TOD) Housing Program promotes the development of homes in close proximity to transit. The program provides low-interest loans as gap financing for rental developments that include homes affordable to lower-income households, and as mortgage assistance for homeownership developments. In addition, grants are available to cities, counties, and transit agencies for infrastructure improvements and better transit connectivity to support the development of qualified housing. **Agency:** CA Department of Housing and Community Development.

Proposed Use: To provide transit-oriented housing affordable to very-low income households, who own fewer cars and use transit at significantly higher rates than the general population.

Statement of Need and GHG Nexus: SB 375 aims to reduce GHGs by coordinating regional transportation and land use planning to reduce driving and increase transit use. TOD is a key strategy for meeting these goals. Proximity to transit is a major contributor to transit use¹ and can significantly reduce VMT.² Building more housing closer to transit stops increases the number of people who do not need to rely primarily on automobiles, reducing VMT and GHG emissions. A 1993 study of California TODs showed that of residents who had previously "lived away from transit, 52.3 percent switched to transit commuting upon moving within ½ mile walking distance of a rail station."³

For TOD to succeed as a GHG-reduction strategy, it must include housing affordable to very low income families. Simply locating more people near transit is not by itself enough to achieve VMT and GHG reductions: transit-proximate residents must actually ride transit.⁴ As has been described in a new report⁵ by the California Housing Partnership Corporation as well as other long-standing research, because residents with household incomes under about \$20,000 – those in the very low income category – have far lower rates of auto ownership and higher rates of transit ridership than the general population, building affordable homes near transit is a key strategy to maximize the potential of TOD. A quarter of these households own no car at all (compared to 8.3% overall), and another half own only one car.⁶ More dependent on transit, very low income residents take more than four times as many transit trips as members of the population at large.⁷

Emphasizing affordable homes in TOD is also critical to avoid unintended consequences that could undermine the environmental benefits of such development. Studies have found that TOD can backfire by displacing transit-using lower income families from transit-rich urban neighborhoods.⁸ (TOD rents are typically 10-20% higher than in comparable residential neighborhoods.⁹) When TOD displaces these families, it not only reduces ridership by making transit inaccessible to the most frequent transit riders, it also increases the likelihood that a very low-income household will purchase a high-polluting but cheap used car.¹⁰

The state's Transit-Oriented Development Housing Program is well designed to maximize GHG reduction from TOD by providing critical financing and infrastructure investments to support new development near transit *and* by ensuring that homes affordable to lower-income households are integrated into this development.

Co-benefits: In addition to GHG reduction benefits, providing housing near transit affordable to very-low-income families has health, mobility and economic co-benefits. Health co-benefits include reduced auto emissions, including co-pollutants; increased active transportation (walking, biking), associated with lower rates of obesity and chronic diseases like diabetes; and health benefits

associated with stable, safe and affordable housing. Mobility co-benefits include greater accessibility to transit; increased transit ridership, which improves the economic viability of transit agencies and allows them to increase service; and reduced vehicle traffic. Economic co-benefits include greater job accessibility for low-income families, the creation of permanent jobs carried out by California workers (e.g., property managers, grounds maintenance staff, bus and train operators, mechanics) and businesses; the generation of economic multiplier effects to local economies; and the leveraging of federal funding streams. Construction of TOD projects leverages private and federal investment and provides new job opportunities. Finally, affordable TOD housing is an effective anti-poverty program, significantly reducing the combined housing and transportation (H+T) cost burden on low-income families.

Benefit to Disadvantaged Communities: Affordable TOD housing allows disadvantaged residents to live near transit and jobs, reduces household H+T cost burden, and stabilizes and protects against the risk of displacement low-income residents who are core transit riders. This increased residential stability has major health benefits for low income families, such as reducing stress and increasing available resources for nutritious food and health care costs. Proximity to transit increases access to amenities, education, healthcare, grocery stores and other vital destinations, especially for people of color, the elderly, people with disabilities, and youth. When affordable TOD is located in healthy, high-opportunity places, lower income families benefit from improved health, education and economic outcomes.

SB 535 Nexus and Proposed Use of GGRF Allocation: Eligible uses of Greenhouse Gas Reduction Fund (GGRF) allocations under SB 535 would include low-interest loans for affordable homeownership and rental development affordable to very low-income residents. To count towards the 25% minimum for funds spent to benefit disadvantaged residents, GGRF allocations for the TOD program should fund the development of housing affordable to very low income residents near transit nodes, both in disadvantaged communities and in other communities. To count toward the 10% minimum for funds that are spent within disadvantaged communities, GGRF allocations should fund the development of housing affordable to very low income residents near transit nodes in disadvantaged communities.

Modifications to the TOD Housing Program: Housing California produced evaluations of the first¹¹ and second¹² funding rounds after awards were made, taking into consideration feedback from an expert advisory committee. The formal recommendations for future iterations of the program include:

- Funds should only finance homes that are affordable to very low- or low-income households;
- Density should be used as a scoring criterion, rather than project size;
- Additional points should be given to developments that achieve additional GHG reductions or energy conservation through onsite renewable energy, energy efficiency, discounted or free transit passes, car sharing, or other similar features.

Principle 1: Open, inclusive and transparent process: Housing and transportation planning agencies would be required to hold accessible workshops to solicit and consider input from residents of disadvantaged communities for a proposed TOD project. The workshops would occur early enough in the planning process to influence staff recommendations on how to invest GGRF allocations.

Principle 2: Address High Priority Needs: Local public workshops would identify high priority residential and commercial development needs of disadvantaged communities for the TOD project.

To address high poverty and unemployment in disadvantaged communities, they should be hired for jobs associated with constructing the TOD project.

Principle 3: Benefits Outweigh Burdens: Without affordable housing, TOD can impose displacement and other burdens on low-income residents, including the loss of the small business that serve them. Funds earmarked for the TOD Housing Program will protect against those burdens by producing homes affordable to very low income households. This will help stabilize gentrifying neighborhoods, promoting mixed-income communities that include disadvantaged residents and high propensity public transit users.

For more information, please contact Parisa Fatehi-Weeks, Public Advocates, at pfatehi@publicadvocates.org.

¹ Reid Ewing and Robert Cervero, "Travel and the Built Environment A Meta-Analysis," *Journal of the American Planning Association* 76, No.3 (2010): 10 URL: <http://dx.doi.org/10.1080/01944361003766766>; Robert Cervero, "Transit Oriented Development's Ridership Bonus: A Product of Self-Selection and Public Policies," *Environment and Planning* 39, (2007): 2073, 2078.

² John Holtzclaw, Robert Clear, Hank Dittmar, David Goldstein, and Peter Haas, "Location Efficiency: Neighborhood and Socio-Economic Characteristics Determine Auto Ownership and Use - Studies in Chicago, Los Angeles and San Francisco," *Transportation Planning and Technology* 25, No.1, (2002). <http://dx.doi.org/10.1080/03081060290032033>; Linda Bailey, Patricia L. Mokhtarian, Ph.D., and Andrew Little, *The Broader Connection between Public Transportation, Energy Conservation and Greenhouse Gas Reduction*, (ICF International for the American Public Transportation Association 2008), 11-14.

³ Cervero, "Transit Oriented Development's Ridership Bonus," 2069.

⁴ Alex Karner, Ph.D., and Deb Niemeier, Ph.D., *Alternative scenarios, affordable housing, and vehicle-miles traveled in the Bay Area*, (UC Davis Center for Regional Change, May 2012). Citing Matthew E. Kahn, "Gentrification Trends in New Transit-Oriented Communities: Evidence from 14 Cities That Expanded and Built Rail Transit Systems," *Real Estate Economics* 35, no. 2 (2007); Stephanie Pollack, Barry Bluestone, and Chase Billingham, "Maintaining Diversity in America's Transit-Rich Neighborhoods," (Dukakis Center for Urban and Regional Policy, 2010); Kara S. Luckey, "Assessing the Effectiveness of Approaches to the Allocation of Low-Income Housing Tax Credits in Proximity to Rail Transit" (paper presented at the 91st Annual Meeting of the Transportation Research Board, Washington, DC, 2012); Martin Danyluk and David Ley, "Modalities of the New Middle Class: Ideology and Behaviour in the Journey to Work from Gentrified Neighbourhoods in Canada," *Urban Studies* 44, no. 11 (2007).

⁵ Megan Kirkeby and James Pappas. "Building and Preserving Affordable Homes Near Transit: Affordable TOD as a Greenhouse Gas Reduction and Equity Strategy" California Housing Partnership Corporation http://www.chpc.net/dnld/FullReport_CHPCAffordableTOD013113.pdf

⁶ Pucher, John, and John L. Renne, "Socioeconomics of Urban Travel: Evidence from the 2001 NHTS," *Transportation Quarterly*, 57, No. 3, (2003): 49-77. See forthcoming report from the California Housing Partnership Corporation, *Building and Preserving Affordable Homes near Transit: Affordable TOD as a Greenhouse Gas Reduction and Equity Strategy*, January 2013.

⁷ Id.

⁸ Stephanie Pollack et. al., *Maintaining Diversity In America's Transit-Rich Neighborhoods: Tools for Equitable Neighborhood Change*, Dukakis Center for Urban and Regional Policy, Oct. 2010, p. 24).

⁹ Keith Wardrip, *Public Transit's Impact on Housing Costs: A Review of the Literature* (Center for Housing Policy, 2011).

¹⁰ See Pollack, *Maintaining Diversity*, 12, 24.

¹¹ Sharon Sprowls. "Evaluation of First Round Awards Under California's Transit-Oriented Development (TOD) Housing and Infill Infrastructure Grant (IIG) Programs" Housing California. Available at: http://www.housingca.org/site/PageServer?pagename=policyissues_landuse

¹² Sharon Sprowls, Nathan Cataline and Judson Brown. "Evaluation of California's Transit-Oriented Development (TOD) Housing and Infill Infrastructure Grant (IIG) Programs" Housing California. Available at: http://www.housingca.org/site/PageServer?pagename=policyissues_landuse