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An Evaluation of California's Continuously Appropriated Programs Funded through Cap-and-Trade

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**An Evaluation of California's Continuously Appropriated Programs
Funded through Cap-and-Trade**

By

Domingo Candelas

A Thesis Quality Research Paper
Submitted in Partial Fulfillment of the
Requirements for the Master's Degree in

PUBLIC ADMINISTRATION

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The Graduate School

San Jose State University

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Abstract

In 2006, the State of California passed AB 32, the Global Warming Solutions Act (CARB, 2014). Through this legislation, the state sought to reduce its carbon emissions to 1990 levels by 2020. The California Air Resources Board (CARB) was tasked with doing so and thus instituted the Cap-and-Trade program, a market-based mechanism to reduce emissions. Additionally, legislation has further directed funding on an annual basis for various continuously appropriated programs. This paper will examine the efficacy of those continuously appropriated programs and their legislative intent.

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INTRODUCTION

In 2006, the California legislature successfully passed AB 32, the California Global Warming Solutions Act. This created the Cap-and-Trade program that currently funds various programs and projects throughout the state to reduce greenhouse gas emissions (GHG). This report will examine GHG emissions, as reported to the California Air Resources Board (CARB), and the continuous funding allocation to various GHG mitigation programs. Furthermore, this study will analyze their efficacy by identifying the reductions in GHG emissions that have occurred, as well as the investments made to-date, and review their match to the legislative mandate.

BACKGROUND

Strong scientific evidence indicates an increase in global climate temperatures across the planet (Stocker, 2014). Climate change has increased the volatility of government budgets for natural disaster response, as wildfires devastate communities as a result of years of drought and warmer temperatures (Pierre-Louis, 2018). The social and health impact on disadvantaged communities near heavy carbon-emitting facilities is significant. Cases of asthma and breathing illnesses in children are higher in economically disenfranchised neighborhoods, including those that are near freeways (Hajat, Hsia, and O'Neill, 2015).

GHG-based illness in the population can lead to a larger spending of scarce public resources for medical care and less spending for essential government functions, such as public safety and social safety-net services (Stone and Fiedler, 2017). Although the *degree* to which climate change is happening is often debated, there is no denying that it *is* happening; and United Nation's action to stymie growing global carbon pollution has been successful (Masson-Delmotte, 2018). California has taken the lead in dealing with climate change—in the last decade, the state has significantly invested in programs with the goal of reducing harmful emissions. This paper will examine those emission investments and the legislature's continuous funding allocation programs, with the goal to analyze their efficacy to examine whether they are meeting the program's legislative intent.

Government Action: The Montreal and Kyoto Protocols

Global climate action is not new and actually began in the late 1980's. In September 1987, the Montreal Protocol was signed. This multi-national agreement sought to end the production and use of chlorofluorocarbons (CFCs), and other ozone-depleting substances, commonly used in aerosol propellants and in air-conditioning and refrigeration units (UN Environment, 2017). Government intervention is working, as scientist have uncovered positive

evidence to suggest that Earth's Ozone layer is essentially "healing" over Antarctica (McGrath, 2016). In 1992, 172 government participants convened in Rio de Janeiro, Brazil at the UN Conference of Environment and Development (UN, 2017). This set up the initial framework for an environmental protection process that would eventually follow. In 1997, the Kyoto Protocol was signed, which set the goals and targets to reduce GHGs, and specifically identified carbon dioxide (CO₂), methane, nitrous oxide, hydrofluorocarbons, and perfluorocarbons as negative pollutants (UN, 1998). The global community's focus on GHG solutions was now firmly underway.

Carbon markets, at times referred to as emission trading programs, use the market to drive carbon pollution down while incentivizing investment in green technology (Environmental Defense Fund, 2018). Table 1 displays information about countries with carbon markets.

Table 1: *World Carbon Markets*

Country	GHG Emission Target	Greenhouse Gasses Covered	Average Price of Carbon
California (USA)	Reduce emissions to 1990 levels by 2020 (AB 32); 40% below 1990 levels by 2030 (SB 32); 80% below 1990 levels by 2050 (Executive Order S-3-05).	Carbon Dioxide (CO ₂), methane (CH ₄), nitrous oxide (N ₂ O), sulfur hexafluoride (SF ₆), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), nitrogen trifluoride (NF ₃), and other fluorinated GHGs.	\$11.65 (2014) \$15.06 (Q4 2017)
Australia	Economy-wide commitment to 5% below 2000 levels by 2020 and 26% to 28% below 2005 levels by 2030 (as outlined in NDC).	Safeguard mechanism covers carbon dioxide (CO ₂), methane (CH ₄), nitrous oxide (N ₂ O), sulfur hexafluoride (SF ₆) and HFCs.	The volume weighted average price for each of the ERF auctions has been AUD\$13.95 (auction 1), AUD\$12.25 (auction 2), and AUD\$10.23 (auction 3). The average price across the three auctions equates to AUD\$12.10.
Japan	Contribute to the TMG's overall goal: 25% GHG reduction below 2000 levels by 2020; 30% reduction below the 2000 level by 2030.	Energy-related carbon dioxide (CO ₂).	3,500 JPY or 31.5 US\$ for excess reduction credits (2015, decided among facilities).
Republic of Korea	To reduce 37% below the Republic of Korea's Business as Usual emission levels by 2030.	Carbon dioxide (CO ₂), methane (CH ₄), nitrous oxide (N ₂ O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), and sulphur hexafluoride (SF ₆).	According to monthly price updates provided by the Climate Change Research Institution of Korea, the average closing price of KAU15s traded in the Korea Exchange (KRX), between January 2015 and June 2016, was KRW 16,520/tCO ₂ e. KAU15 prices were at its highest on May 19, 2016, reaching KRW 21,000/tCO ₂ e. According to monthly price updates provided by the Climate Change Research Institution of Korea, the average closing price of KCU15s traded in the KRX, between January 2015 and June 2016, was KRW 18,500/ tCO ₂ e. KCU15 prices were at its highest on June 7, 2016, reaching KRW 18,500/tCO ₂ e.
Source: Environmental Defense Fund, 2018			

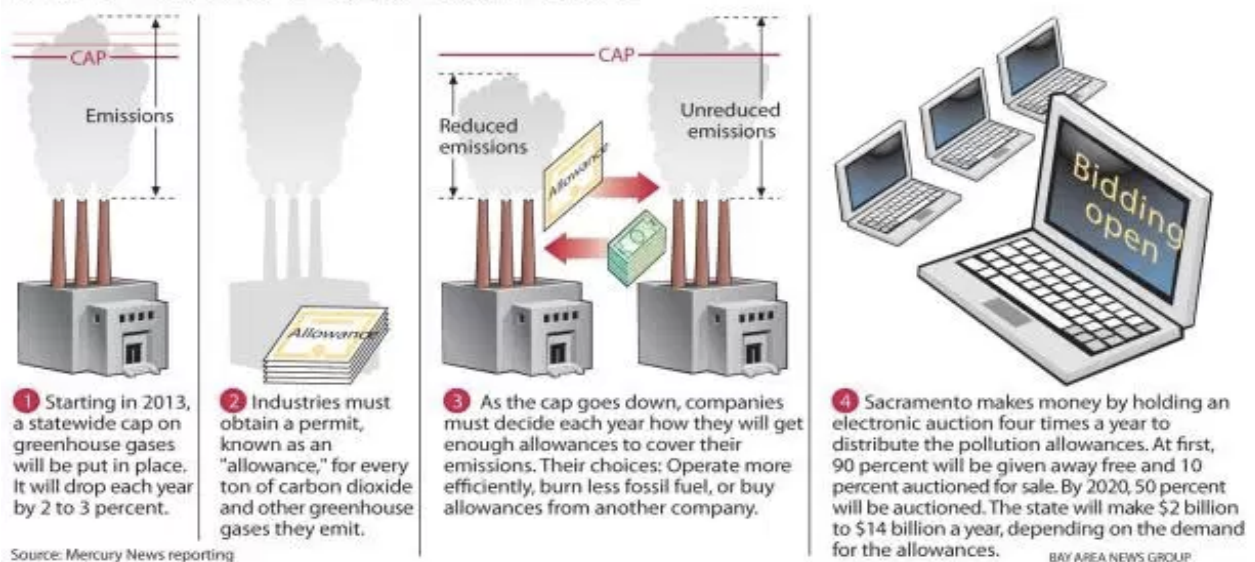
AB 32

In 2006, California took a bold step towards curtailing climate change by enacting AB32, the California Global Warming Solutions Act. It was a bipartisan effort spearheaded by the Democrat Speaker of the Assembly, Fabian Nunez, and the Republican Governor, Arnold Schwarzenegger. Both leaders carefully constructed this policy without sacrificing their priorities in their respective sides of the aisle (Tamminen, 2013). The goal was to establish a mechanism that would not hurt business and economic growth while protecting the environment. AB 32 requires the state's global warming pollution be reduced to 1990 levels by 2020, which is to be accomplished through an enforceable and declining statewide cap on global warming emissions (CARB 2017a). Subsequent action by the legislature in 2016 established an "additional target of reducing emissions by at least 40% below 1990 levels by 2030" (Taylor, 2017, p. 3).

Figure 1. *Cap-and-Trade Program visual.*

How California's cap-and-trade will work

Rather than having a strict government mandate, like a carbon tax, to reduce pollution, a cap-and-trade system uses market mechanisms to reward companies that figure out ways to reduce pollution below the level the government sets. California's cap-and-trade rules, which will affect oil refineries, power plants and large factories, take effect Jan. 1.



Source: San Jose Mercury News, 2007

Cap-and-Trade Program

AB 32 directed the CARB to develop appropriate regulations and establish a mandatory reporting system to track and monitor global warming emissions levels in order to effectively implement the cap. This “Scoping Plan” is to be updated every five years. CARB created the Cap-and-Trade program, [Figure 1] which can be defined as follows:

A market based regulation that is designed to reduce greenhouse gases (GHGs) from multiple sources. Cap-and-trade sets a firm limit or cap on GHGs and minimizes the compliance costs of achieving AB 32 goals. The cap will decline approximately three percent each year beginning in 2013. Trading creates incentives to reduce GHGs below allowable levels through investments in clean technologies. With a carbon market, a price on carbon is established for GHGs. Market forces spur technological innovation and investments in clean energy. Cap-and-trade is an environmentally effective and economically efficient response to climate change (CARB, 2019, np).

The Cap-and-Trade program is a crucial element in California’s GHG emission-reduction strategy. Under this program, CARB places a statewide limit, or cap, on GHG emissions by issuing a limited number of tradeable permits, or allowances, which is equal to the cap (CARB, 2014).

The notion is that, each year, the number of allowances must decline to achieve the intended emission reductions. Each source, as defined in the Scoping Plan that is subject to the Cap-and-Trade regulation, must turn in one allowance or offset credit for every carbon emission unit it produces. That way, a business has a strong incentive to reduce carbon emissions and trade or sell their surplus allowances to a company that finds it more expensive to reduce their emissions (CARB, 2017b).

In 2017, the legislature reauthorized the Cap-and-Trade program with a two-thirds vote for AB 398, thereby extending the program and reinforcing the legal certainty of the legislation (Megerian and Fox, 2017).

Greenhouse Gas Reduction Fund Programming

The revenues generated from the Cap-and-Trade auctions of allowances are deposited into the Greenhouse Gas Reduction Fund (GGRF) and subsequently appropriated to various state agencies tasked with reducing GHG emissions. Funding is disbursed to local governments and non-governmental organizations to reach the goals established by AB 32 (CARB, 2017). This paper examines the funding deposited into the GGRF and continuously appropriated to the various programs to analyze whether they are meeting their legislative intent.

Continuous appropriation of funding

Each year, the California legislature invests billions of dollars in the form of appropriations or “the authorization or program to make expenditures/incure obligations for a specific purpose and period of time” (California Department of Finance, 2019, p. 2). However, when the specific appropriation occurs under a permanent constitutional or statutory expenditure authority without further legislative action, it is a continuous appropriation (California Department of Finance, 2019). This dedicated funding source is permanent and no longer up for debate on a year-by-year basis, thereby eliminating the need for an annual debate on the specific budgetary appropriation.

Mandated reporters

In California, certain facilities that emit GHGs, suppliers of certain fuels and carbon dioxide, and electric power entities are mandated to report their emissions to the CARB (CARB, 2017). These facilities include large factories, such as cement producing plants that combust coal, refineries that produce gasoline and diesel fuel, and automobile manufacturers. Over 800 of these facilities or entities fall under the mandatory reporting requirements within the state, and these entities

must comply with California's clean-air regulations instituted through AB 32 and the Cap-and-Trade program (CARB, 2018a).

GHG goals in California

In 2005, the GHG emissions in California were 480 Million Metric Tons (MMT) of carbon dioxide equivalent (CO₂e), of which 421 MMT was CO₂. This amounted to 7% of U.S. GHG emissions and 1.4% of global GHG emissions. "California's CO₂ emissions in 2005 fell between 13th-ranked Iran (467 MMT) and Mexico (415 MMT)" (Dean, 2016, p. 1).

Given below are the emission reduction goals in California as per AB32, as summarized by Dean (2016):

- Target for 2010: Get back to year 2000 emissions (466 MMT, 4% below 2005 level), which was accomplished by 2009;
- Target for 2020: Get back to year 1990 emissions (431 MMT), set in statute by AB 32 (Nunez, 2006);
- Target for 2030: 40% below 1990 level, set in statute by SB 32 (Pavley, 2016);
- Target for 2050: 80% below 1990 level.

California Climate Investments

CARB provides annual reports to the legislature regarding Climate Investments. The California Climate Investments report details how Cap-and-Trade Auction Proceeds are spent. The 2018 report includes certain cumulative outcome totals for projects, the number of Zero-Emission Vehicles (ZEV's) rebates issued, acres of land preserved or restored, and the number of transit agencies that have added or expanded transit options, to name a few (CARB, 2018a). The legislature has appropriated "nearly \$6.1 billion to state agencies administering GHG emission reduction programs and projects" (CARB, 2018b, p. 2 [ii.]).

Figures 2, 3 and 4 list programs that receive appropriations through the GGFR as of February 15, 2018 (CARB, 2018c).

Figure 2. CA Climate Investments I.





CALIFORNIA CLIMATE INVESTMENTS
APPROPRIATIONS FROM THE GREENHOUSE GAS REDUCTION FUND
As of February 15, 2018
Natural Resources and Waste Diversion

	Total Appropriations to Date (\$M)
Coastal Conservancy	
Climate Ready Program and Adaptation – NEW for FY 2017-18	\$6
Conservation Corps	
Training and Work Program – NEW for FY 2017-18	\$5
Department of Fish and Wildlife	
Wetlands and Watershed Restoration	\$42
<i>Funds restoration and enhancement of wetlands and mountain meadow ecosystems</i>	
Department of Food and Agriculture	
Dairy Digester Research and Development Program and Alternative Manure Management Program	\$161
<i>Funds installation of anaerobic digesters and non-digester related manure management practices</i>	
Healthy Soils Program	\$8
<i>Provides incentives for on-farm management practices that will build soil carbon</i>	
Department of Forestry and Fire Protection	
Wildfire Prevention and Forest Health – NEW for FY 2017-18	\$75
Forest Health Program and Urban and Community Forestry Program	\$302
<i>Funds forest health restoration, reforestation projects, and urban forestry projects</i>	
Department of Resources Recycling and Recovery	
Waste Diversion	\$111
<i>Provides incentives for capital investments in composting/anaerobic digestion infrastructure and recycling manufacturing facilities that divert waste from landfills</i>	
Office of Emergency Services	
Wildfire Response and Readiness – NEW for FY 2017-18	\$25
Natural Resources Agency	
Urban Greening Program	\$106
<i>Funds expansion or enhancement of neighborhood parks, establishment of green street and alleyways and/or non-motorized urban trails</i>	
Wildlife Conservation Board	
Climate Adaptation and Resiliency Program – NEW for FY 2017-18	\$20


Note: Funding amounts were rounded to the nearest million dollars.
Appropriations listed are estimates based on published budgets, legislation, and quarterly Cap-and-Trade auction results.

For more information on California Climate Investments Program, visit
www.caclimateinvestments.ca.gov

Source: California Climate Investments, 2018

Figure 3. *CA Climate Investments 2.*


CALIFORNIA CLIMATE INVESTMENTS
APPROPRIATIONS FROM THE GREENHOUSE GAS REDUCTION FUND
As of February 15, 2018
Energy Efficiency and Clean Energy



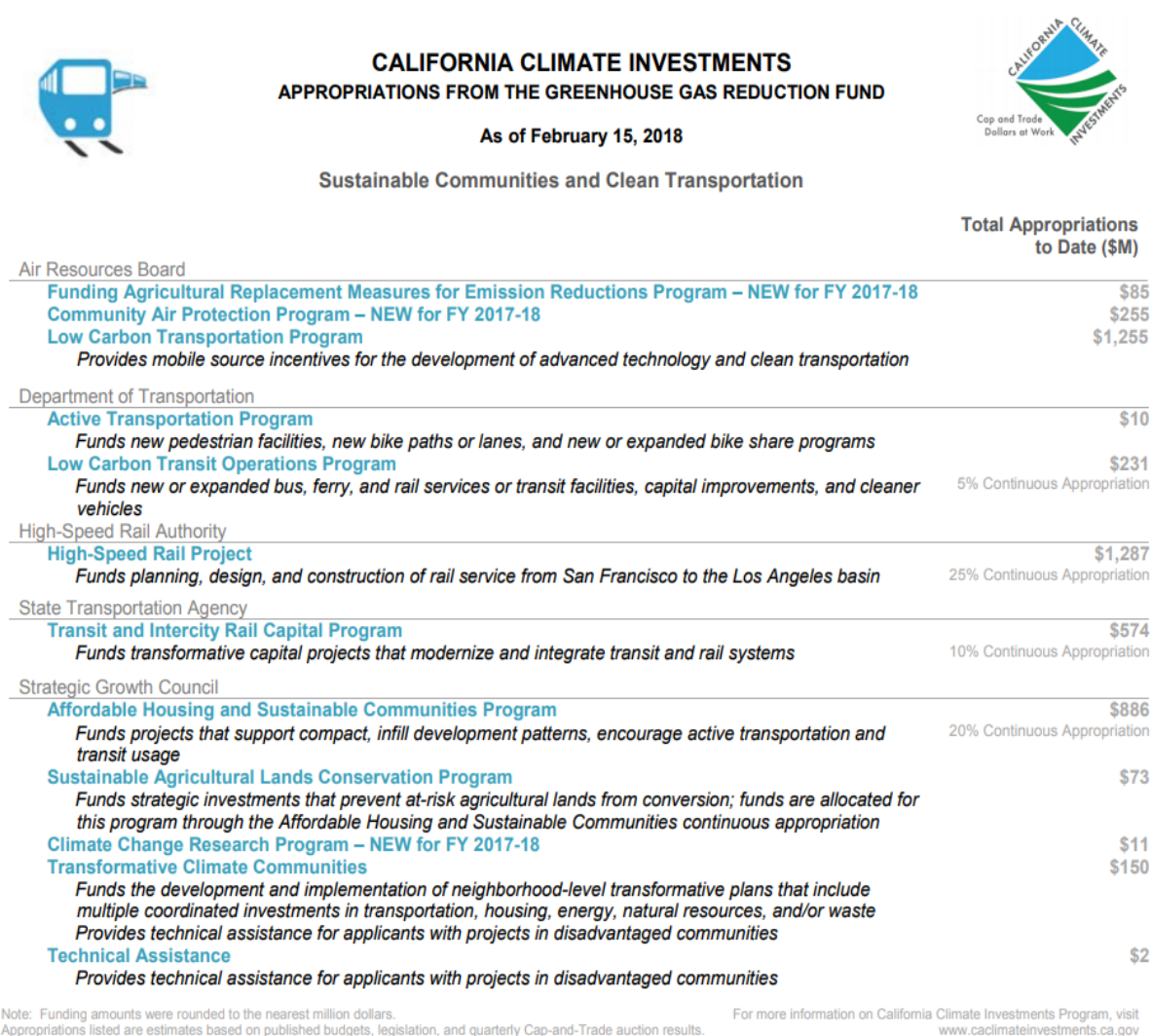
	Total Appropriations to Date (\$M)
Air Resources Board	
Woodsmoke Reduction <i>Provides incentives for replacing existing residential wood burning devices with cleaner, efficient heating devices</i>	\$5
Department of Community Services and Development	
Low-Income Weatherization Program <i>Funds installation of weatherization measures, solar water heaters, rooftop solar systems, and community solar</i>	\$189
Department of Food and Agriculture	
Alternative and Renewable Fuels <i>Funds for establishing specifications for low carbon renewable biofuels derived from agricultural waste</i>	\$3
State Water Efficiency and Enhancement Program <i>Provides incentives for irrigation systems, pump improvements, and fuel conversions for energy and water use efficiency</i>	\$66
Department of Water Resources	
State Water Project Turbines <i>Provides replacement of two hydroelectric turbine runners on the State Water Project</i>	\$20
Water-Energy Grant Program <i>Funds residential, commercial, or institutional water efficiency projects</i>	\$50
Energy Commission	
Renewable Energy for Agriculture Program – NEW for FY 2017-18	\$6
Food Production Investment Program – NEW for FY 2017-18	\$60

Note: Funding amounts were rounded to the nearest million dollars.
 Appropriations listed are estimates based on published budgets, legislation, and quarterly Cap-and-Trade auction results.

For more information on California Climate Investments Program, visit
www.caclimateinvestments.ca.gov

Source: *California Climate Investments 2018*

Figure 4. CA Climate Investments 3.



Source: California Climate Investments 2018

Every year, the California Legislature appropriates funding to various programs throughout the state. However, in 2014, SB 862 mandated that the revenue from Cap-and-Trade be statutorily appropriated to specific programs, giving them 60% of the GGRF revenue as of FY 2015–2016 (CARB, 2018). These programs and their administrative agencies are as follows:

- a) Twenty five percent to the High-Speed Rail Project administered by the California High-Speed Rail Authority (CHSRA);
- b) Twenty percent to the Affordable Housing and Sustainable Communities (AHSC) Program administered by the Office of Planning and Research (OPR), Strategic Growth Council, and its member agencies;
- c) Ten percent to the Transit and Intercity Rail Capital Program (TIRCP) administered by the California State Transportation Agency (CalSTA); and
- d) Five percent to the Low Carbon Transit Operations Program (LCTOP) administered by the California Department of Transportation (Caltrans). (CARB, 2018, p. 6).

The other 40 percent of GGRF appropriations go towards programs and priorities that reduce emissions, with a goal to improve California’s climate. In 2017, the state established new legislative priorities and programs to ultimately meet the state’s “broad suite of climate goals and strategies” (CARB, 2018, p. 10). Examples of these new priorities are as follows:

- Air toxic and criteria air pollutants from stationary and mobile sources;
- Low- and zero-carbon transportation alternatives;
- Sustainable agricultural practices that promote the transitions to clean technology, water efficiency, and improved air quality;
- Healthy forests and urban greening;
- Short-lived climate pollutants, such as methane;

- Climate adaptation and resiliency; and
- Climate and clean energy research.

(CARB, 2018b, p. 10)

The Climate Community Investments (2018) report to the legislature describes updated laws about the Cap-and-Trade program appropriations. “In 2016, the Legislature passed AB 1550 (Gomez, Chapter 369, Statutes of 2016), which modified the SB 535 disadvantaged community investment minimums; and in 2017 the Legislature passed AB 398 (E. Garcia, Chapter 135, Statutes of 2017), which established additional legislative priorities for Cap-and-Trade auction proceeds” (CARB, 2018b, p. 6). Further, the following was the legislative action on AB 398:

[...] AB 617 (C. Garcia, Chapter 136, Statutes of 2017) to strengthen air quality monitoring and reduce community-level air pollution in the communities with high cumulative exposure to pollution. AB 617 provides a new community-focused action framework to improve air quality and reduce exposure to criteria air pollutants and toxic air contaminants in communities most impacted by air pollution. The bill recognizes that while California has seen tremendous improvement in air quality, some communities still suffer greater impacts than others. These communities require special attention and accelerated action. AB 617 builds on the foundation of existing air quality legislation and programs, providing additional tools to target actions in communities that bear the greatest burdens (CARB, 2018b, p. 10).

Continuously Appropriated Programs

SB 862 (2014) codified specific programs to be funded on an on-going basis.

Descriptions of those programs with their legislative intent follow.

High-Speed Rail (HSR) program

The purpose is to provide planning, designing, building, and operation of the first high-speed rail system in the nation (CARB, 2018b). Connecting mega-regions such as the San Francisco Bay Area and Los Angeles within the state will ensure that California maintains its economic vitality while mitigating negative environmental impacts, such as GHG emissions, associated with the increase in travel between Northern and Southern California (Taylor, 2011). Ultimately, the completion of the California High-Speed Rail Project “will decrease GHG and air pollutants such as NO_x, ROG, CO, PM and toxics, by over 50 million tons and more than one hundred thousand tons, respectively” (CARB, 2018b, p. 70). CARB is anticipating those reductions to be between 2025 and 2075.

Various short-term gains in GHG reductions can be attributed to the project even though the full implementation and completion of the project lies years ahead. The 2018 annual report to the legislature lists some short-term benefits to the GHG emission levels. This includes the recycling of construction waste, the use of clean-air construction equipment (through an agreement with the San Joaquin Valley Air Pollution Control District that replaces diesel engines), and an agreement with Cal Fire to offset construction emissions by funding urban and rural tree planting programs. Indirect short-term economic benefits include thousands of jobs for more than 400 small businesses, with over \$1 billion invested in disadvantaged communities between 2006 and 2017 (CARB, 2018b).

Affordable housing and sustainable communities (AHSC) program

It aims to provide affordable housing loans and other capital grants for affordable housing developments, housing-related infrastructure, sustainable transportation infrastructure, transportation-related amenities, and related programs (CARB, 2018b).

The following are the funding examples of this program:

- Laurel Grove Multi-Family Development in San Jose;
- St. James Station Transit Oriented Development improvements (Strategic Growth Council, 2016a); and
- Renascent Place for Low-Income and Extremely Low-Income Families Development in San Jose (Strategic Growth Council, 2016a).

Transit and intercity rail capital program (TIRCP)

This program's objective is to fund transformative capital improvements that will modernize California's intercity, commuter, and urban rail systems, as well as bus and ferry transit systems; significantly reduce GHG emissions and vehicle miles traveled, and reduce congestion (CARB, 2018b).

Funding examples include the following:

- BART to San Jose (Murphy, 2017); and
- SF Muni Light Rail Vehicle Fleet Expansion (CARB, 2018c).

Low-carbon transit operations program (LCTOP)

This program aims to "provide operating and capital assistance for transit agencies to reduce GHG emissions and improve mobility, with a priority on serving disadvantaged communities" (CARB, 2018b, p. 67).

The following are the funding examples:

- San Diego Student Transit Pass Reduced Fare Program to encourage public transit use (CARB, 2018b, p. 69); and
- Clipper Card System upgrade in the Bay Area.

Millions of dollars are appropriated to various programs on an on-going basis, creating opportunities for local governments to augment their budgets specifically for affordable housing, active transportation, and clean energy projects. AB 32 also created the Clean Air Vehicle rebate program, which provides cash incentives to assist individuals to purchase more environment-friendly vehicles, such as passenger vehicles with high gas mileage or even all-electric vehicles.

LITERATURE REVIEW

The literature in the field indicates a real threat of climate change. Perhaps one of the most consistent themes, made by various authors of different backgrounds, is that GHG emissions are a real threat to human health and welfare. Nordhaus (2017), Truong (2012), Burt (2012), and Wills (2014) all touch on some aspect of climate change. William Happer of Princeton University, a climate scientist, differs from the scientific consensus that global warming is a danger (Davenport, 2019). Each author offers a different approach to solving the problem, differing analysis of current programs, and comments on efficacy. However, Happer offers the contrarian belief that “more CO₂ will benefit the world” (Davenport, 2019). GHG emissions are causing climate change; so, evaluating to what extent and how California intends to tackle this problem is important.

On the other hand, some authors believe that the problem with air pollution is that it does not respect state boundaries, and, therefore, should be administered by the federal government, and not by states. Burt (2012) discusses the responsibility of regulating carbon gas emissions. The Federal Clean Air Act of 2006 states that the federal as well as the state government are obligated to “protect and enhance the quality of the Nation's air resources to promote the public health and welfare and the productive capacity of the population” (Federal Clean Air Act, 2006). With this broad language, and subsequent court actions such as the case of *Massachusetts v. EP* (2007), it is difficult to ascertain whether the GHG regulation is a primary function of the federal government, especially with an administration more skeptical of climate change. It is important to note that although Burt (2012) believes it is a best practice for federal regulation of GHGs, the author states that California’s Cap-and-Trade program is a “legitimate measure that will not be preempted by any of the existing clean air regulations” (p. 429). The constitutionality of the

program has withstood a court challenge. In 2017, the California Supreme Court refused to take up the case after the lower court's decision to uphold the merits of the Cap-and-Trade program and leave the program intact.

The California Legislature, through legislation, has directed that funding raised through the Cap-and-Trade Program directly impact communities that are affected the most by carbon emissions. Senate Bill 535 (2015) and Assembly Bill 1532 (2016) are highlighted as examples of bills that will seek to provide low-income and historically economically disadvantaged communities with direct investment from the Cap-and-Trade revenues. Each bill had a specific purpose, with SB 535 specifying where the revenue needs to be spent, while AB 1532 created the parameters of investment. The onus falls on the California Environmental Protection Agency (CalEPA) to identify the disadvantaged communities for investment through community engagement efforts, and come up with a strategy to reduce air pollution impacts in those areas. Truong (2012) makes a strong argument for investment in areas affected by high-pollution rates, and advocated turning them into solution areas. One strategy is an investment in green technology businesses, incentivizing the creation of well-paid jobs by leading strong economic outputs, which eventually get people out of poverty. The only caveat the author offered was having a strong vigilance to ensure proper investment (Truong, 2012).

Dr. William Happer of Princeton University is in the minority of scientists who do not believe in climate change. In fact, he “has gained notoriety in the scientific community for his statements that carbon dioxide — the greenhouse gas that scientists say is trapping heat and warming the planet — is beneficial to humanity” (Davenport, 2019, n.p.). This is not the norm, and in fact, he is considered by most in the scientific community as an outlier, mostly due to the

controversial nature of the study, funded by foreign oil companies, in which he has made such claims (Davenport, 2019).

Nobel Peace Prize-winning scientist William D. Nordhaus notes that the “most important single economic concept in the economics of climate change is the social cost of carbon (SCC)” (2017, p. 1518). In the study, Nordhaus estimates that “the SCC is \$31 per ton of CO₂ in 2010 US\$ for the current period (2015)” (2017, p. 1518). Quantifying the social implications attributed to GHGs is critical in shaping the narrative to the public to ease the political tension with voters.

Wills (2014) wrote about the role that companies such as Tesla play in the zero emissions vehicles (ZEV) market. They contribute positively to reducing the GHG emissions in the state, while also being the direct beneficiaries of the Cap-and-Trade program by receiving millions of dollars in subsidies (Wills, 2014).

Rabe (2016) analyzed why Cap-and-Trade programs faltered, while others, such as CARB’s, did not. The author notes, “particular emphasis on political resilience across election cycles, their ability to be flexible and adapt administratively through mid-course adjustments, and their capacity to build constituency support through benefit-allocation to offset opposition linked to cost imposition” (Rabe, 2016, p. 103).

For example, in California, a Democratic-controlled legislature passed a bill and managed to get it signed by a Republican governor. California’s Cap-and-Trade program survived a change in governor with the election of Democrat Jerry Brown and further election challenges. However, the political resiliency dynamic is not the single reason why Cap-and-Trade programs succeed or fail. A Cap-and-Trade program succeeds partly because of their design flexibility, which could allow for multi-year reinvestment programs in states such as California. This allows for the opportunity to build community support with incremental and

marginal gains occurring on a yearly basis (Rabe, 2016). And finally, perhaps the most essential, is the fact that resources generated from carbon allowance auctions need to be allocated towards communities that are largely affected by carbon emission.

METHODOLOGY

This report was evaluated based on the data produced by CARB for reductions in GHGs emitted per dollar invested; subsequently, each program receiving continuous appropriations was analyzed for the value of investment.

This was accomplished by incorporating a four-phase evaluation that identified the problem, created a solution, implemented the solution, and evaluated the subsequent feedback to understand the impact of dollars invested when compared to the Greenhouse Gases reduced and further analyzed the continuous appropriations to see whether the program met its legislative mandate (Sylvia and Silvia, 2012).

Table 2: Methodology

Problem Identification	Solution Development	Implementation	Evaluation
Harmful carbon and greenhouse gases are causing climate and water temperature to rise, hurting communities and, ultimately, the environment.	Government needs to find a way to reduce greenhouse gas emissions (carbon). Goal is set to 1990 levels by 2020 with AB 32 (CA). Goal is set to 40% below 1990 levels by 2030 with SB 32 (CA).	Cap-and-Trade program (market-based regulation to encourage carbon reduction), generating revenue. California Climate Investments show Cap -and- Trade investments in climate mitigating programming that aims to meet statewide greenhouse gas reduction goals.	Evaluate subsequent feedback to understand the impact of dollars invested when compared to Greenhouse Gases reduced and critique the continuous appropriations.

FINDINGS

As described above, there are four California Climate Investment transit-related programs that have continuously appropriated funding from the cap-and-trade auction income that are being evaluated in this project for their efficacy. These are high speed rail (HSR), affordable housing and sustainable communities (AHSC), transit and intercity rail capital program (TIRCP), and low-carbon transit operations program (LCTOP). Below Findings have been collected about each of the four programs that provide data on which to base an evaluation.

High Speed Rail (HSR)

HSR is firmly underway in the central valley of California. According to HSR, “High-speed rail is already happening [in the Central Valley], with construction now spanning 119 miles across Madera, Fresno, Kings, Tulare and Kern counties (HSR, 2018).” Several major design-build construction contracts have been issued worth several billion dollars as well (HSR, 2018a). Like a lot of transformative projects, HSR had several years of analysis and environmental permitting to clear before a shovel even touched the ground.

The environmental and geotechnical analysis necessary to begin construction were partially funded using GGRF funds “the Legislature has appropriated those funds and the Authority has advanced the project through the environmental process, acquired right of way, and relocated utilities (p.2, HSR, 2018b).”

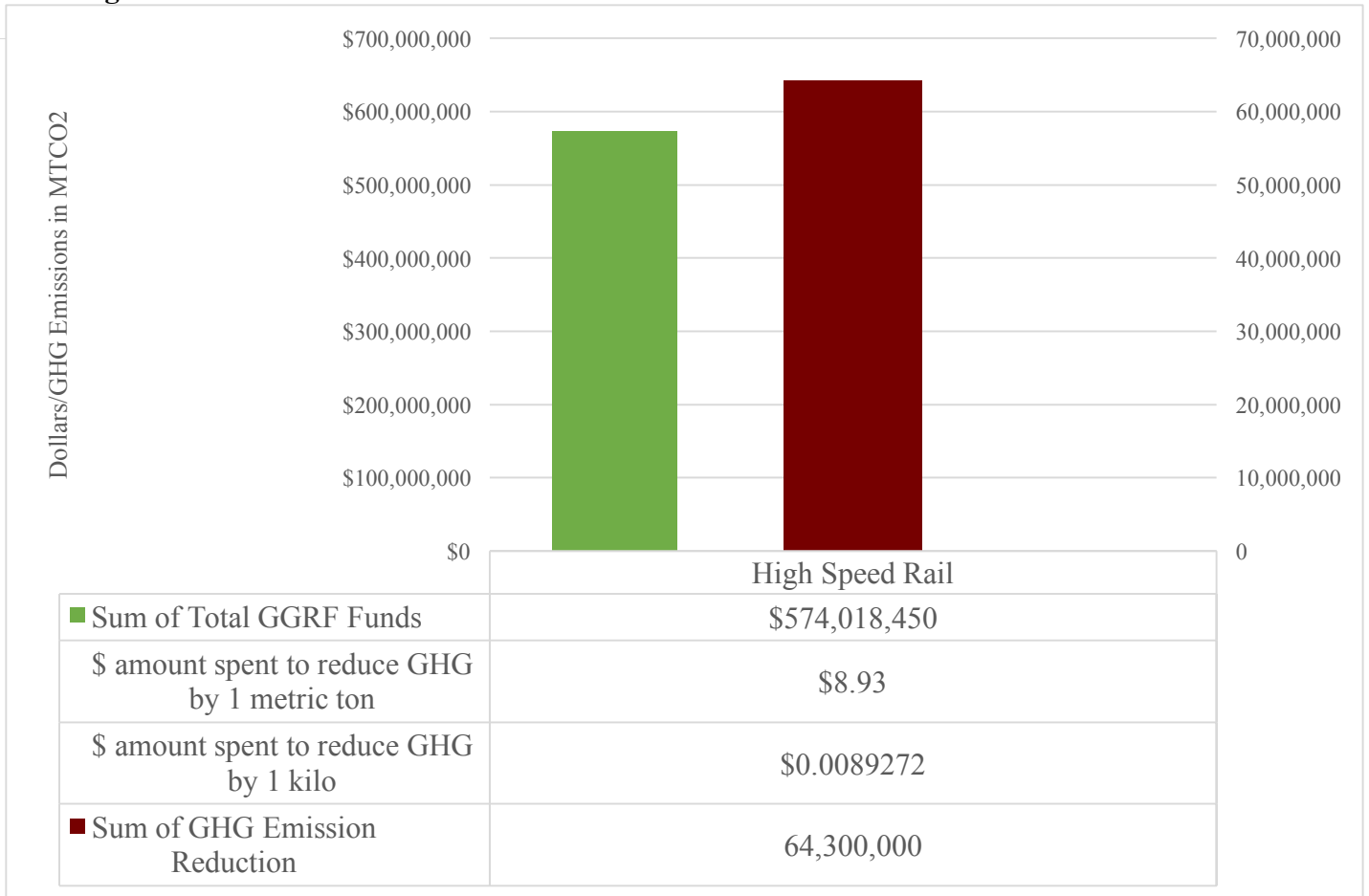
Table 3: High-Speed Rail

Program	High-Speed Rail
Percentage of GGRF	25%
<i>*GHG reduced (metric tons)</i>	<i>64,300,000 MTCO2E</i>
<i>Cumulative Program cost</i>	<i>\$1.686 billion**</i>
<i>Dollars implemented through Dec. 2018</i>	<i>\$574,018,450</i>

*upon completion of the project

** Full-funding project costs appropriated through GGRF as per the 2018 HSR Business Plan
Source: California Climate Investments, 2018

Figure 5: HSR Dollars Invested to GHG Reduced



Source: California Climate Investments, 2018

Program Benefits

High-Speed Rail will ultimately:

- “Transform how people move around the state;
- Put people to work building the system;
- Spur economic growth and new industries;
- Help achieve the state’s ambitious environmental objectives” (HSR, 2018, pg.1).

At the present time the benefits have been limited to the mitigation measures taken during the design and construction phase of the project in the Central Valley. The decision by Governor

Gavin Newsom to defer additional funding for the statewide HSR, and just complete the line from Bakersfield to Merced. (Bizjak, Sheehan and Appleton, 2019) has changed the benefits profile.

Program Critique

The goal of transforming transportation in California by the High-Speed Rail Authority will take years. This long-term goal of transforming how people move across the state will not have any impact on traffic-related air pollution until 2026–2027, at the earliest (HSR, 2018, pg. 2 [ii]), when the first segment of the system is completed in the Central Valley between Bakersfield and Merced.

In order to achieve the GHG reduction goal by increasing ridership by train and reducing ridership by passenger vehicles, the system needs to be operational, at a minimum, from the San Francisco Bay Area section to the Central Valley. The new governor's decision to limit the scope of the HSR system for the foreseeable future (Bizjak, et al. 2019), requires a revision in the GHG reduction targets and build-out evaluation.

Affordable Housing and Sustainable Communities (AHSC)

The AHSC program has funded several housing projects throughout the state. Funds were awarded to project applicants who clearly demonstrated a reduction in GHG because they got “Californians to drive less by making sure housing, jobs, and key destinations are accessible by walking, biking, and transit (AHSC, webpage 2019).”

Since 2018 this program has invested nearly \$265 million, funding the construction of several multi-family housing projects. From transit-oriented development in San Francisco that looks to reduce GHG by nearly 15,500 MTCO₂, to a multi-family housing program that provides

free public transit passes to its residents, these are a few of the examples of projects implemented thus far with AHSC (AHSC, 2016 award).

The AHSC program has funded affordable housing developments throughout the state that are close to transit, thus will reduce dependence on individual passenger vehicles, and incentivize the use of public transportation systems. An example of funded development projects is the Coliseum Connections multi-family housing development in Alameda County, estimated to reduce GHG emissions by 31,940 MTCO₂ (ARB, 2018b). The projects that were granted funding had a nexus that reduced passenger vehicle miles traveled or had a program to encourage active transportation, transit ridership, or criteria air pollutant reduction programs.

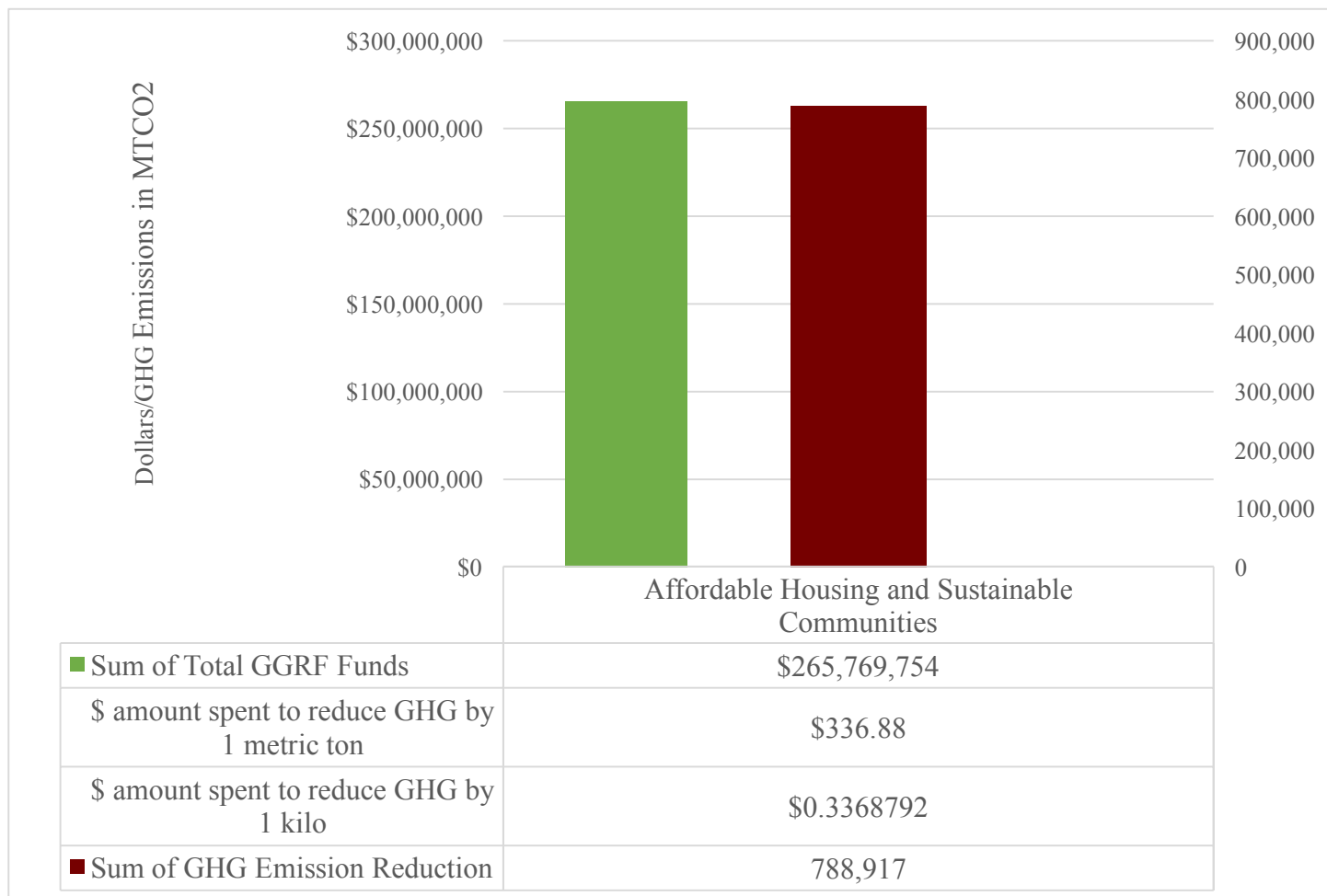
Table 4: *Affordable Housing and Sustainable Communities*

Program	Affordable Housing and Sustainable Communities
Percentage of GGRF	20%
<i>**GHG reduced:</i>	<i>788,917 MTCO₂E</i>
<i>Cumulative Program cost:</i>	<i>\$915 million</i>
<i>Dollars implemented through Dec. 2018</i>	<i>\$265,769,754</i>

*** GHG reduction projections upon full completion of the projects funded*

Source: California Climate Investments, 2018

Figure 6 AHSC Dollars Invested to GHG Reduced



Source: California Climate Investments, 2018

Program Benefit

The cap-and-trade auctions are a funding source for localities trying to “create more walkable, bicycle- and transit-friendly communities, and reduce vehicle miles traveled” (Strategic Growth Council, 2017, pg. 1). This program directs funding investments to historically under-invested communities, which will give more opportunities to more Californians. Specifically, 50% of these monies are statutorily dedicated to communities in or projects benefitting disadvantaged communities (Strategic Growth Council, 2017). “These are defined by the California Environmental Protection Agency’s CalEnviroScreen tool, which combines environmental,

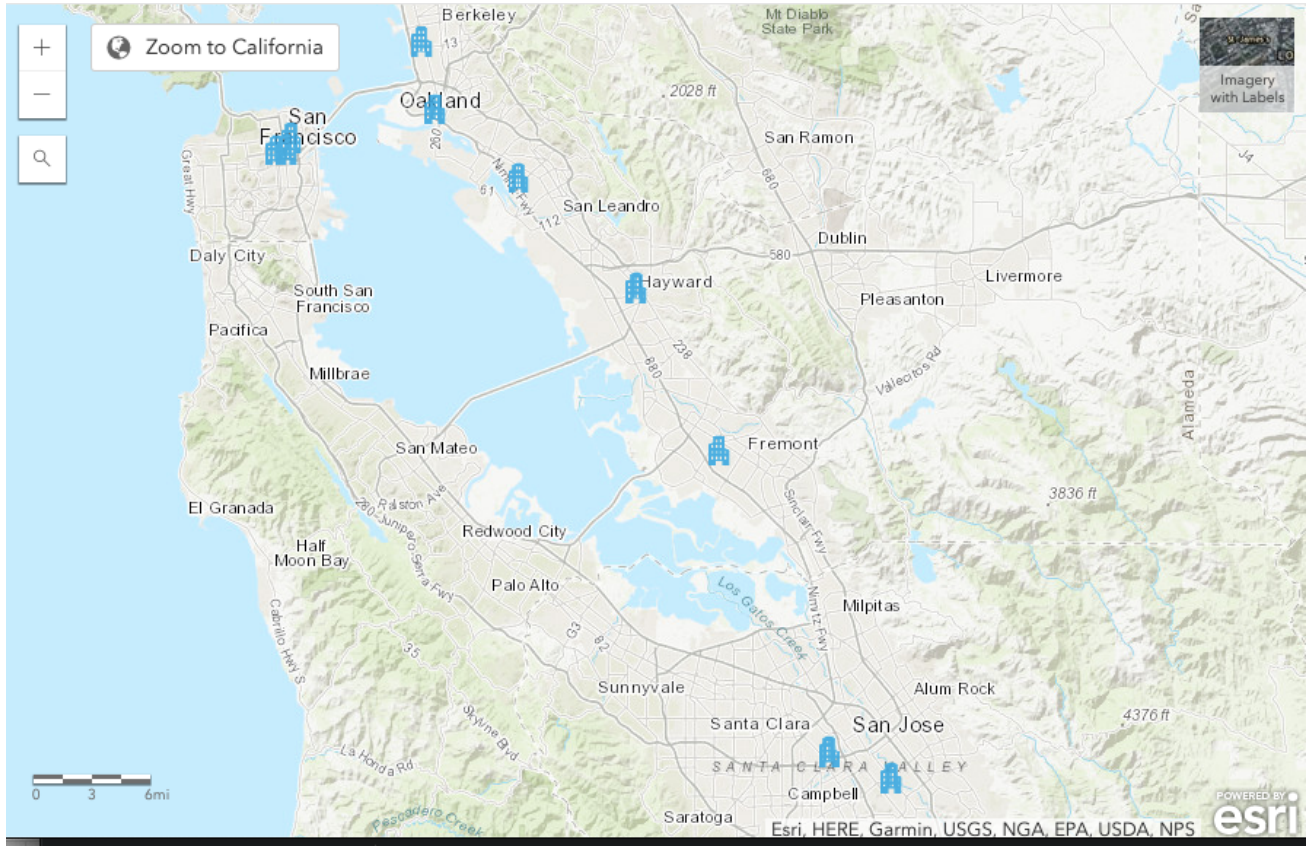
health and socioeconomic data by census tract to indicate the level to which communities are impacted by pollution. New legislation will also require AHSC to invest in low-income census tracts throughout the state” (Strategic Growth Council, 2017, pg. 1)

Capital investment and community programs are eligible for funding, such as minimum density, mixed-use, transit-oriented developments that are located within one-half mile of a high-use frequency transit stop (Strategic Growth Council, 2017). Participating sustainable transportation projects are close to qualifying transit stops, to incentivize a change in transportation modes from driving to some other alternative. This could be bike-lanes, bike share systems, or traffic-calming projects, as well as infrastructure technology that helps improve transit (Strategic Growth Council, 2017). Finally, “eligible programs include subsidized transit passes, bike share and educational programs to encourage mode shift” (Strategic Growth Council, 2017. pg. 2).

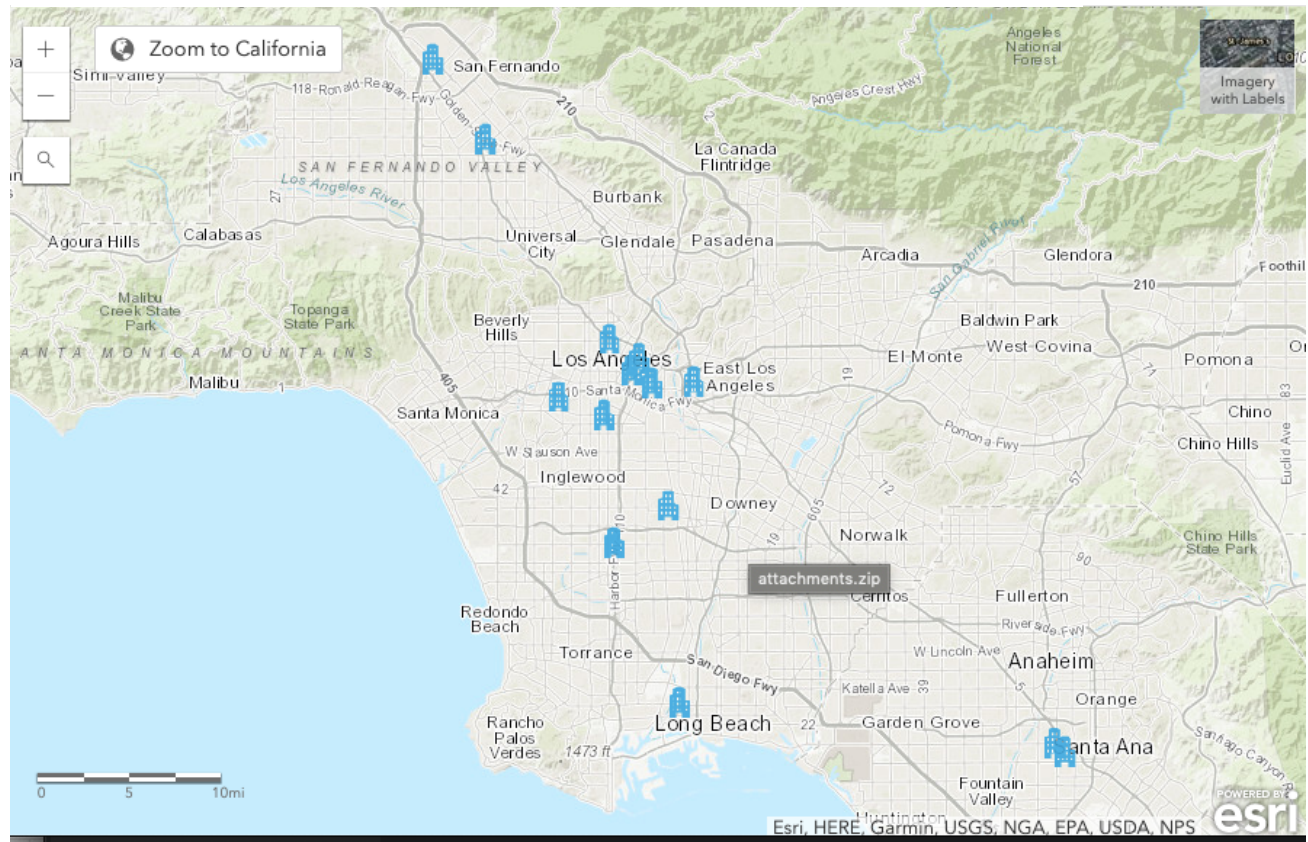
Program Critique

Long-term benefits of the GHG reductions are evident. Quantifying the immediate and near-term impact of AHSC investments is difficult. The methodology that CARB uses reports that with investments in the AHSC, emissions reductions will occur “over the course of awarded developments’ operating lives.” (Strategic Growth Council, 2016b, pg. 5) A lot of the political concerns that legislative leaders are having relate to the disproportionate amount of funding that is allocated to projects outside of their legislative districts, and disproportionately going towards other areas. (Beall, J., March 2019, personal communication). The basis for this concern can be seen in the figures below. Figure 7 shows the nine AHSC projects in Northern California and Figure 8 shows the 11 AHSC projects in Southern California.

Figure 7: AHSC Projects in Northern California



Source: California Climate Investments Project Map, 2019

Figure 8: AHSC Projects in Southern California

Source: California Climate Investments Project Map, 2019

Even though these projects may reduce GHG in the targeted areas, the poverty and air pollution problems of the Central Valley are not addressed in any projects so far. The tie between the severity of air pollution and the selection of projects needs to be more clear, demonstrating that these specific projects will provide the best return for dollar invested.

Transit and Intercity Rail Capital Program (TIRCP)

Various projects throughout the state have received funding from the TIRCP and through this funding have led to a finished transit project. An example would be the Sonoma-Marín Area Rail Transit or SMART Rail Car Extension Project funded in 2016. This funding specifically allowed for the transit agency to purchase 3 additional rail cars, providing additional capacity to be available for weekend, peak period, seasonal and special event demand periods, which has resulted in a reported GHG reduction of 82,630 MTCO₂.

Another project that has received funding through the TIRCP program is the Travel Time Reduction Project that enabled Union Pacific Rail Road and Altamont Corridor Express to partner on track and curve improvements that anticipates creating faster journeys and ridership increases, saving travel times by an estimated 10-minutes, and reducing GHG emissions by an estimated 24,747 MTCO₂.

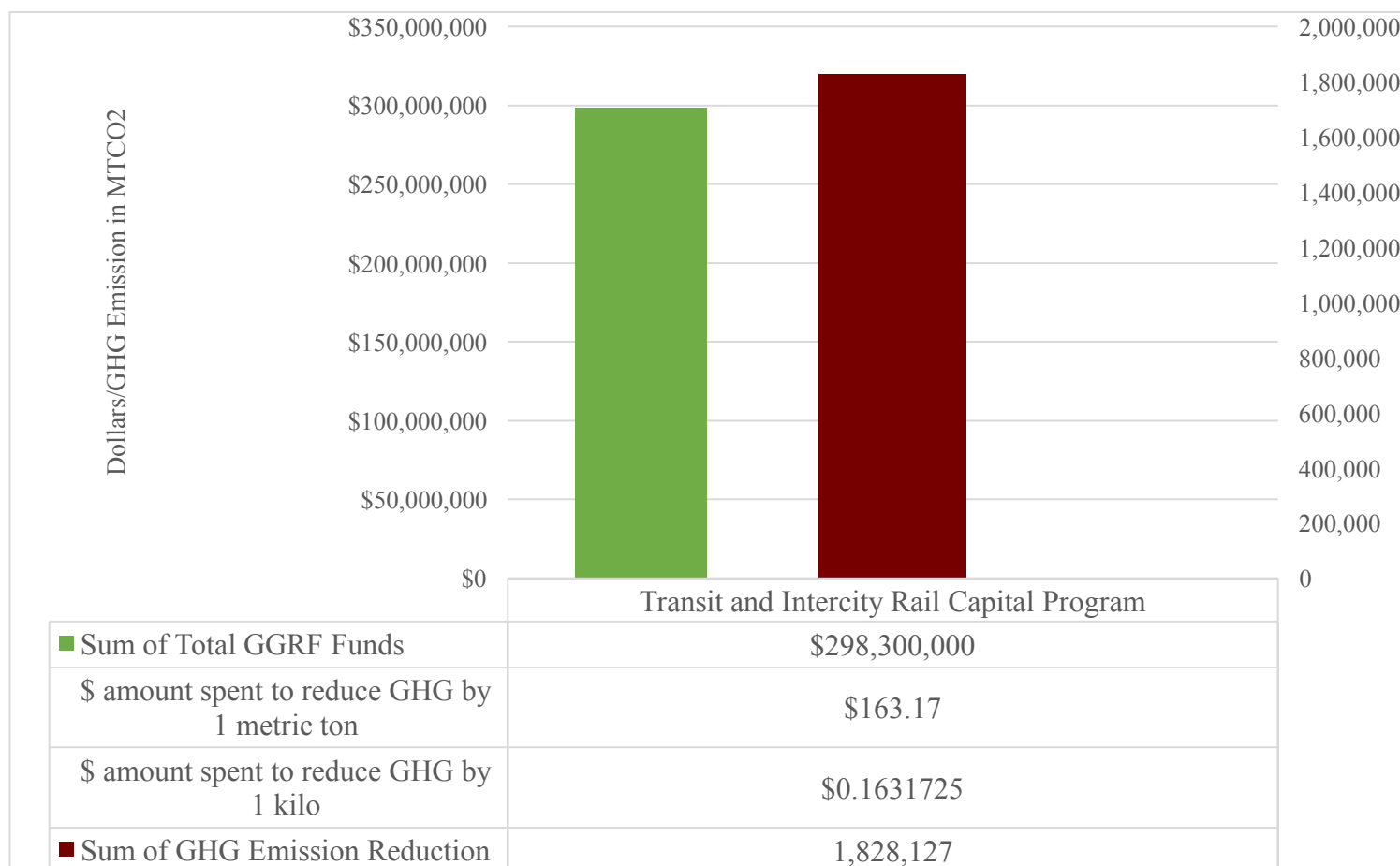
Table 5: *Transit and Intercity Rail Capital Program*

Program	Transit and Intercity Rail Capital Program
Percentage of GGRF	10%
<i>**GHG reduced:</i>	<i>1,828,127 MTCO₂E</i>
<i>Cumulative Program cost:</i>	<i>\$575 million</i>
<i>Dollars implemented through Dec. 2018</i>	<i>\$318,835,709</i>

*** GHG reduction projections upon full completion of the projects funded*

Source: California Climate Investments, 2018

Figure 9. TIRCP Dollars Invested to GHG Reduced



Source: California Climate Investments, 2018

Program Benefit

This program “funds transformative capital improvements that will modernize California’s intercity, commuter, and urban rail systems, and bus and ferry transit systems to reduce greenhouse gases by reducing congestion and vehicle miles traveled throughout California” (TIRCP, factsheet 2018, pg. 1). The goal is to see the “reduction of greenhouse gas emissions expanded, and improved rail and transit service to increase ridership, the integration of different rail and transit systems, and improved transit safety” (CalSTA, 2018, pg. 1).

Some examples of projects eligible for funding are as follows:

- “Rail and bus capital projects;

- Intercity, commuter, and urban rail projects that increase service levels, improve reliability or decrease travel times;
- Rail, bus, and ferry integration implementation;
- Bus rapid transit and ferry investments” (CalSTA, 2018, pg. 1).

Program Critique

The TIRCP program receives multi-year funding allocations for projects that take years to fully-construct. At times, again, a critique of these appropriations is the lack of short-term gain in GHG reductions due to the implementation and buildout of projects in California.

The cost of doing projects of this magnitude requires significant investment, that at one point caused questions to be raised about the effectiveness of the program. TIRCP guidelines identify large, transformative projects that this program is trying to target, which are likely to cost billions of dollars and take years, or even decades, to complete. A one-time influx of money may be helpful, but the nature of these long-term projects requires a long-term commitment in order to ensure completion of the project (and the requisite GHG emission reduction).

Fortunately, in 2015, the legislature successfully passed SB-9 (Beall), which allowed CalSTA to enter into multi-year funding agreement for major intercity rail transit projects of major scope (CalSTA, 2018).

A local multi-year project currently underway is the BART to San Jose extension project. This project is a recipient of TIRCP funding, however, the GHG benefits will not be seen until the system is fully operational. Another project is the Peninsula Corridor Electrification Project which was given \$20 million towards the electrification of the Caltrain corridor between San Jose and San Francisco, allowing for the purchase of Electric Multiple Unit trainsets, which will increase frequency and capacity for Caltrain, and reduce GHG emissions by 734,000 MTCO₂.

Again, the GHG reduction will not be seen until the project is completed and people are out of their cars and riding Caltrain, thus justifying the GHG reductions because those cars will no longer be on the road.

Low Carbon Transit Operations Program (LCTOP)

The LCTOP has successfully funded several projects throughout California. For example, in Solano County, LCTOP helped fund the purchase of seven new diesel-electric hybrid vehicles in 2017 for \$325,052, which reduces GHG by 1,311 MTCO₂. In Santa Clara County, LCTOP helped the Santa Clara Valley Transportation Authority (VTA) purchase five new forty-foot zero emission electric transit buses, three fast-speed electric vehicle charging stations, and assisted with making all related connectivity improvements at VTA for \$3,562,582. This reduced GHG emissions by 12,285 MTCO₂ as reported to the CARB.

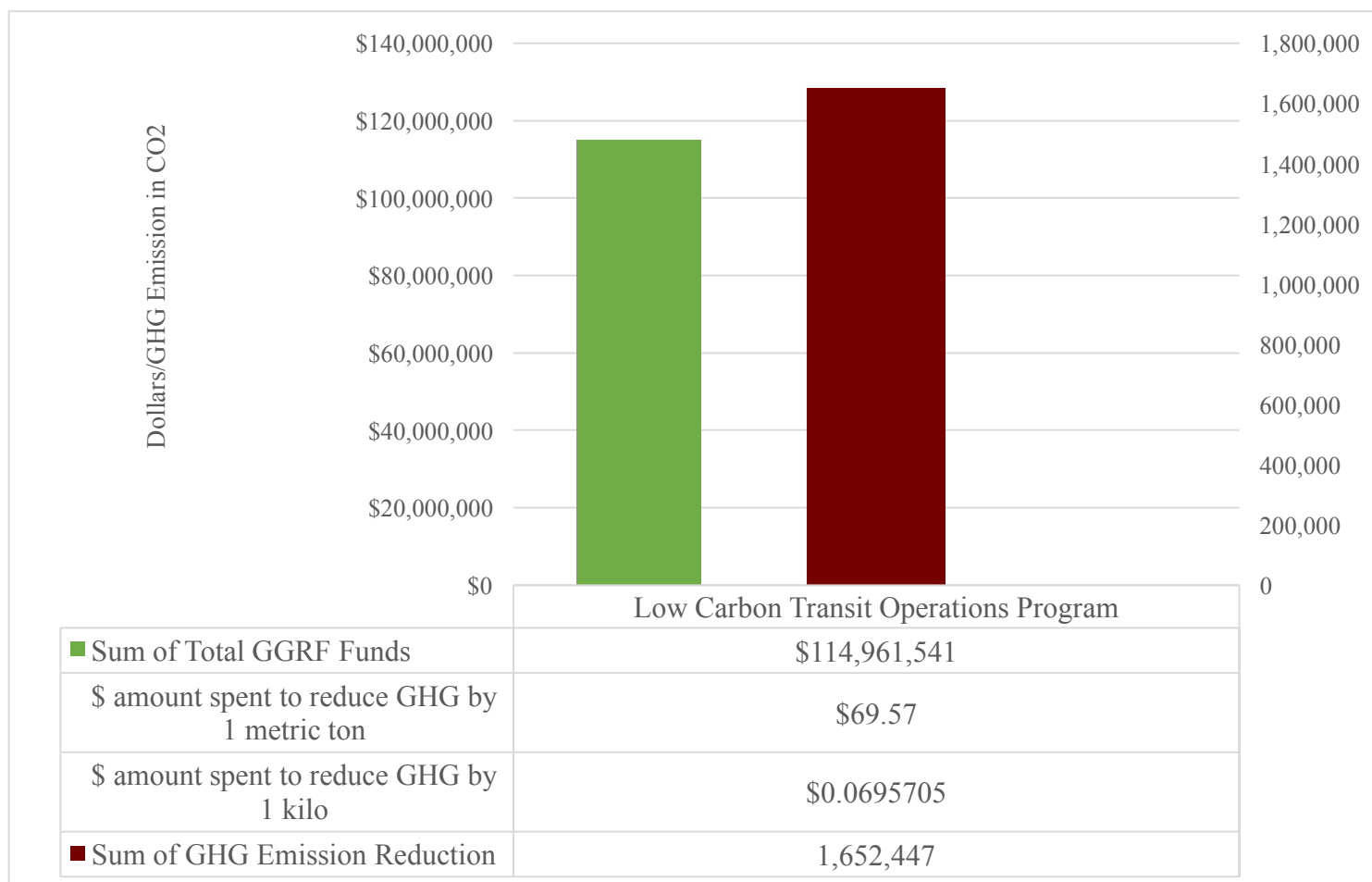
Table 6: *Low-Carbon Transit Operations Program*

Program	Low-Carbon Transit Operations Program
Percentage of GGRF	5%
<i>**GHG reduced:</i>	<i>1,652,447 MTCO₂E</i>
<i>Cumulative Program cost:</i>	<i>\$213 million</i>
<i>Dollars implemented through Dec. 2018</i>	<i>\$114,961,541</i>

*** GHG reduction projections upon full completion of the projects funded*

Source: California Climate Investments, 2018

Figure 10. LCTOP Dollars Invested to GHG Reduced



Source: California Climate Investments, 2018

Program Benefit

LCTOP funds are disbursed through a noncompetitive formula based on prior use of State Transit Assistance (STA) funds, wherein 50% of the funds were designated for regional entities and the other 50% for transit operators by the California Department of Transportation (Caltrans) (California Department of Transportation, 2018).

LCTOP projects will reduce GHG emissions and support transit agencies in their efforts to increase mode share. To achieve the required greenhouse gas emissions reduction for each project, Caltrans will not approve or accept any project that would not be fully

funded when LCTOP funds are combined with other committed funding sources.

Therefore, a project that only includes pre-construction work will likely be ineligible under the program (California Department of Transportation, 2018, pg. 5).

LCTOP funds are to be expended by transit agencies on operating and capital assistance that reduce greenhouse gas emissions and improve mobility, with a priority on serving disadvantaged communities; and meets any of the following:

1. Expenditures that directly enhance or expand transit service by supporting new or expanded bus or rail services, new or expanded water-borne transit, or expanded intermodal transit facilities, and may include equipment acquisition, fueling, maintenance, and other costs to operate those services or facilities;
2. Operational expenditures that increase transit mode share;
3. Expenditures related to the purchase of zero-emission buses, including electric buses, and the installation of the necessary equipment and infrastructure to operate and support zero emission buses (California Department of Transportation, 2018, pg. 6).

Program Critique

According to CARB, the transportation sector is the largest source of GHG emissions in the state (2017). Furthermore, only 5% of GGRF funds go towards the program that seeks to support transit agencies in their efforts to increase mode share, lower personal-passenger vehicle use, and remove polluting busses from the streets to be replaced with zero emissions electric busses.

Simply encouraging the development of new bus routes with existing bus technology will only increase air pollution by transit, and there is no guarantee that the expanded services will attract enough riders to create a balance of single car reductions to compensate for the new bus emissions. New routes created in advance of demand, and as a way of creating demand, will

pollute every day, whether they are diverting cars or not. “Public transport is the key to reducing GHG emissions, and should be incentivized at a higher percentage” (J. Beall, March 2019, personal communication).

Comparative Value of Investment

Looking at the comparative value of the investments across the four programs. From what the data shows it appears the lowest funded continuously appropriated program, the LCTOP is generating an immediate result, however the local capital projects might show real GHG reduction in the near future through the TIRCP. The AHSC program is not reducing as much GHG’s compared to the three more transit-focused programs. At this point HSR looks like the best impact with regard to actual GHG reductions, however the data for actual projection of GHG emissions needs to be further evaluated to conclude a confident investment, knowing that new administrations goals for the project may change the evaluation of benefit.

Figure 11. All Four Continuously Appropriated Programs Comparison



Source: California Climate Investments, 2018

ANALYSIS

This study looked at each of the transportation-oriented programs that receives a continuous appropriation from the GGRF. Those four programs – HSR, AHSC, TIRCP and LCTOP - are in various stages of development, and at times have multiple projects within them. The goals, as established by the legislature, are to have statewide GHG emission back to 1990 levels by 2020. Although the legislation has since pushed that goal to 40% below 1990 levels by 2030, this analysis only focused on the progress made to date toward the 2020 goal.

High Speed Rail

The California High-Speed Rail Authority (HSRA) has expended approximately \$4.062 billion to-date (HSR Business Plan, 2018). Although much of this funding comes from the GGRF, it is not this project's sole source of funding. However, for the purpose of this evaluation, it is all that was analyzed. As previously mentioned, this mega project aims to revolutionize the way Californians travel throughout the state. Much of the emission reductions calculated in the program will not start being generated until after the project becomes operational.

The cost of reducing GHG by the investment in HSR becomes tangible upon completion of the project. The GGRF investment of \$8.93 per metric ton of estimated GHG reduction is a reasonable investment. However, the biggest question about the project is funding. In 2018 California elected a new Governor, and this change in administration reduced the political will and drive for this major project (Bizjak, et al., 2019). The data is clear; upon the completion of the HSR, the investment made will not only be significant but also cause GHG reductions. The environmental importance of the completion of this project has been constantly reiterated as recently as 2018's Business Plan (HSR, 2018).

Furthermore, the continuous appropriation of GGRF dollars towards this project is

important if California wants to meet its emission reduction targets beyond 2020. However, the new governor's reduction of the project scope will have a significant negative impact on its GHG emissions reduction.

Affordable Housing and Sustainable Communities

Since the program's inception, it has had a cumulative cost of approximately \$915 million as of December 2018. However, the total investments as of December 2018 has been \$265.7 million. The total estimated reduction in GHG is approximately 788,917 MTCO₂, coming at a cost of reducing carbon at \$336.88 per metric ton. This program has significant investment from the legislature, linking housing with transportation investments. California is currently under-producing housing stock by the thousands of units. AHSC helps increase the number of units of smart development near transit so as to ultimately lower GHG emissions.

Although the data shows the carbon reduction at a cost higher than HSR, TIRCP, and LCTOP, the benefits from the production of housing that is affordable and connected to intermodal transit and job centers, such as those in San Jose and San Francisco, cannot be ignored. The AHSC program comes at a higher cost of reducing GHG when compared to other continuously appropriated programs. Although the reverberating benefits to communities are difficult to quantify, this program undoubtedly produces transit-oriented housing units at the time of a housing shortage. Furthermore, it clearly incentivizes transit use as an environmental benefit because of the decrease in GHG emissions that will result.

It is important to also recognize the concerns that have been raised about the disbursement of funding and where the projects are being selected to be built, essentially pitting Northern California against Southern California with regards to funding for respective regions.

The equally needy Central Valley seems to be severely underrepresented in resource allocation.

Transit and Intercity Rail Capital Program

This program has a cumulative cost of \$575 million as of December 2018; however, the total investments through December 2018 has been ~\$318.8 million. Transformative intercity rail projects such as BART to San Jose and the Electrification of Caltrain from San Francisco to San Jose in Northern California, and the Los Angeles Region Transit System Integration and Modernization Program in Southern California will change the way people commute to work and travel for leisure. As mentioned earlier, the most significant cause of GHG emissions in the state is attributed to vehicle transportation. Upon completion of major projects, the long-term benefit of transportation infrastructure was found to be significantly more than housing production.

The total estimated reduction in GHG with these projects is estimated to be approximately 1,828,127 MTCO₂. This reduces carbon at a cost of \$163.17 per metric ton. Compared with HSR, AHSC, and LCTOP, this is the second most expensive program to reduce GHG. However, investment and long-term usage of the transportation infrastructure is similar to investments seen in the AHSC program and the life-span usability of these programs for the community.

Low Carbon Transit Operations Program

This program has a cumulative program cost of \$213 million as of December 2018. Funding is disbursed by formula to regional entities and transit operators. Agencies implement programs specifically targeting priority populations and projects that aim to reduce GHG.

To-date, the program has distributed \$114,961,541, which is estimated to reduce GHG by 1,652,447 MTCO₂. This is a reduction cost of \$69.57 per metric ton, making for an effective

investment. As identified in the critique of the program in the Findings section of this paper, this program is only allocated 5% of the GGRF funds. This the second most cost-effective form of investment based on the data, right behind HSR, if it had been built out. With the reduction of the HSR footprint this is now probably the most cost-effective carbon reduction program. Based on the data, more revenue should be invested in this program to increase GHG emission reduction, considering that most GHG emission is caused by transportation sources.

Furthermore, CARB passed “the Innovative Clean Transit Regulation on Dec. 14, [2019] that requires the state's 200 public transit agencies to submit proposals to CARB for how they plan to turn over their fleets to electric power by 2040” (Evarts, 2019, n.p.). By 2020 the number of electric busses will rise from the 153 used in 2019 to 1,000. Ultimately, the state’s 12,000 public transit busses will be replaced with electric busses, yielding carbon savings of 19 million tons of CO₂ between 2020 and 2050. (Evarts, 2019) This is the equivalent of taking four million cars off the road.

The program is already being phased in, with all new busses having to be electric by 2029. Many agencies had already bought lower emission natural gas busses that were expected to last for decades. Now, by 2023, 25% of all public transit busses must be electric, and by 2026 it must be 50% (Tabuchi, 2018). CARB offers incentives for transit agencies to purchase the new busses, which are said to cost \$1 million each (CARB, 2019). There is a high cost-benefit to an investment in electric bus conversion.

CONCLUSION AND RECOMMENDATIONS

The most cost-effective investment is the HSR project if it is built as originally designed. However, it has a high-level of uncertainty and the benefit of the project, once fully built-out, will be impactful. Governor Newsome's realignment of the HSR project will change the cost/benefit calculations for HSR (Bizjak, 2019). As for the AHSC program, housing comes at a premium in California. The program is building housing in transit-oriented centers such as San Francisco and Los Angeles that are intended to minimize passenger vehicle traffic. However, the value that AHSC plays with respect to contributing reductions in GHG is less when compared to the three other transportation-focused programs. The TIRCP program's reduction of GHG, along with the LCTOP program, are significantly more than AHSC's.

The State of California has allocated billions of dollars to carbon emission reduction programs in the last decade. From the analysis, it was found that the investments are targeted specifically at transformative and long-term projects such as HSR, inter-regional rail, and housing to reduce commute times. The long-term reductions in GHG will benefit California; however, the reductions in GHG through the investment in LCTOP having immediate benefit merits further investment. As for the continuously appropriated programs resulting from Cap-and-Trade auction income, they are projected to meet the legislative mandate of reducing GHG. However, the funding formula allocation should be reexamined for further investment in transit systems, specifically the electric bus fleet conversion, based on the data. Future studies could focus on such reallocation of funding to either regional transit entities for capital investment, or transit operators for vehicle fleet conversion, especially now that the HSR investment will be terminated in a shorter timeframe than originally projected. Since transportation has been proven to be the largest producer of GHGs, the focus of the cap-and-trade auction funding should remain

on transit and transportation until the significant reductions in harmful emissions needed to combat climate change are achieved.

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Appendix 1: California Climate Investments, Implemented Projects through Dec. 2018*As provided from CARB*

Project ID	Project Name	Program	Description	Total GGRF Funds Implemented	GHG Emission Reductions MTCO ₂ e	County	Reporting Year
30284	Sylmar Court Apartments	Affordable Housing and Sustainable Communities	This infill development is a Leadership in Energy and Environmental Design (LEED)-Gold rated affordable housing development less than a ½ mile away from the MetroLink Sylmar station and consists of 101 affordable units for families earning b ...	\$2,500,000	23,000	Los Angeles	2016
34791	Wasco Farmworkers Housing Relocation Project	Affordable Housing and Sustainable Communities	The City of Wasco Housing Authority, City of Wasco, Wasco Affordable Housing, Inc, and the Housing Authority of the County of Kern proposes to relocate 160 families from a disconnected, industrially zone location to a new sustainable greenpoint rated housing with solar power, covered and secured bicycle storage and onsite transit stop closer to grocery stores, schools, parks, transit and other amenities. Site will also feature an adjacent day care and medical clinic and is across the street from a planned elementary school site. Fixed transit service will connect residents to shopping, regional transit stop and Amtrak station. The new construction includes the installation of sidewalks to provide pedestrian connectivity to services/retail/schools, the creation of dedicated bike lanes to connect the affordable housing site to services/retail/schools, the creation of transit stops within the project area, and the purchase of a shuttle bus for the transit service	\$18,637,432	10,754	Kern	2017
35254	455 Fell Street	Affordable Housing and Sustainable Communities	455 Fell was designed as model project with 108 units of affordable housing; this project locates a vulnerable population in an area that is walkable and highly amenities. Making the pedestrian and biking experience safer for the entire community by implementing sidewalk and street improvements identified during the lengthy community outreach process.	\$16,056,563	15,560	San Francisco	2017

35348	Sierra Village (aka Dinuba Village)	Affordable Housing and Sustainable Communities	The Project will consist of 43 affordable rental units and 1 managers unit. A 2,289 sq. ft. The project includes 100% solar PV to offset common area and residential loads, and water conservation/efficiency measures. The project will include both a commute reduction program (vanpool) and a public transit ridership program for the residents. Other transportation improvements include sidewalks, bike lanes, pedestrian enhancements, traffic calming within the project and bike-sharing infrastructure. California Van Pool Authority (CalVans) will be providing a van for a residential vanpool program. Through the incorporation of meaningful transportation improvements, the project will result in a reduction of VMTs.	\$4,646,731	3,122	Tulare	2017
30226	Laurel Grove (Park Avenue Family Apartments)	Affordable Housing and Sustainable Communities	777 Park Ave is a new development project which will allow for 82 multifamily residential units on a 1.08 acre site. All units will target households earning between 20% and 60% of area median income.	\$4,000,000	12,070	Santa Clara	2016
30351	Central Commons	Affordable Housing and Sustainable Communities	Habitat for Humanity East Bay/Silicon Valley will fund Central Commons, a 30 unit single-family development located in the City of Fremont. All homes will be sold to buyers with incomes below 80% of area median income. The development will ...	\$1,000,000	2,798	Alameda	2016
30122	Anchor Place	Affordable Housing and Sustainable Communities	Anchor Place features 120 affordable, permanent supportive apartment homes, including 75 units for veterans and 18 units for the homeless and mentally ill. The affordable housing development will contain community rooms, supportive service ...	\$2,441,616	28,369	Los Angeles	2016
35241	Santa Ana Collective Arts	Affordable Housing and Sustainable Communities	The project consists of 58 units for families earning 30% to 60% of AMI. The site has bus access, with two local stops and an express bus stop directly adjacent to the development. Santa Ana Arts Collective is a reuse of an existing commercial building in a jobs and transit rich area. It furthers the goals of the AHSC program by locating working families in an area where they can accomplish most of their daily tasks on foot, bike, or transit. It also converts Bush Street into a bike and pedestrian enhanced street to provide a safer route to the Santa Ana Civic Center. This will bring a critical mass of pedestrian and bike amenities developing and encouraging widespread mode shift away from cars.	\$12,028,626	12,301	Orange	2017
34781	Rolland Curtis West	Affordable Housing and Sustainable Communities	Rolland Curtis West is a 70-unit project that is part of a three-phased, mixed-use development anchored in South Los Angeles. This project delivers much needed affordable housing at 60%AMI and below, and is adjacent to USC, one of the largest private employers in the City. As an infill development, Rolland	\$5,668,074	15,818	Los Angeles	2017

			Curtis West will enhance the community by creating desperately needed affordable housing designed with high quality green building measures to help mitigate the development's location on a high pollution census tract. The project is rich with transportation options, including a light rail Metro station, rapid and local bus lines. With the connectivity improvements designed by cross-department teams in the City of LA, pedestrians, cyclists and transit riders will benefit from increased safety that will encourage walking and biking to key destinations, thereby reducing VMT. These improvements include bicycle and pedestrian enhancements that are part of the Mobility Plan 2030: Neighborhood Enhanced Network (NEN) that will connect to existing bike lanes.				
35378	Palm Terrace (aka Lindsay Village)	Affordable Housing and Sustainable Communities	The project is located within 1 mile of various amenities. A bus stop is located within ¼ mile of the project, with a ballpark within ½ mile and a library within 1 mile. The project includes 15.17 and 15.18 as GHG emission reduction strategies for the residents of the affordable housing project. Implementing resident trip reduction programs and provided transit subsidies, these measures will promoting public transportation ridership and non-motorized transit. These measures are an opportunity to educate residents and achieve meaningful GHG reductions through utilization of the referenced programs	\$5,518,353	3,311	Tulare	2017
35538	Coliseum Connections	Affordable Housing and Sustainable Communities	Coliseum Connections is a 110-unit multifamily residential project developed on an existing BART owned parking lot adjacent to the Coliseum BART station. A mixed-income project targets residents across the income spectrum. 54 units will be restricted at 50-60% AMI and 55 units will be 60-100% AMI. Residents will benefit from green housing, free transit passes, and an improved bus, bike and pedestrian network. Providing access to key amenities and job centers. The project will be adding bike channels to the entrance of Coliseum BART; and AC Transit and procure a hybrid bus for that route.	\$14,844,762	31,940	Alameda	2017
30414	Grand Gateway Transportation Infrastructure	Affordable Housing and Sustainable Communities	The project will also provide transportation improvements in the Grand Gateway and Washington transit-oriented development/infill development districts. The project will greatly improve walkability and bike ability opportunities that are cur ...	\$4,130,888	29,374	Yolo	2016
30457	Vanpool Expansion Project	Affordable Housing and Sustainable Communities	The Vanpool Expansion Project will be targeted toward providing farmworkers located in rural areas with a van to travel between home and work. Residents in these areas generally lack access to reliable public transportation, a reliable...	\$3,000,000	12,139	Kings	2016

30080	Riviera Family Apartments	Affordable Housing and Sustainable Communities	Riviera Family Apartments will provide 58 newly constructed apartments affordable to low-income families in the City of Walnut Creek. New infrastructure serving the housing will include structured parking and utility service as well as new ...	\$4,956,610	8,110	Contra Costa	2016
30100	Crenshaw Villas	Affordable Housing and Sustainable Communities	This development will consist of the new construction of a five story, mixed-use affordable housing building at 2645 Crenshaw Boulevard. This development consists of 50 residential dwelling units and 4,999 square feet of neighborhood...	\$2,200,000	13,149	Los Angeles	2016
30428	Truckee Railyard Downtown Corridor Improvements Project	Affordable Housing and Sustainable Communities	The Truckee Railyard Downtown Corridor Improvements Project (TRDCIP) is a multimodal transportation improvement in downtown Truckee, the vibrant core of a rural region. Over the last decade, the Town has worked to transform its historic downtown, a portion of which is former State Highway 267, into a pedestrian, bike, transit, and vehicle-friendly central core to better reflect the corridor's opportunity as a thriving mixed-use downtown. Truckee is the gateway to the Tahoe region, a community and economy deeply impacted by climate change, and it can redefine mountain living with smart, urban principles. The TRDCIP will provide safer multimodal mobility between downtown and working neighborhoods, and open up desperately needed infill housing and economic development. TRDCIP is a critical link in the Town's integrated transportation and land use approach to a more equitable, sustainable, and economically competitive future to address the region's most pressing challenges.	\$8,000,000	20,079	Nevada	2018 Semi-Annual
34713	Sun Valley Senior Veterans Apartments and the Sheldon Street Pedestrian Improvements	Affordable Housing and Sustainable Communities	Sun Valley Senior Veterans Apartments (SVSV), the Sheldon Street Pedestrian Improvements, and the Transit Connect Program supports infill development that reduces GHG emissions. SVSV is the new construction of 96 units of housing for senior Veterans. 2 of the 96 units will be managers units and the remaining 94 are for Veterans. There are various amenities that facilitate community building such as a library, recreation room, fitness center, a media room, and a computer lab. New Directions for Veterans will provide on-site supportive services to the senior veterans. To improve transportation, the Sheldon Street Pedestrian Improvements will encourage residents to engage in active transportation through new sidewalks construction, ADA ramps, continental crosswalks, stripping, curb extensions, and increased lighting. Sheldon Street will connect residents to more buses and a new bike lane. The project will also have a Transit Connect Program that will take residents to transit stations.	\$11,110,020	8,947	Los Angeles	2018 Semi-Annual

30520	Mission Bay South Redevelopment Area	Affordable Housing and Sustainable Communities	Mission Bay Block South 6 East is a 1.45 acre site located in San Francisco's Mission Bay neighborhood. The affordable housing development includes 143 residential units and 10,000 square feet of neighborhood retail. This project also...	\$4,999,989	51,747	San Francisco	2016
30228	Paradise Creek II (Westside-Infill TOD)	Affordable Housing and Sustainable Communities	The Westside Infill Transit Oriented Development is a proposed 201-unit affordable housing infill development along Paradise Creek in National City. Phase I, currently under construction, will complete 109 units on site. Phase II will...	\$9,240,888	16,103	San Diego	2016
30574	Mosaic Gardens at Westlake	Affordable Housing and Sustainable Communities	Mosaic Gardens at Westlake is an infill site which will be repositioned as a vibrant 125-unit housing community. The development includes the acquisition of six contiguous parcels, totaling 1.19 acres. The new development replaces a site cu ...	\$1,900,000	29,188	Los Angeles	2016
34886	Las Palmas de Sal Gonzales, Sr. Apartments (fka Kings Canyon Connectivity Project)	Affordable Housing and Sustainable Communities	The Affordable Housing Development will be a 135-unit multi-family affordable housing development consisting of 89 family units and 46 senior units. 58 units will be at 40% AMI, 76 units will be at 60% AMI, and 1 unit will be an unrestricted manager's unit.	\$15,579,426	10,375	Fresno	2018 Semi-Annual
30567	Transbay Block 7 (222 Beale Street)	Affordable Housing and Sustainable Communities	222 Beale (Transbay Block 7) provides an opportunity to create a vibrant urban community within San Francisco's newest transit-oriented neighborhood. The project proposes 120 units of affordable housing with on-site childcare, housing infra ...	\$6,500,000	19,461	San Francisco	2016
34708	7th and Witmer Apartments	Affordable Housing and Sustainable Communities	New construction of 76 permanent supportive housing units, with 32 parking spaces for cars and 86 secured bicycle spaces. Installation of pedestrian lights, replacement of street trees, sidewalk repair, curb extension and traffic calming	\$16,760,000	18,497	Los Angeles	2018 Semi-Annual
30302	Cielito Lindo Apartments Phase II (fka 1st and Soto TOD Apartments Phase 2)	Affordable Housing and Sustainable Communities	Cielito Lindo is a mixed use project across from light rail and 5 major bus lines in the neighborhood of Boyle Heights. 29 total units with 28 affordable units restricted as 100% affordable for households earning between 30% to 50% AMI and one managers unit.	\$4,072,843	14,172	Los Angeles	2018 Semi-Annual
35198	Cornerstone Place	Affordable Housing and Sustainable	The Project is located in the City of El Cajon in San Diego County and is comprised of an Affordable Housing Development (AHD), a Sustainable Transportation Improvement (STI), Housing Related Infrastructure (HRI), and a Transit Pass Program	\$12,090,713	19,094	San Diego	2018 Semi-Annual

		Communitie s	(Program). The proposed AHD, named Cornerstone Place, will create 70 new units of affordable housing for families and veteran households. The development will feature 48 one-bedroom units, 22 three-bedroom units (including one unrestricted manager's unit), and will strive to achieve LEED Silver design through the use of energy efficient systems and a variety of sustainability features. The STI project proposes to expand Metropolitan Transit System (MTS) Routes 815 and 816, which are dovetailed through Downtown El Cajon, between the project location and the El Cajon Transit Center.				
34786	Grayson Street Apartments	Affordable Housing and Sustainable Communitie s	New construction of 2,000± square feet of ground floor commercial space, and 23 affordable apartments consisting of 9 units set-aside for youth transitioning out of the foster system and three units for people living with HIV/AIDS. The STI will include the purchase of a new 40-foot hybrid bus to support the increased service levels of AC Transit's adopted Service Expansion Plan. The project will also include transit passes and bike education.	\$3,755,326	14,081	Alameda	2018 Semi-Annual
34845	Jordan Downs Phase 1B (fka MD Jordan Downs)	Affordable Housing and Sustainable Communitie s	New Construction, Infill development of 135 apartments within the Jordan Downs master planned community. Streets improvements include; wide sidewalks, bike lanes, shade trees, and a re-routed bus line.	\$11,969,111	16,083	Los Angeles	2018 Semi-Annual
30303	Downtown Hayward Senior Apartments	Affordable Housing and Sustainable Communitie s	Hayward Senior Apartments is the new construction of a Leadership in Energy and Environmental Design (LEED) -Gold rated infill development with 60 affordable housing apartments for seniors earning between 15% to 60% of area median income...	\$2,183,000	11,613	Alameda	2016
30280	Depot at Santiago	Affordable Housing and Sustainable Communitie s	The Depot at Santiago consists of a 70-unit development that will be affordable to families earning between 30% and 60% of area median income. Located directly across the street from the Santa Ana Regional Transit Center (SARTC), the...	\$3,925,000	27,532	Orange	2016
34720	PATH Metro Villas Phase 2	Affordable Housing and Sustainable Communitie s	The development consists of two six story buildings over one level of subterranean parking to maximize the density on this well located .86 acre lot only two blocks from the Metro Red Line. The project density is 140 units per acre. The project will also include community space with a community kitchen, lobby, management office space, meeting rooms, computer room, and common laundry facilities, and social service community facilities. A minimum of 3 Full Time Equivalent employees (FTEs) will directly provide and/or coordinate on-site services for the 120 residents including those units set aside for individuals who are chronically homeless and/or living with chronic health	\$13,750,183	14,987	Los Angeles	2018 Semi-Annual

			conditions. Case Management, provided by PATH and PATH Ventures, will expand upon existing supportive services provided the Department of Mental Health, the Veterans Administration, Department of Health Services, and by the PATH family of agencies.				
34818	Renascent Place (fka Renascent San Jose)	Affordable Housing and Sustainable Communities	New construction of 162 unit infill development that will serve as permanent supportive housing for the chronic homeless. STI and TRA include the construction of 2 miles of bike/pedestrian trails and street trees. The proposed Programs include Rangers for the trails, free bus passes and free bicycle repair and training.	\$14,979,486	11,602	Santa Clara	2018 Semi-Annual
35258	Six Four Nine Lofts	Affordable Housing and Sustainable Communities	Six Four Nine Lofts is a 55 unit new construction project serving households with incomes below 50 % of Area Median Income (AMI). There will be 54 efficiency units and one two-bedroom manager's unit. The target population consists of households who are experiencing homelessness and/or have physical or developmental special needs. The project will provide multiple services designed to meet the needs of the target population and will be located within a multi-use seven story building that also contains the Clinic at 7th and Wall Street, a three story approximately 25,000 square foot, federally qualified health clinic (FQHC) owned by Los Angeles Christian Health Centers (LACHC). The LACHC clinic will be a separate legal parcel, financed with different sources, and have different ownership than the residential component.	\$5,315,000	19,182	Los Angeles	2018 Semi-Annual
30103	South Bay Bus Rapid Transit Project	Affordable Housing and Sustainable Communities	The South Bay BRT is a 21-mile bus rapid transit route that will operate between the Otay Mesa Border Crossing and Downtown San Diego. The project will complete the final 11 miles of the route between Chula Vista and a new Intermodal...	\$7,000,000	182,429	San Diego	2016
30300	Civic Center 14 TOD Apartments	Affordable Housing and Sustainable Communities	Civic Center 14 TOD Apartments is a Leadership in Energy and Environmental Design (LEED) -Gold rated infill development in a major transit area consisting of 40 affordable housing apartments for families earning between 15% to 60% of area med ...	\$1,500,000	6,616	Alameda	2016
30304	127th Street Apartments	Affordable Housing and Sustainable Communities	The 127th Street Apartments is a Leadership in Energy and Environmental Design (LEED)-Gold rated affordable housing development consisting of the new construction of 85 units for residents with special needs earning between 25% to 35% of area ...	\$1,500,000	18,142	Los Angeles	2016
30420	March Veterans Village	Affordable Housing and Sustainable Communities	The Coachella Valley Housing Coalition, in partnership with the U.S. Veterans Initiative, will develop March Veterans Village, a 138 unit multi-family, 100% affordable, apartment community on the old March Air Force Base to house veterans. ...	\$6,109,114	21,712	Riverside	2016

30494	El Segundo Boulevard Apartments	Affordable Housing and Sustainable Communities	El Segundo Family Apartments consists of the 75 new affordable rental units for working families and people with special needs earning between 15% to 50% of Area Median Income. In addition to the construction of the affordable housing, this ...	\$1,900,000	15,460	Los Angeles	2016
2665	High-Speed Rail	High Speed Rail	The California High-Speed Rail Authority is planning, designing and constructing rail service from San Francisco to the Los Angeles basin, via the Central Valley, in under three hours at speeds capable of exceeding 200 miles per hour.	\$574,018,450	#####	Fresno, Madera	2016
15-16-D5-64	SBMTD Line 1 and 2 A.M. Peak Period Frequency Improvement	Low Carbon Transit Operations Program	This is an operations project that enhances service during the A.M. peak-period between east and west Santa Barbara.	\$190,000	170	Santa Barbara	2016
15-16-D5-65	SBMTD Smartcard Network/Fare Integration	Low Carbon Transit Operations Program	SBMTD operates a fleet of 105 transit vehicles, and intends to utilize these funds to enhance transit services by introducing "contactless" technology that will speed boarding, improve data collection, and allow integration with other...	\$121,403	78	Santa Barbara	2016
15-16-D4-53	Purchase of Electric Bus	Low Carbon Transit Operations Program	This project will expand/enhance transit service and purchase, operate, and maintain a zero-emission fully-electric bus.	\$949,523	851	San Mateo	2016
15-16-D3-34	Connect Card Project	Low Carbon Transit Operations Program	Funding of the startup and up to two years of operations of Yolo County Transportation District's share of the "Connect Card", a universal transit fare card program for the Sacramento Region	\$181,156	86	Sacramento, Yolo	2016
15-16-D3-32	South Line Phase 2 Light Rail Extension Project	Low Carbon Transit Operations Program	Operation of a 4.3 mile Light Rail segment extending from the Meadowview Station south/south east to Cosumnes River College. Trains run every 15 minutes on weekends before 7:30 pm, and on weekends and holidays every 30 minutes.	\$1,440,433	856	Sacramento	2016
15-16-D10-118	BRT Expansion-MLK Corridor	Low Carbon Transit Operations Program	The project will implement a new BRT route along the MLK Corridor that will operate entirely in a disadvantaged community. This project will provide rapid service, provide access to a variety of destinations, and use zero-emission buses.	\$584,436	229	San Joaquin	2016
15-16-D10-120	Bus Stop Enhancement and Access Improvement Program	Low Carbon Transit Operations Program	Improve transit bus stops/station to meet ADA accessibility requirements as well enhance transit service to increase ridership on StaRT's routes.	\$173,076	17	Stanislaus	2016
15-16-D8-106	PVL Station Passenger Upgrades	Low Carbon Transit Operations Program	Upgrade Perris Valley Line Stations to support active transportation and encourage ridership. Project includes covered benches, bike covers/lockers and energy efficient lighting.	\$391,049	1,886	Riverside	2016

16-17-D06-069	FAX Expanded Weekday Night Service	Low Carbon Transit Operations Program	<p>Fresno Area Express is increasing service by extending night service on 5 routes (38, 9, 32, 28, and BRT). This expanded service, which just began in May 2017, will provide extended night service by operating buses up to 1:00AM on weekdays, which is 251 days of service per year. The extended service will span approximately 11 miles on core routes in the FAX system. They include 38, Cedar Avenue from Shaw to Butler; 9, Shaw Avenue from Cedar to Brawley; 32, from Courthouse Park to Elm and North; 28, from Courthouse Park to MTC; and BRT, from Blackstone and Nees to Clovis and Kings Canyon. This project, as an expansion of existing service, includes an incremental increase in operating costs. It is anticipated that the service will increase passenger trips by 306k and reduce SOV use in the City. This expanded service will provide extended service hours and will serve Fresno residents in many DAC neighborhoods.</p>	\$334,488	275	Fresno	2017
16-17-D07-102	City of Banning Pass Transit Cabazon Sustenance Funding	Low Carbon Transit Operations Program	<p>The City of Banning needs this LCTOP funding to sustain hourly service frequency in the unincorporated Disadvantaged Community of Cabazon. Furthermore, funding can be used to support the expansion of Saturday Dial-A-Ride capacity to increase weekend capacity and improve mobility for all Banning Pass Transit Passengers. The current budget scenario, absent LCTOP supportive funding, would preclude any additional Saturday DAR service and necessitate a Cabazon segment of route 1 reduction of approximately 4 revenue service hours per weekday. The total LCTOP operating request is \$74,561, which includes \$66,761 for the current span of service and hourly frequency, along with \$7,800 for additional system wide Saturday Demand Response capacity.</p>	\$74,561	13	Riverside	2017
16-17-D08-104	Increase frequency during morning peak service	Low Carbon Transit Operations Program	<p>Currently CCTS operates with a 60 minutes headway. This project is intended to increase weekday bus frequency during peak service from 6:30am to 9:00am by adding an additional bus in both directions for the Red Line and the Blue Line. This will increase frequency to every 30 minutes during the morning peak hours. CCTS provides service on weekdays and Saturdays. There is no service on Sundays and the following holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. This project applies only to weekday service; CCTS expects to operate 254 weekdays in FY 17-18.</p>	\$123,831	1	Riverside	2017
16-17-D10-124	Pinecrest Transit Service	Low Carbon Transit Operations Program	<p>Pinecrest is a popular area of the County that is not currently served by public transportation. The greater Pinecrest area offers significant recreation opportunities on the Stanislaus National Forest. Pinecrest offers important seasonal job opportunities for many of the area youth. This service will also deliver additional</p>	\$24,213	67	Tuolumne	2017

			<p>public transit service to the upper (Eastern) highway 108 corridor and offer service on holidays and weekends when there traditionally are no services available. This service is anticipated to be operated during the busy spring, summer and early fall period of the year. It is anticipated that in the first year the service begin in mid-June or as early as project approval comes. In future years, the Transit Agency will begin the service on Memorial day weekend or the opening of trout season (weather conditions permitting). The service will operate 1-2 round trips daily on weekends and holidays. There will be a morning run for employees working in the high country and folks planning a big day. There will be a second run midday and a final bus returning in the evening.</p>				
16-17-D10-123	Metro Hopper Expansion	Low Carbon Transit Operations Program	<p>This project will expand transit service by operating RTD's newest Hopper route in Stockton. RTD is requesting \$221,773 to operate this Metro Hopper service that serves Stockton's disadvantaged communities. The Hopper service will operate Monday through Friday from 7:35 A.M. to approximately 5 P.M. All Hopper buses are wheelchair accessible and services will operate 252 days per year. This service was in operation for the entire FY16 using LCTOP Operating funds and provided 7,610 rides for FY16. The goal for this project is to continue providing the deviated Hopper service as it provides a necessary means of transportation for many elderly and ADA certified passengers.</p>	\$221,773	64	San Joaquin	2017
16-17-D05-061	North County Transit Marketing and Try Transit Program	Low Carbon Transit Operations Program	<p>Transit vouchers for SMAT, Guadalupe Flyer, Breeze, RTA Route 10 and the Clean Air Express will be distributed at the new Santa Maria Bici Centro community bike shop, the Santa Maria Farmers Market and other special events.</p>	\$110,761	22	San Luis Obispo, Santa Barbara	2017
16-17-D05-062	SBMTD Ridership Development Marketing Plan	Low Carbon Transit Operations Program	<p>Development and execution of a marketing plan with free or reduced-fare transit vouchers to grow ridership through the implementation and promotion of real-time arrival info, ease of fare purchase and boarding with smartcard technology, and deployment of new zero-emissions EV fleet.</p>	\$154,541	449	Santa Barbara	2017
16-17-D05-064	SCT operating assistance for continuing new Route 27 and 28 service.	Low Carbon Transit Operations Program	<p>Continuing Route 27 and 28 operating service which provide hourly Monday-Sunday service on Route 28 (clockwise), while the counterclockwise Route 27 would only operate on weekdays.</p>	\$134,418	6	San Luis Obispo	2017

16-17-D03-029	Golden 1 Arena Special Event Service (Year 2)	Low Carbon Transit Operations Program	Operate year 2 supplemental light rail service transporting riders from approximately 77 major events at the new downtown basketball arena (the Golden 1 Center (G1C)). G1 Center capacity is 17,500 persons and traffic congestion in the area is severe after major events. This service provides an attractive alternative to personal automobile and thereby helps to alleviate the congestion. In year 2 the service includes 2 outbound trips on the Gold Line and 2 outbound trips on the Blue Line south- more if needed depending on event participation. In addition supplemental service is provided as needed on Blue Line north.	\$50,845	6	Sacramento	2017
16-17-D03-027	Connect Card Operations (Year 2)	Low Carbon Transit Operations Program	<p>The Connect Card is the Sacramento region's network/fare integration smart card fare payment system that allows transit users to ride nine transit systems using a single fare instrument. The system became operational in Nov. 2016 and is gradually being expanded to region-wide coverage. SRTD accounts for approximately 80% of the region's transit ridership and the rest is split among the remaining providers.</p> <p>The goals are to 1) simplify using transit among the 9 regional transit providers 2) facilitate the use of transit region wide 3) add security by replacing money and tickets with a card 4) make fare payment more convenient 5) reduce fare evasion 6) provide better ridership information. The Connect Card is a multi-faceted system of hardware and software. It does not change routes but is expected to increase ridership over time.</p>	\$20,862	750	Alpine, Amador, Butte, Colusa, El Dorado, Lake, Napa, Nevada, Placer, Sacramento, San Joaquin, Sierra, Solano, Sutter, Yolo, Yuba	2017
16-17-D06-067	Bus Shelter	Low Carbon Transit Operations Program	This project includes purchase and installation of one Bus Stop Shelter located at 700 61/2 Avenue in Corcoran, CA 93212 which is located in Kings County. Ridership is anticipated to increase due to installation of bus stop shelter.	\$23,083	2	Kings	2017
16-17-D03-012	Free Butte Regional Transit Fare-Day(s)/Green-Day(s) and Voucher Program	Low Carbon Transit Operations Program	<p>The purpose of this project is to offer free transit day(s) and free vouchers/passes to specific groups for Butte Regional Transit System. This program will be offered on a day or several days throughout the year to promote the service and encourage more people to use public transportation. This will be offered on all of Butte Regional Transit routes. If it applies, special attention will be given to route(s) that have been implemented over the past year. Butte Regional Transit (B-Line) will provide free bus service at various times (i.e. start of school year) and during promotional events (i.e. Free Fare to the Fair, Spare the Air Days, Free Summer School Lunches offered by school districts) throughout the year to promote this mode of transportation as an alternative means to get to major destinations. BCAG/BRT Staff will do lots of public outreach and promotion prior to the</p>	\$79,014	247	Butte, Colusa, Glenn, Plumas, Sutter, Tehama, Yuba	2017

			promotional free bus events. Staff will make the effort to reach out to the DAC's and also to prospectively-new riders. These activities will be performed as part of the LCTOP funding, and the direct and indirect expenses will be subsidized with the funding from this Project.				
16-17-D01-001	Solar Photovoltaic System/Solar Panels	Low Carbon Transit Operations Program	A small solar photovoltaic system was recently installed at the Humboldt Transit Authority (HTA). HTA will be receiving and electric bus in March of 2018 and needs additional solar panels installed for the extra load. The panels that will be used are LG Neon2/ part# LG315N1C-G4.	\$70,293	354	Humboldt	2017
16-17-D05-059	Weekends Without Fares in Salinas	Low Carbon Transit Operations Program	Free fares on weekends on transit routes serving DACs in Salinas. Additionally, summer youth passes will be distributed, valid for free rides all summer.	\$223,971	79	Monterey	2017
16-17-D05-060	Continued Expansion of Intercounty Services	Low Carbon Transit Operations Program	Prior to FY 2014/15 LCTOP funds, San Benito LTA operated 14 runs from San Benito County to Gilroy in Santa Clara County. With FY 2015/16 LCTOP funds, San Benito LTA now operates 18 routes. With 2016/17 LCTOP funds, San Benito LTA will operate a minimum of 16 runs.	\$24,983	43	San Benito, Santa Clara	2017
15-16-D3-15	E-Tran Local Route 156 Transit Service Frequency Improvements	Low Carbon Transit Operations Program	Increase service frequency on local e-tran Route 156 to 15-minute headways during weekday AM/PM peak periods	\$173,992	13	Sacramento	2016
15-16-D9-113	Pass Fare Reduction	Low Carbon Transit Operations Program	Offer deeply reduce multi-ride passes to increase ridership on the Mammoth Express commuter bus routes	\$9,510	22	Inyo, Mono	2016
15-16-D7-94	Fixed Route Bus Transit Operations	Low Carbon Transit Operations Program	Big Blue Bus is making service changes in anticipation of Los Angeles County Metro's Expo Light Rail Line. As part of the integration plan, BBB anticipates increasing its service hours by an additional 53,000 hours. The LCTOP funds will be ...	\$387,175	1,436	Los Angeles	2016
15-16-D7-96	Foothill Transit Line 280 Expansion and Electrification	Low Carbon Transit Operations Program	Foothill Transit's Line 280 Expansion and Electrification project will extend and electrify Line 280, while extending service hours, increasing the frequency of service, and increase the capacity, all with zero emission electric buses.	\$512,738	26,111	Los Angeles	2016
16-17-D02-007	Plumas Transit Systems-Two Bus Patron Shelters	Low Carbon Transit Operations Program	This project includes the purchase of two (2) bus patron shelters for the bus stops in the Quincy area. The bus shelters will accommodate up to eight (8) patrons. The bus shelters will be installed after completion of required ADA upgrades. These shelters will allow transit users to escape inclement weather	\$8,767	19	Plumas	2017

			which will increase convenience and lead to an increase in transit ridership.				
16-17-D02-005	Free Fare Day Program	Low Carbon Transit Operations Program	The Free Fare Day Program aims at creating more awareness in the county for the public transit system. Therefore, the Lassen Transit Service Agency (LTSA) would like to offer free rides to members of the general public throughout the whole county on days to be determined by the LTSA commission. Within our current fare structure this program would provide an estimated 5510 free rides. The amount of days that a free fare will be offered would be dependent on the popularity of the program. The main goal of the program is to increase the awareness of public transportation in Lassen County as a viable mode of transportation and thereby permanently increase ridership and remove vehicles from our roads to effectively reduce Greenhouse Gas (GHG) Emissions.	\$14,554	6	Lassen, Modoc, Plumas, Shasta	2017
15-16-D4-38	Clean Fuels Electric Trolleys	Low Carbon Transit Operations Program	Replace four (4) diesel trolleys with four (4) electric trolleys to reduce GHG.	\$307,569	7,915	Contra Costa	2016
14-15-D04-30	Purchase hybrid Transit Vehicles	Low Carbon Transit Operations Program	Improved transit amenities to attract new riders and improve transit options	\$45,703	0	Marin	2015
14-15-D04-31	Purchase IBE (1) 40' Electric /Diesel Hybrid Bus (replacement)	Low Carbon Transit Operations Program	Improved transit amenities to attract new riders and improve transit options	\$107,192	0	Alameda	2015
14-15-D03-19	Route 30 Extension	Low Carbon Transit Operations Program	Improved transit amenities to attract new riders and improve transit options	\$34,128	0	El Dorado, Placer, Yolo	2015
14-15-D04-26	Real Time Transit Signage	Low Carbon Transit Operations Program	Improved transit amenities to attract new riders and improve transit options	\$1,726	0	Sonoma	2015
14-15-D10-89	Shuttle for Ace passengers and fixed route bus services free of charge	Low Carbon Transit Operations Program	Provide an essential transit link by directly connecting passengers to employers, business parks and other transit modes such as BART as well as provide for missed transit connections and alternate service options in case of an emergency.	\$39,455	0	Santa Clara	2015

15-16-D7-98	Operations Expenditures for the New Gold Line Foothill Extension	Low Carbon Transit Operations Program	The Phase 2A Foothill extension of the Metro Gold Line has added six new stations to extend Light Rail Transit service to increase transit opportunities to the San Gabriel Valley. The project will include trains operating seven (7) days a ...	\$7,007,087	2,749	Los Angeles	2016
15-16-D3-30	Connect Card Operations	Low Carbon Transit Operations Program	Operations implementation of the Sacramento region's new smart card transit fare system, which will allow passengers to use one card to ride multiple transit system.	\$45,000	529	Sacramento	2016
15-16-D3-31	Golden 1 Arena Special Event Service	Low Carbon Transit Operations Program	Enhancing light rail service to accommodate the mobility needs of G1 Center patrons while mitigating regional traffic and air quality impacts.	\$206,632	69	Sacramento	2016
15-16-D3-18	Continuation of the Cameron Park Service Enhancement	Low Carbon Transit Operations Program	Expansion of fixed route service in Cameron Park from 3 hour headways to 60 minute headways. Addition of 765 hours annually.	\$172,232	29	El Dorado, Sacramento	2016
15-16-D10-116	New Route 23	Low Carbon Transit Operations Program	Implement a new bus route between the downtown Transit Center to North Modesto along J Street and McHenry to Bangs.	\$354,065	360	Stanislaus	2016
15-16-D6-85	MCC Bus Wi-Fi	Low Carbon Transit Operations Program	Purchase and install Wi-Fi equipment and access service for all MCC Buses	\$20,335	2	Madera	2016
15-16-D6-84	MCC Bus Stop Shelters and Bike Lockers	Low Carbon Transit Operations Program	Purchase and install bus stop shelters and bike lockers at bus stops within Madera County.	\$63,492	3	Madera	2016
16-17-D03-035	YCTD - TMA Monthly Pass Subsidies	Low Carbon Transit Operations Program	This project provides subsidies for monthly transit passes for Yolobus and/or Sacramento RT. YCTD administers the Yolo County transportation Management Association (TMA) and proposes to offer subsidies for the purchase of monthly transit passes. The subsidy would be \$75 per monthly pass, for up to two months per participant. The subsidy would also require a pledge to use transit for a certain number of days each month. The project is an incentive program for participation in Yolo TMA, with goals of reducing single-occupant vehicle trips, related emissions, and related traffic congestion.	\$8,252	13	Yolo	2017
16-17-D03-032	YCTD 2017 e-Lockers	Low Carbon Transit	Project is to procure and install two G5 SS Quad e-Lockers for storing bicycles at the County Fair Mall in Woodland, and West Sacramento Transit Center in West Sacramento. Each Quad e-	\$35,961	62	Yolo	2017

		Operations Program	Locker can safely and securely store up to four bicycles. Please see specifications and price quote attached.				
16-17-D03-031	Bijou Bus Shelter	Low Carbon Transit Operations Program	The project would relocate an existing, underutilized bus shelter to a newly constructed ADA accessible bus pad at the corner of Herbert Avenue and Spruce Avenue within South Lake Tahoe's Bijou neighborhood. The new bus facility would incorporate bus stop enhancements including bike racks, solar shelter lighting, bus signage and schedule holders, and bear-proof recycling and trash receptacles. The project aims to increase ridership from the Latino demographic in this neighborhood while also providing an opportunity for new Active Transportation Program facilities to be connected to transit. The facility is located near newly constructed portions of the South Tahoe Greenway Shared-Use Class 1 Bike and Pedestrian Trail along with other portions scheduled to be completed in the near future. The new shelter would be utilized by local fixed-route bus passengers on Route 53 which connects members of the Bijou community to South Lake Tahoe's main artery, US Highway 50.	\$31,445	1	El Dorado	2017
14-15-D03-07	E-Tran Local Route 156 Service Frequency Improvements	Low Carbon Transit Operations Program	Provide multimodal options for commuters traveling to/from Elk Grove that would utilize the improved Route 156 service and connect to light rail service at CRC. Increase ridership from students at the CRC traveling to/from the City of Elk Grove.	\$59,300	0	Sacramento	2015
14-15-D06-49	Bus shelters with solar lighting	Low Carbon Transit Operations Program	Replacement of shelters will make it safe and comfortable for passengers to wait for buses. It's anticipated these improvements will increase ridership by 10%.	\$17,580	0	Kern	2015
14-15-D07-65	MBL Route 10 Rideshare Thursday	Low Carbon Transit Operations Program	Will add approx. 19,000 passengers a year. Expected reduction in VMT and GHG emissions by replacing current automobile trips with the expanded service of this high frequency line. CNG buses will reduce carbon footprint.	\$56,717	0	Los Angeles	2015
15-16-D2-11	Free Trinity Transit Fare Day and Voucher Program	Low Carbon Transit Operations Program	Trinity Transit will offer several free fare days on all Trinity Transit routes, pass programs, and youth encouragement programs, to encourage more people to use public transportation systems and increase ridership.	\$13,977	17	Trinity	2016
16-17-D07-098	Metrolink Ticket Vending Machine Replacement, Expansion and Fare	Low Carbon Transit Operations Program	Replace up to 5 current ticket vending machines (TVMs) to allow for expanded transferability. New TVM units embed technology to allow ticket sales of multiple fare products and full expansion of integrated tickets for transfer to connecting transit (now 97 operators). Specs require upgrade capability as technology advances; ADA; user-friendly interface, easy to install, operate, maintain; stability in harsh environments; optional solar/AC hybrid charging stations. This project increases system reliability,	\$938,926	1,600	Imperial, Inyo, Kern, Los Angeles, Orange, Riverside, San Bernardino	2017

	Integration Project		lowers operational costs and makes the enhanced transferability possible via the replacement and expansion of the Metrolink TVM fleet. A total of 144 units will be designed, procured and installed (total project cost is \$30.48M). LCTOP funding from FY 2014-15 contributed to project, and LCTOP FY 2016-17 adds to SCRRA's capacity to replace the TVM fleet by up to 5 units, with any remainder to be held for next procurement batch.			, Santa Barbara, Ventura	
16-17-D07-099	Active Transportation Infrastructure at the Torrance Park Regional and Ride Transit Center	Low Carbon Transit Operations Program	The proposed project would purchase and install active transportation infrastructure at our Torrance Regional Park and Ride Transit Center (RTC). This includes, but is not limited to bicycle lockers, bicycle fix-it stations, and bicycle racks next to the bus bays within our RTC. Our Regional Transit Center will function as a hub for transit activity, connected to many of our popular routes such as the Line 4 Express route to Downtown Los Angeles and the Route 3 that extends from Redondo beach to Long Beach. The RTC is the location of the future Green Line expansion and will only increase in significance with the advent of the new NFL stadium that is currently under construction nearby in Inglewood. Active transportation infrastructure at the RTC will greatly enhance the intermodal connectivity of our region.	\$59,487	103	Los Angeles	2017
16-17-D07-100	Oxnard - Camarillo Employment Connector Project	Low Carbon Transit Operations Program	The project will continue to fund a new bus route connecting Disadvantaged Communities (DAC) in South and Central Oxnard to employment opportunities in Camarillo. LCTOP funds will pay for the operation of the transit service. It is expected that the 12-mile route would continue to be funded annually if the route proves to be successful. The route provides 4 one-way trips in the morning from two bus transfer stops in Oxnard, and 5 one-way return trips in the afternoon from 2 stops in Camarillo. The route will run 7 days a week to serve employees traveling to the Camarillo Outlet Mall for work.	\$325,442	156	Ventura	2017
14-15-D07-70	Metro Gold Line Foothill Extension Phase 2 Arcadia to Azusa	Low Carbon Transit Operations Program	Improved transit amenities to attract new riders and improve transit options	\$5,897,391	0	Los Angeles	2015
16-17-D10-122	BRT Expansion - MLK Corridor	Low Carbon Transit Operations Program	This project will provide operational funding to support a new BRT route in one of the most disadvantaged areas in Stockton. This new service will provide residents in the area with transportation that is significantly more frequent, reliable, and convenient. The goal of the BRT Expansion - MLK Corridor project is to enhance access to jobs, medical services, shopping, and other necessary destinations while significantly reducing air	\$175,960	170	San Joaquin	2017

			pollution through the deployment of zero-emission electric buses. The new BRT service will operate on weekdays from 6 A.M. until 10 P.M., and on weekends from 8 A.M. until 7 P.M. The BRT routes provide frequent service arriving every 15 minutes during peak hours. The estimated ridership per year is approximately 210,651 with an estimated miles per year traveled of 148,441. These estimates are based off performance of other BRT routes currently in service and a system analysis of the MLK Corridor.				
16-17-D10-121	Modesto Downtown Transit Center	Low Carbon Transit Operations Program	This project proposes to improve Modesto's downtown Transit Center which is located within a disadvantaged community. The Transit Center was built in 1993 and is in need of renovation and updates to better serve the needs of existing customers and to attract new riders. This project proposes to improve the customer service capacity of the Transit Center to increase the safety and comfort of Modesto Area Express public transit customers. While not included in GHG reductions calculations, this facility also will serve the future ACE train in 2 to 5 years along with the county's rural transit system, Greyhound and taxis. This project is a regional priority and has the support of StanCOG and all the regional transit agencies.	\$255,849	61	Stanislaus	2017
14-15-D07-66	Student Pass Program	Low Carbon Transit Operations Program	Utilization of CNG fueling facility to fuel the CNG buses with CNG gas.	\$5,100	0	Los Angeles	2015
14-15-D07-64	Bike Racks for Dash Buses	Low Carbon Transit Operations Program	Will encourage community bike and ride trips for a reduction of auto trips and resultant VMT/GHG emissions.	\$214,964	0	Los Angeles, Ventura	2015
14-15-D08-75	Free Ride Day	Low Carbon Transit Operations Program	Increased ridership on buses will replace auto trips with transit trips. Expected ridership increase of approx. 50 riders per week to replace other auto trips.	\$1,098	0	San Bernardino	2015
14-15-D08-74	Veteran's Voucher Program	Low Carbon Transit Operations Program	Project would provide service free of charge to approx. 166 veterans, which in turn would replace VMT by 42.8 miles per trip for an overall reduction in VMT of 7,104.8 miles.	\$655	0	Riverside	2015
14-15-D04-34	Expanded Service for the 38-R Geary and 44-O 'Shaughnessy Lines	Low Carbon Transit Operations Program	Increased service, increased capacity. Riders will not need to wait as long for buses. More service means more capacity and reduced crowding.	\$2,592,022	0	San Francisco	2015

14-15-D10-87	Purchase and Install 14 additional Bus stop shelters in DAC areas	Low Carbon Transit Operations Program	Upgraded bus stops and new shelters will encourage public transit ridership and support active transportation ridership.	\$183,908	0	Alameda, Merced, San Joaquin, Santa Clara, Stanislaus	2015
14-15-D04-33	Train Car Repair and Maintenance Project	Low Carbon Transit Operations Program	Improved transit amenities to attract new riders and improve transit options	\$1,596,049	0	Alameda	2015
15-16-D11-133	South Bay Rapid	Low Carbon Transit Operations Program	The South Bay Rapid Project will construct shelters at six stations, including five new Bus Rapid Transit (BRT) stations, along a new 21 mile BRT route that will operate between Downtown San Diego and the Otay Mesa International Border Cros ...	\$375,669	6,750	San Diego	2016
15-16-D12-126	Fare Adjust	Low Carbon Transit Operations Program	A 10-month bus fare adjustment program. The program is expected to achieve a 4% increase in ridership, reduce greenhouse gas emissions and reach 63% of boarding's from DACs and associated Benefit Zones 1/2 mile around the DACs.	\$3,588,424	9,001	Orange	2016
15-16-D10-132	Fare Reduction Program	Low Carbon Transit Operations Program	Implement a fare reduction program in StaRT's transit service area. The Fare Reduction Program will be offered to residents living in Census Tracts within the following Disadvantaged Communities (DAC) (as defined by SB 35): Ceres, Crows La ...	\$25,000	22	Stanislaus	2016
15-16-D11-125	Student Transit Pass Reduced Fare Program	Low Carbon Transit Operations Program	Establishment of a reduced SPRINTER/BREEZE monthly pass program with three (3) post-secondary educational institutions and one (1) school district. The goal is to increase ridership at the student level to promote long term transit ridership.	\$794,903	3	San Diego	2016
16-17-D03-034	YCTD Connect Card Equipment	Low Carbon Transit Operations Program	Project is for two Connect Card readers to be installed onboard YCTD vehicles as spare/replacement units to ensure system reliability and continued access for all customers. The Connect Card will provide riders with easy online account management, added security with free balance protection, additional new locations for customers to pay for fares, and a single card needed for the eight participating transit agencies. A rider can simply tap a Connect Card at a light rail station or on a bus and the system will deduct the correct fare. Participating agencies include Regional Transit, e-Tran, El Dorado Transit, Folsom Stage Line, Roseville Transit, South County Transit Link, Yolobus, and Yuba-Sutter Transit. The Connect Card will be valid for travel on buses and light rail trains. Please see attached specifications sheets.	\$16,000	256	Yolo	2017

16-17-D03-033	YCTD West Sacramento Pilot Project	Low Carbon Transit Operations Program	The project is for an innovative solution to meeting the changing travel demands of residents of West Sacramento. The project will be implemented as a Pilot Project to operate up to 12 months (including project closeout) in and around West Sacramento. The project will include the operation of up to two on-demand vehicles that will operate as on an on-demand/reservation-based service picking up and dropping off at key destinations throughout the service area. Service will operate during peak commute hours, and may be extended as funding allows. The project will also utilize a tailored software solution to manage operational activities and reporting.	\$22,718	3	Yolo	2017
16-17-D03-036	Connect Card Program (Universal Fare Card)	Low Carbon Transit Operations Program	The Connect Card system is intended to electronically streamline the accessibility of transit fare for nine (9) transit agencies in the Sacramento Region including Yuba-Sutter Transit. This gives each transit user the convenience of using a single fare card for travel on any of the participating agencies. Riders can continue to purchase fare products and add cash value at each agency customer service location as well as at select retail outlets. The Connect Card project also involves deployment of the electronics needed to support this fare payment system including smart card readers on each bus. This involves the incorporation of wireless technology in bus garages as well as connections to a centralized server and financial clearinghouse. The project will provide seamless connections among regional transit systems; simplify the administration of diverse fare structures and fare media types; speed passenger boardings; reduce fare conflicts with operating personnel; and, is expected to increase the attractiveness of transit use and will be an incentive for new passengers to use transit at Yuba-Sutter Transit and throughout the Sacramento area.	\$82,455	5	Butte, Colusa, Lake, Napa, Placer, Sacramento, Solano, Sutter, Yolo, Yuba	2017
16-17-D03-030	Bus Route 25 Enhancement - Operations	Low Carbon Transit Operations Program	Enhancement of service on Route 25 improves headways from every 60 minutes to every 30 minutes on a portion of the current route (on Fair Oaks Blvd. in Carmichael) by extending trips that currently terminate at Marconi Ave. and Fair Oaks Blvd. to a new terminus on Manzanita Avenue and Locust Avenue near the Bel Air shopping center. Requested funding is to operate the enhanced service in year 3 (July 1, 2017 to June 30, 2018) which will continue to operate Monday through Friday. Spans of service remain the same. Performance goals include maintaining/improving the level of on-time performance (80.6% pre- implementation), and increasing ridership by an additional 40+ boardings per day. This addition of service improves frequency and allows individuals more opportunities to travel to grocery stores and retail destinations in Carmichael along Fair Oaks Blvd.	\$31,989	34	Sacramento	2017

16-17-D04-041	New Route 381	Low Carbon Transit Operations Program	Partial operating funding for proposed Route 381 serving downtown Pittsburg and nearby DACs.	\$164,247	35	Contra Costa	2017
15-16-D7-89	Bus Service Expansion	Low Carbon Transit Operations Program	Operate two additional hours on the Blue Route, which serves the Citadel Outlets and Commerce Casino on Telegraph Road, the largest employers in the City of Commerce	\$31,108	25	Los Angeles	2016
15-16-D7-88	Electric Bus Infrastructure Improvements	Low Carbon Transit Operations Program	AVTA is seeking funds to procure, construct and install the infrastructure improvements necessary to provide sixty nine overnight charging stations for proposed fleet of electric vehicles.	\$118,796	23,956	Los Angeles	2016
15-16-D7-136	Montebello Bus Lnes "Route 10" Rideshare Thursday	Low Carbon Transit Operations Program	Continue "Route 10" Rideshare Thursday Project to enhance mobility and increase access to service on its most productive route. The line provides service to designated disadvantaged communities.	\$178,826	11	Los Angeles	2016
16-17-D04-049	Petaluma Transit: Weekday Afternoon Service Enhancements	Low Carbon Transit Operations Program	Addition of service to the afternoon Routes 2 and 11 in order to increase service frequency and reliability.	\$29,004	1	Sonoma	2017
16-17-D04-050	Expanded Service on the 9R San Bruno Rapid Line	Low Carbon Transit Operations Program	Continue to provide expanded service on the 9R San Bruno Rapid line for an additional year. The 9R had its frequency increased to run every 9 minutes instead of every 12 minutes on weekdays. This resulted in an increase in vehicles from 23 to a maximum of 29 on the 9/9R.	\$3,764,725	47	San Francisco	2017
15-16-D7-91	Free Fare on DASH Services for Metro Pass Holders	Low Carbon Transit Operations Program	Provide Free DASH rides for Metro pass holders (regular, senior, student, and other monthly passes) for six months.	\$663,949	1,214	Los Angeles	2016
15-16-D7-90	Line 1X Transit Service	Low Carbon Transit Operations Program	This project help continue to fund the increased in bus service frequency while reducing Green House Gases (GHG) in the Disadvantaged Communities (DAC) along freeway I-110 in Los Angeles	\$111,484	14	Los Angeles	2016
16-17-D07-090	Route 22 Extension Project	Low Carbon Transit Operations Program	LBT is seeking funding assistance through LCTOP in the amount of \$236,592 for the Route 22 Extension Project. LBT's Route 22 presently operates from the Transit Gallery in downtown Long Beach, California, to Alondra Boulevard at Downey Avenue in Paramount, California. The goal of the Route 22 Extension Project is to extend the	\$236,592	24	Los Angeles	2017

			current route from its existing terminus to the Los Angeles County Metropolitan Transportation Authority's (Metro) Green Line Lakewood Station. Metro's Lakewood Station in Downey, California, is located approximately two miles from the current Route 22 terminus. Long Beach Transit will operate this line 365 days with at least 27 trips on weekdays and at least 12 trips during weekends and holidays.				
16-17-D02-008	Expansion of Express Services	Low Carbon Transit Operations Program	Free-Fare days falls under category A5: Free or reduced fare transit vouchers. This project is designed to provide free-fare days for riders using the Crosstown Express. The operation of the service is funded with LCTOP funding. The route is the only transit bus service for the Redding Civic Auditorium, Turtle Bay Exploration Park, and Sundial Bridge. Crosstown Express is the only RABA route with a 30 minute headway and runs for approximately 8 service hours daily (from 8:20 AM to 12:20 PM and 2:50 PM to 6:50 PM) on weekdays. The route uses a Gillig diesel 35'-40' buses, which are the standard buses that Redding Area Bus Authority (RABA) has for fixed route use.	\$85,439	25	Shasta	2017
16-17-D02-006	Local Demand Response Service Expansion (M,W,F)	Low Carbon Transit Operations Program	Purpose: To expand daily driver service hours on Sage Stages local demand response Dial a Ride service's by adding an additional (1) eight hour shift Monday, Wednesday, and Friday. Currently DAR service hours are 7:30 - 5:30 (5) days per week with one driver M, W, F and two drivers Tu and Th. Sage Stage would add one additional (8) hour shift three days per week. The expansion is projected to add 26 passenger trips per day within the 10 mile service area and reduce the number of missed passenger incidents. The added shift would be 8:30 am - 5:30 pm. The program will increase awareness of local public transit as a viable means of transportation to the general public. The new added hours will increase ridership and reduce Green House Gas emissions.	\$11,759	2	Lassen, Modoc, Siskiyou	2017
16-17-D02-009	Siskiyou County Transit and General Express Bus Stop Enhancement Project	Low Carbon Transit Operations Program	The proposed project includes upgrades to bus stop infrastructure including but not limited to benches, shelters, trash cans, solar lighting, bus shelter concrete pads, passenger waiting areas, and striping at two bus stops in Siskiyou County. The existing stops have shelters that do not meet ADA. They do not match our other improvements so passengers do not always realize these locations are bus stops. These stops have been over used by non-bus riders and are in need of improvements to make it safer for our riders and new residents to the area. Both sites provide access to retail, medical, social service facilities, schools, our local college and other county services.	\$21,093	9	Siskiyou	2017

14-15-D08-78	Perris Valley Line Feeder Bus Service is an expansion of the existing 91 Line - Operating Assistance	Low Carbon Transit Operations Program	The Perris Valley Line ridership could grow to 4,000 daily riders to replace an average of 24 auto miles each way for the bounce back service.	\$129,859	0	Los Angeles, Orange, Riverside	2015
16-17-D08-113	Lines 80 and 81 Service Frequency Improvements	Low Carbon Transit Operations Program	SunLine requests funding to increase service frequency and realign service map. Service frequencies will go from 1-hour increments to half hour, and the realignment allows the service to reach a trip generator area (e.g. an area with sought after amenities for riders). Service enhancements will have no effect on fare and these service lines intersect a DAC area in the City of Indio. Last year's LCTOP application did ask for funding for Lines 80, 81 and 95, however due to operational resource constraints, no improvements were made to Lines 80 and 81. All funding enhanced Line 95 and the DAC area in the City of Coachella. This year, we consider Lines 80 and 81 to be a new project for enhancements. LCTOP funds will help SunLine to provide best service to the City of Indio which is an overall low-income area and receives most of its ridership from those looking to make the best economic use of their resources.	\$249,672	3	Riverside	2017
16-17-D06-065	Free Ride Days	Low Carbon Transit Operations Program	Arvin Transit offers discounted fares to its community members daily Monday through Friday, thereby reducing Greenhouse Gas Emissions (GHG) by offering a viable, convenient means of transportation and increasing ridership. Because of the extreme level of poverty in the City, Arvin transit has not increased its fares and this LCTOP fund enables the transit department to continue to provide low cost transportation and encourages the use of mass transit thereby reducing GHG. The City would like to use their 2016-17 LCTOP funding totaling \$9,811 to continue to keep fares low, and to offer "free ride" days, which will increase riders, and reduce GHG.	\$9,811	3	Kern	2017
16-17-D03-024	Tart Highway 267 Year-Round Service- Year 3	Low Carbon Transit Operations Program	This project will add bus service on the Tahoe Truckee Area Regional Transit Highway 267 route to year-round. The route operates on a 60-minute headway between Kings Beach, Northstar and Truckee. The service is currently only provided during the winter, and in the summer between only Kings Beach and Northstar. The summer route does not go to Truckee. This route will add the entire route for the 250 days per year outside of the winter season. The route is operated by Tahoe Area Regional Transit (TART), which is a division of the Placer County Department of Public Works. The addition of the Highway 267	\$54,215	17	Placer	2017

			route on a year-round basis will close a significant gap in service in the north Tahoe Truckee area. This addition of transit service has been a priority for Placer County for several years and has been identified as a key part of an effort called the Resort Triangle Transit Vision. The added route service is estimated to add 50,400 passengers per year. This service will add an important connection between Kings Beach and Truckee as well as providing a year-round connection to Northstar resort for visitors and employees.				
16-17-D06-068	Bus Shelters with Solar Lighting	Low Carbon Transit Operations Program	The proposed project would complete year 3 of 3 to purchase, construct and install bus stop enhancements including but not limited to benches, shelters, trash cans, solar lighting, bike racks, bus shelter concrete pads, passenger waiting areas, and sidewalk at twenty eight bus stops throughout City of Delano. The twenty eight bus stop include improvements to bus stops served by City of Delano Area Rapid Transit (DART). The bus stops include stops that provide access to retail, schools, medical facilities, and county services.	\$95,542	23	Kern, Tulare	2017
16-17-D08-106	New Service	Low Carbon Transit Operations Program	New Fixed Route Service will be implemented between Big Bear Lake and Lucerne three times daily, four days per week. Currently there is no service between these two areas.	\$150,550	111	San Bernardino	2017
16-17-D08-105	Joshua Tree National Park Transportation Service	Low Carbon Transit Operations Program	LCTOP funding requests assistance in the collaboration between Joshua Tree National Park and the MBTA to provide the citizens of Morongo Basin and tourists a bus service that provides these visitors a way to visit the National Park without having to use personal vehicles. This collaboration effort will help reduce traffic congestion and environmental impacts.	\$76,696	416	San Bernardino	2017
16-17-D08-108	Route 290 Freeway Express	Low Carbon Transit Operations Program	Omnitrans is requesting funding to continue its 290 Freeway Express. The 290 cuts this travel time in half, bringing the total time for a one-way trip down to 58 minutes. For riders traveling the entire distance of the route, this reduces travel times by over an hour each direction.	\$69,826	869	San Bernardino	2017
16-17-D08-107	Free Fare Day Program	Low Carbon Transit Operations Program	Free Ride Day to promote ridership on all Mountain Transit services to public. Funding requested is estimated to provide one free ride day per year for the next two years.	\$4,645	9	San Bernardino	2017
16-17-D08-110	Perris Valley Line Operation	Low Carbon Transit Operations Program	Riverside County Transportation Commission will be applying FY 16/17 LCTOP funds toward the operation cost of the commuter rail 91/Perris Valley Line that started operation on June 6, 2016. The route provides six round trips from the City of Perris to the Los Angeles Union Station and 6 bounce back trips between the City of Perris to downtown Riverside. The line	\$183,080	8,958	Riverside	2017

			operates Monday through Friday with service spanning from 4:43 A.M. to 8:25 P.M.				
15-16-D3-16	Route S Expansion	Low Carbon Transit Operations Program	Expansion and enhancement of Local Service Route S, increasing hours of operation and extending route to service additional stops on previously unserved corridors that include large employment centers, business commercial sites and resident ...	\$162,221	1,262	Placer	2016
15-16-D6-87	Fare Subsidy Program for New Riders	Low Carbon Transit Operations Program	TCAT proposes to implement a Fare Subsidy Program for new riders that will offer free and/or reduced fares to promote increased transit usage throughout Tulare County.	\$147,474	131	Tulare	2016
15-16-D10-115	Calaveras Transit Pilot Saturday Service	Low Carbon Transit Operations Program	Implement a new transit service on Saturdays that will connect communities from Valley Springs to Murphys, giving both residents and visitors the opportunity to use public transportation for shopping and recreation.	\$44,235	40	Calaveras	2016
15-16-D7-92	Operating Assistance for New NTS Route	Low Carbon Transit Operations Program	Expand Norwalk Transit Services (NTS) to include Metro's Line 270. This will entail a joint effort of NTS and Foothill Transit to take-over line 270 whereas NTS will service the southern portion of the route.	\$51,207	5	Los Angeles	2016
15-16-D7-93	Regional Smart Card Ticket Vending Machine Project	Low Carbon Transit Operations Program	Operations funding for ticket vending machine project	\$17,168	22	Los Angeles	2016
15-16-D5-59	MST Electric Bus	Low Carbon Transit Operations Program	MST would purchase one 30-foot all electric bus to operate Line 42 (a new transit route started with LCTOP funds from FY14)	\$296,890	3,057	Monterey	2016
14-15-D04-37	Curtola Park and Ride Hub Phont Voltaic Panels	Low Carbon Transit Operations Program	Installation of 120 solar panels will generate 30KW of power annually which is more than enough to power the entire facility and charging stations. Offering a well-lit parking lot with charging stations will keep 592 vehicles off the Highway.	\$169,444	0	Solano	2015
15-16-D1-4	Ticket Vouchers	Low Carbon Transit Operations Program	Provide ticket vouchers to Veterans to promote public transportation throughout Humboldt County.	\$5,900	27	Humboldt	2016
15-16-D2-9	Expansion of Express Route Services	Low Carbon Transit Operations Program	Expansion of express route transit services. The project is to expand express transit route services provided by Redding Area Bus Authority.	\$187,529	4	Shasta	2016
15-16-D2-10	Transit Facilities Upgrades to Support	Low Carbon Transit Operations Program	Transit Facilities Upgrades to Support Active Transportation and Encourage Ridership (benches, efficient lighting, signage, and bicycle racks) Funds to be rolled over.	\$62,305	21	Tehama	2016

	Active Transportation and Encourage Ridership						
14-15-D08-79	Perris Valley Line Feeder Bus Service will establish seamless transfers between bus and rail at the new commuter rail stations - Operating Assistance	Low Carbon Transit Operations Program	Reduction in VMT and GHG emissions by providing a direct transfer connection between bus and rail.	\$460,410	0	Riverside	2015
14-15-D06-59	Bus Stop Enhancements - McFarland / Tehachapi	Low Carbon Transit Operations Program	Enhanced bus stops will attract 10 new riders each, over a year, to replace an average drive round trip per rider of 60 miles. Providing new amenities will attract new riders who will have a positive visual of Kern's transit service.	\$8,620	0	Kern	2015
14-15-D07-71	Metrolink Ticket Vending Machine Replacement and Expansion	Low Carbon Transit Operations Program	Increased reliability of ticket vending machines is expected to increase system ridership by 9.9%.	\$486,312	0	Los Angeles, San Bernardino	2015
14-15-D05-40	Transit Expansion	Low Carbon Transit Operations Program	Two-loop Saturday expansion could add 26 commuter bus trips per day.	\$79,756	0	Santa Barbara	2015
14-15-D07-62	Culver City Bus Line 6	Low Carbon Transit Operations Program	Expansion could add 520 commuter bus riders per day. Culver City Bus fleet operates on 100% CNG, further contributing to reduced GHG emissions.	\$34,529	0	Los Angeles	2015
14-15-D04-28	Expanded service route 201	Low Carbon Transit Operations Program	Expansion could add 110 commuter bus riders per day to replace an average auto trip of 10 miles each way.	\$178,646	0	Contra Costa	2015
14-15-D03-18	South Line Phase 2 Operations	Low Carbon Transit	Predicted increase of nearly 2,900 passenger boarding's per weekday on RT's Blue Line due to the operation of service along the SLP2 project.	\$365,969	0	Sacramento	2015

		Operations Program					
14-15-D04-24	Martinez Shuttle	Low Carbon Transit Operations Program	Expanded service will reduce VMT and GHG emissions by replacing auto trips with transit trips. Expansion could add 145 bus riders per day.	\$185,881	0	Contra Costa	2015
14-15-D08-80	Vine Street Stop Expansion will expand the bus zone on Vine Street which is next to downtown Metrolink commuter rail station	Low Carbon Transit Operations Program	The Vine Street stop will result in a reduction of VMT and greenhouse gas emissions by providing a direct transfer connection between bus and rail. Project will see an estimated annual reduction of almost 4.4 million in VMT.	\$58,822	0	Riverside	2015
15-16-D3-33	Route 30	Low Carbon Transit Operations Program	Expansion of Route 30 on the West Shore of Lake Tahoe connecting to the North Shore's TART service.	\$72,980	1	El Dorado, Placer	2016
15-16-D3-17	Free Fare Day Program	Low Carbon Transit Operations Program	The Free Fare Day Program will offer free rides to the general public on days to be determined by the Colusa County Transit Agency Commissioners.	\$22,015	14	Colusa	2016
16-17-D06-075	Free Transit Program	Low Carbon Transit Operations Program	For this Free Fare Program, KCAPTA aims to offer free rides to members of the general public on days to be determined by KCAPTA Board. Also a 30-day pass will be available to individual new to transit. At our current structure, this program will provide between 5,000 and 10,000 free riders over the course of the program. The amount of days that free fare will be dependent on the popularity of the program. The goal of this program is two-fold, to offer free rides and remove vehicles from our roads to effectively reduce Greenhouse Gas (GHG) Emissions, and also to increase awareness of public transportation as a viable means of transportation and thereby permanently increase ridership. This project will also create "KART University" with the development of a travel training curriculum including video. Travel training will teach individuals how transit works, what to expect while riding transit, and how to plan their trip. The course will focus on educating the elderly population.	\$59,442	13	Fresno, Kern, Kings, Monterey, San Luis Obispo, Tulare	2017
16-17-D06-079	Shafter Saturday DAR Service	Low Carbon Transit	In fiscal year 2015-16 the LCTOP program provided \$18,256 in funding to begin a Saturday Dial A Ride Service in the City of Shafter consisting of one van operating for six hours per	\$8,354	1	Kern	2017

	- Fare Reduction	Operations Program	Saturday. Between July 1, 2016 and February 27, 2017 the City transported 684 riders. Prior to this service being established there were no local public transit services being provided. The City would like to use their 2016-17 LCTOP funding totaling \$8,354 to promote this new Saturday Service through a fare reduction program.				
16-17-D06-072	Route 240 Boron to Mojave-Expand Service	Low Carbon Transit Operations Program	<p>Kern Transit Fixed Route currently provides Wednesday only service between Boron and Mojave. There are 4 round trips between 3:45a.m. and 6:45p.m., 9.5 hours of actual service. The route provides access to medical care, social services and shopping locations in Mojave as well as other destinations in Kern County via connections to other Kern Transit routes. Passengers can also travel to Lancaster and beyond via Kern Transit's bus connection to the Metro Link in Lancaster.</p> <p>The proposed project is to add service hours on Monday each week. Monday was the predominant request per an on board survey. The first 2 hour round trip (3:45a.m. to 6:35a.m.) will be eliminated on Wednesdays. The remaining three round trips will be re-scheduled to both continue to connect to other Kern Transit routes and to provide full day coverage. There will be 7.5 hours of service. The second day's schedule will mirror Wednesday's. There will be a total of 15 hours of actual service between the two days.</p> <p>The project goals: 1) 50% of current ridership ride both days 2) Net gain of five new riders 3) Unlinked passenger trips increase by 75%.</p>	\$53,319	4	Kern	2017
16-17-D06-073	Route 110 Delano Bakersfield	Low Carbon Transit Operations Program	<p>Funds will be used for the expansion of operating service for RTE 110 Delano/Bakersfield. The expanded hours on the existing route will improve mobility, education, job, and medical care access. The expansion also addresses existing service gaps which limits a passenger's ability to travel from Delano, McFarland, Shafter, and Wasco to Bakersfield for work or education that begin or end in the late afternoon and evening. Currently, students and employees from these communities can use Delano Area Rapid Transit (DART) and KRT to travel to Bakersfield. Students can ride DART all the way to Bakersfield Jr.College (BC). KRT's last stop is the Downtown Transit Center. Students then use Golden Empire Transit (Bks. City) to finish the travel to BC. DART's last trip from Bakersfield to Delano is at 2:15pm. KRT's last trip from Bakersfield to Delano is 5:40pm. Thus, students with late afternoon or early evening classes, and employees with later work hours have no public transit to return them to the north Kern communities.</p>	\$53,319	314	Kern	2017

<p>16-17-D06-082</p>	<p>Year 2 Expand and Enhance V- LINE Shuttle Service</p>	<p>Low Carbon Transit Operations Program</p>	<p>The City of Visalia is proposing to expand its V-LINE service to provide an increase in frequency and increase capacity on the most popular runs the service provides. Two of the trips have reached their capacity levels. The 20 passenger vehicles used are at capacity on the most popular trips. Larger 35ft vehicles are being used to be able to provide the adequate room for passengers to get to and from their destination. V-LINE provides service from the City of Visalia Transit Center with stops at the Visalia Municipal Airport, the Fresno Yosemite Airport, and the Fresno Courthouse Park. The service operates six round trips a day (4am; 6am; 9am; 1pm; 4pm; 6:30pm). There have been requests to provide additional trips between the 1pm-4pm and after 6:30pm hour. Since implementation, a little more than a year ago, ridership increased more than 50%. Enhancing this service would satisfy the need of the communities by getting passengers to the airport, school, medical appointments, and other needs. This would increase mode share by replacing automobile trips with Transit trips.</p>	<p>\$130,289</p>	<p>149</p>	<p>Fresno, Tulare</p>	<p>2017</p>
<p>16-17-D06-080</p>	<p>Enhanced Fare Integration</p>	<p>Low Carbon Transit Operations Program</p>	<p>The City of Tulare proposes to install electronic fareboxes and other ITS equipment on TIME fixed-route, and DART demand-response systems to attract new riders, reduce dependence on auto trips, and improve air quality. The City is collaborating with other transit operators in Tulare County, including the City of Visalia and the County of Tulare, to optimize fare media between systems, including transfers, use of passes, and multi-agency reimbursements. The proposed project is expected to result in a two % increase in annual ridership of 7,500 riders and measurable greenhouse gas reductions. The City currently has a total of 18 buses. LCTOP funding for 16 units was requested in 15/16 and 1 to 2 additional units at a minimum are proposed for 16/17 project funds with actual units and other ITS enhancements to be refined as the bidding process proceeds. Ridership performance statistics will be closely monitored.</p>	<p>\$225,794</p>	<p>60</p>	<p>Tulare</p>	<p>2017</p>
<p>16-17-D06-081</p>	<p>Real Time Bus Information Integration</p>	<p>Low Carbon Transit Operations Program</p>	<p>Tulare County proposes to develop and implement a new website for the County's transit system, Tulare County Area Transit (TCaT). The County seeks to launch a website that provides comprehensive TCaT information with simplicity, clarity and ease of use. The website will be milt-lingual and allow for interactive real-time information and accessible route maps and brochures. It will be designed to adapt to mobile technologies and promote accurate and reliable, real-time customer information such as system wide bus arrival times and passenger system alerts.</p>	<p>\$64,588</p>	<p>269</p>	<p>Fresno, Inyo, Kern, Kings, Tulare</p>	<p>2017</p>

16-17-D07-084	Electric Bus Infrastructure Improvements	Low Carbon Transit Operations Program	AVTA's is transitioning its fleet from diesel gasoline to all zero emission electric buses. AVTA is seeking funds toward the cost of 1 commuter bus. AVTA's board adopted goal is to be 100% electric by December 2018. We have used past years LCTOP funds toward the installation of necessary wiring, conduit and basic energy delivery equipment on site at a 1 charger to 1 bus ratio. We have received a grant award through the Transit and Intercity Rail Capital program toward the purchase of 13 commuter buses. This award does not fully fund the bus purchase price and LCTOP funds will be used to complete the funding for the 13th bus.	\$54,831	1,002	Los Angeles	2017
15-16-D8-135	Ontario Airport Shuttle Service Pilot	Low Carbon Transit Operations Program	Shuttle service from Ontario Airport and surrounding hotels to and from rider destinations.	\$554,435	53	San Bernardino	2016
15-16-D8-134	Omnitrans Route 290 Pilot Program Expansion	Low Carbon Transit Operations Program	290 Freeway Express bus service expansion	\$591,285	946	San Bernardino	2016
15-16-D8-111	Transfer Center and Bus Stop Amenities	Low Carbon Transit Operations Program	Make improvements to the main transfer points in the VVTA system, as well as provide additional amenities to existing bus stops.	\$296,574	378	San Bernardino	2016
15-16-D8-109	Lines 80,81, and 95 Service Frequency Improvements	Low Carbon Transit Operations Program	Increase service frequency on Lines 80, 81 and 95 that operate in disadvantaged communities.	\$539,373	57	Riverside	2016
15-16-D8-108	Transit Marketing and Fare Subsidy Program for Mountain/Desert Transit Operations	Low Carbon Transit Operations Program	The FY 2015-16 Funds will be used for a six- to twelve-month fare subsidy program for Mountain/Desert transit riders. In addition, funds will be used to assist each of the operators with developing a marketing plan that will help develop ag ...	\$461,683	42	San Bernardino	2016
16-17-D07-086	Culver CityBus Line 6 Rapid Service	Low Carbon Transit Operations Program	Culver CityBus Line 6 Rapid Service continues to exceed capacity on the 11 original buses providing daily service along the Sepulveda corridor. This heavily traveled route covers 12.5 one-way miles along Sepulveda Boulevard and provides 616,147 unlinked passenger trips each year. Passenger loads on peak direction exceed capacity over 80% of the time, so additional buses are being added to the existing route. This service provides enhanced connectivity to two major transit centers, the West L.A.	\$26,218	94	Los Angeles	2017

			Transit Center and the Metro Green Line Station, as well as connected service with the Sepulveda/Exposition Light Rail Station on the Expo Phase II extension to Santa Monica. These funds will contribute to the FY17-18 operating costs of one of the two additional buses placed into service on this line, which began in January 2015.				
16-17-D06-070	Electric Vehicle Acquisition for Fresno County Rural Transit Agency	Low Carbon Transit Operations Program	The proposed project would be the purchase of a single Zenith Zero Emission Electric Van (or equivalent vehicle) to be used in an existing FCRTA Demand Response service areas. This Electric Van would be an addition to the FCRTA fleet. This Van would operate in the existing Demand Response service areas which encompasses small urban cities and/or rural unincorporated areas outside of the sphere of influence of the 15 incorporated cities of Fresno County. This Electric Van would typically transport a variety of FCRTA riders including seniors, disabled, and the general public in a "Curb to Curb" Demand Response service format.	\$98,896	98	Fresno, Madera	2017
15-16-D1-6	Reduced Fare Project for Mendocino college Students	Low Carbon Transit Operations Program	The Project will provide free bus rides to students of Mendocino College in order to attract new riders to transit, thus reducing VMT and GHG emissions.	\$92,361	47	Mendocino	2016
15-16-D4-37	Martinez Shuttle	Low Carbon Transit Operations Program	Continuation of project that expands access to social and health services for Martinez residents.	\$308,009	27	Contra Costa	2016
15-16-D4-36	East Bay Bus Rapid Transit	Low Carbon Transit Operations Program	Purchase and install 120 Transit Signal Priority units on Broadway and International Boulevard between Oakland and San Leandro as part of the 9.52-mile East Bay BRT route. The East Bay BRT project includes dedicated bus lanes, signal prio ...	\$1,948,597	371,444	Alameda	2016
15-16-D3-12	New B-Line Commuter Express Service	Low Carbon Transit Operations Program	Butte County Association of Governments (BCAG) is implementing a New Commuter Express route which will provide service within the DAC of Butte County to Chico Municipal Airport Industrial Park and locations in-between. The Chico Municipal A ...	\$230,926	11	Butte	2016
14-15-D05-42	Intercounty Service Expansion	Low Carbon Transit Operations Program	Reduce GHG through expanded transit service, which will reduce VMT by replacing single passenger vehicle trips with mass transit trips. The potential amount of reduction in VMT is 726 miles per day.	\$18,741	0	San Benito, Santa Clara	2015
14-15-D02-02	Expansion of Express Services	Low Carbon Transit Operations Program	Improved transit amenities to attract new riders and improve transit options	\$62,657	0	Shasta	2015

14-15-D05-45	SCT operating assistance for new Route 26 service	Low Carbon Transit Operations Program	Improved transit amenities to attract new riders and improve transit options	\$97,348	0	San Luis Obispo	2015
15-16-D06-081	Construct Mojave Transit Center	Low Carbon Transit Operations Program	This project is the construction of a full transit center. Phase I (15-16 funding) will comprise construction of separate lanes for bus egress and ingress, code compliant ADA loading and unloading, multiple covered shelters as well as open air benches. Shelters will provide weather protection, solar lighting, benches, bike racks, and waste receptacles. Additional solar lighting will be erected throughout the site. Landscaping will be added to improve aesthetics and provide additional sun protection. Schedule and information kiosks and electronic departure screens will be available. A "park and ride" area will be developed. Phase II (16-17 funding) will comprise installation of restrooms and a ticketing kiosk. It is anticipated the increased comfort, safety and convenience provided by the transit center will attract persons previously not interested in public transit. We look for an increased ridership of 2% per year.	\$112,269	423	Kern	2017
16-17-D12-128	Three-Position Bike Racks	Low Carbon Transit Operations Program	OCTA will procure and install three-position bike racks on all buses in the active fleet with the exception of 60ft and Cutaway buses. OCTA buses are currently equipped with two-position bike racks and buses leave bicyclists at stops when there are two bicycles in the bike racks. The larger capacity racks will reduce the likelihood a bicyclist is left behind, make the system more attractive to bicyclists, resulting in increased ridership. A total of 557 three-position racks will be purchased: 484 installed on buses and 73 spares. Cost for the purchase and installation of the racks is \$766,345. The project will increase system wide ridership by 0.9%, reduce greenhouse gas emissions by 9,837.13 tons, reduce VMT by 21,127,500, and reach 63% of boarding's from DACs and associated Benefit Zones 1/2 mile around the DACs. Total GHG emission reductions over Greenhouse Gas Reduction Fund (GGRF) funds requested is 0.01283643.	\$766,345	6,600	Los Angeles, Orange	2017
15-16-D7-129	Culver City Bus	Low Carbon Transit Operations Program	Add one CNG bus to enhance transit service on heavily-traveled Culver City Bus Line 6	\$56,805	61	Los Angeles	2016
15-16-D7-102	Oxnard-Camarillo Employment Connector	Low Carbon Transit Operations Program	The purpose of the project is to provide a direct bus connection from South-Central Oxnard, A Disadvantage Community (DAC), to employment centers in Camarillo. This project will be combined with FY14-15 LCTOP funds to purchase the bus to o ...	\$804,001	0	Ventura	2016

15-16-D7-101	Purchase One Fuel Efficient Tier 4 EMD F-125 Locomotives	Low Carbon Transit Operations Program	This project would allow SCRRA to acquire one EMD F-125 Tier 4 locomotive for use in expanded Metrolink commuter rail service on existing routes.	\$2,051,727	116,573	Los Angeles, Orange, Riverside, San Bernardino, San Diego, Ventura	2016
15-16-D7-100	Long Beach Transit Bus Stop Improvement Project	Low Carbon Transit Operations Program	Assistance to upgrade between 15 and 20 bus stops in the LBT service area, including within designated disadvantaged communities that are in greatest need of improvement based on the high volume of boarding's and lightings and LBT's asset c ...	\$512,596	0	Los Angeles	2016
15-16-D7-130	Beach Cities Transit (BCT) Transit Bus Pass Subsidy Project	Low Carbon Transit Operations Program	Operations funding for reduced fare BCT monthly bus pass program for City of Lawndale residents	\$7,968	56	Los Angeles	2016
15-16-D4-44	Purchase Three (3) 40 Foot Diesel Electric Hybrid Buses	Low Carbon Transit Operations Program	The project includes procurement of three 40-foot diesel-electric hybrid buses to replace three 40-foot diesel-powered buses in the District's active fleet that have reached the end of their useful lives.	\$1,127,876	26,923	Marin, San Francisco	2016
15-16-D6-73	FAX Increased Frequency Weekend Service	Low Carbon Transit Operations Program	Project to increase fixed route bus frequencies to 30-minute headways on several weekend routes.	\$734,563	1,278	Fresno	2016
15-16-D6-72	Bus Shelters with Solar Lighting	Low Carbon Transit Operations Program	This project will focus replacing or adding shelters and/or benches with lighting to encourage ridership.	\$52,781	13	Kern, Tulare	2016
15-16-D3-14	Amtrak Station Improvement Project- Install Electronic Bike Lockers	Low Carbon Transit Operations Program	Purchase and install 24 new electronic bicycle lockers ("eLockers") at the Amtrak Station. The eLockers are operated by electronic key-cards and are solar powered.	\$93,295	134	Yolo	2016
14-15-D03-12	HWY 267 year round	Low Carbon Transit Operations Program	Improved transit amenities to attract new riders and improve transit options	\$38,608	0	Nevada, Placer	2015

14-15-D06-54	Visalia Fresno Shuttle	Low Carbon Transit Operations Program	New service could add 64 commuter bus riders per day to replace an average of 39 miles of auto trips each way. VMT reductions equaling 651,456 miles annually.	\$167,017	0	Fresno, Tulare	2015
14-15-D06-57	Operating Assistance - Expansion	Low Carbon Transit Operations Program	Plan to add 12,616 service hours on some weekend and some weekday routes improving service reliability and on time performance. Improved frequency is planned to attract more riders less dependent on single occupant vehicles.	\$177,752	0	Kern	2015
14-15-D06-60	Route Expansion	Low Carbon Transit Operations Program	A total of 4 new routes will be added to increase service area, connectivity, and increase frequency along a high activity corridor.	\$51,481	0	Kings	2015
14-15-D07-63	Bus Operation - Line 1X	Low Carbon Transit Operations Program	Improved transit amenities to attract new riders and improve transit options	\$38,999	0	Los Angeles	2015
14-15-D04-39	Expanded Service Route 11	Low Carbon Transit Operations Program	Expanded transit service will reduce VMT and GHG emissions by replacing auto trips with transit trips. Expansion could add 50 commuter bus rider per day.	\$54,247	0	Contra Costa	2015
14-15-D05-41	Transit Services in East Salinas	Low Carbon Transit Operations Program	Expanded transit service will reduce VMT and GHG emissions by replacing auto trips with transit trips. Expansion could add 2,500 passengers per month to replace an average of 4 miles of auto trips each way.	\$345,563	0	Monterey	2015
14-15-D03-08	Louis Orlando Transfer	Low Carbon Transit Operations Program	Improved transit amenities to attract new riders and improve transit options	\$45,465	0	Placer	2015
15-16-D1-5	Bus Stop Sign Upgrades	Low Carbon Transit Operations Program	Install new bus stop signs at 205 bus stops that do not have signs, and at 76 locations with signs that are obsolete or in poor condition. Total signs equals 281.	\$68,131	459	Lake	2016
14-15-D03-06	City of Davis weekend service expansion	Low Carbon Transit Operations Program	Improved transit amenities to attract new riders and improve transit options	\$30,977	0	Yolo	2015
14-15-D03-10	Cameron Park Fixed Route Extension	Low Carbon Transit Operations Program	Improved transit amenities to attract new riders and improve transit options	\$57,524	0	El Dorado	2015
15-16-D6-68	Bus Stop Improvements	Low Carbon Transit Operations Program	Upgrade/improve transit stop stations by replacing damaged and vandalized existing bus shelters	\$13,243	2	Kern	2016

15-16-D6-71	Amtrak Subsidy Program	Low Carbon Transit Operations Program	Provide Amtrak tickets for transportation between the cities of Corcoran and Hanford	\$22,241	27	Kings	2016
15-16-D6-70	Free Ride Days and Promotion	Low Carbon Transit Operations Program	Promote 20 Free Fare Days, and procure and distribute single use passes to promote new regional farebox system.	\$50,000	25	Fresno	2016
14-15-D06-48	Upgrade Transit Stop	Low Carbon Transit Operations Program	Encourage transit ridership in disadvantaged areas by providing for a shelter, bench, solar lighting and trash cans at 5 bus stops.	\$36,902	0	Fresno	2015
14-15-D04-25	Bus Stop Improvements	Low Carbon Transit Operations Program	Expansion could add 50 commuter bus rider per day. Upgraded amenities at transit stops and transportation shelters will help improve the customer experience.	\$98,890	0	Solano	2015
14-15-D09-84	Expansion of Mammoth Express fixed Route commuter bus service will serve multiple purposes for the Eastern Sierra region of Inyou and Mono Counties	Low Carbon Transit Operations Program	Improved transit amenities to attract new riders and improve transit options	\$17,597	0	Inyo, Mono	2015
14-15-D10-90	Metro Hopper Expansion provides improved service to DAC areas within Stockton	Low Carbon Transit Operations Program	Project is expected to reduce 3,780 vehicle miles traveled annually and an average of 1.4 Metric Tons of COS annually.	\$221,773	0	San Joaquin	2015
14-15-D03-15	Bus Route 65 Expansion Operations	Low Carbon Transit Operations Program	Bus Route 65 expansion will result in approx. 1,562 fewer VMT per weekday. Will increase mode share by expanding transit service by 1.7 miles and creating an opportunity for transfers at two lights rail stations.	\$116,751	0	Sacramento	2015

16-17-D07-087	Foothill Transit Line 280 Expansion and Electrification	Low Carbon Transit Operations Program	Foothill Transit is expanding its recognized industry-leading zero emissions electric bus program with the deployment of 13 new extended range, all-electric, zero emissions Proterra transit buses, which will electrify and extend Line 280 (Attachment A-Line 280 Route Map). Foothill Transit requests FY2016-17 LCTOP funds of \$236,658 for operational assistance in the extension and electrification of Line 280, which will extend the transit route, extend service hours, increase the frequency of service, and increase the capacity, all with zero emission electric buses. These operating funds will leverage Foothill Transits FY2015-16 LCTOP funds of \$512,738 also used for operations and FY2014-15 LCTOP funds of \$167,914, to be used to purchase electric charging stations at our Azusa Intermodal Transit Center, which will assist in the electrification of Line 280.	\$756,431	1,228	Los Angeles	2017
16-17-D07-085	Blue Route Service Expansion	Low Carbon Transit Operations Program	This Allocation Request is for the continuation of a previously-funded LCTOP project. The City of Commerce would continue to operate additional hours of service on the Blue Route, which serves the Citadel Outlets and Commerce Casino on Telegraph Road, the largest employers (5,400 total employees) in the City of Commerce. The expanded service operates trips leaving the Citadel Outlet at 7:11 and 8:11 p.m.	\$14,359	1	Los Angeles	2017
16-17-D07-095	Norwalk_Route 7 Ops Asst	Low Carbon Transit Operations Program	The new NTS Route #7 service is one of six fixed route transit services operated by Norwalk Transit System. (Note: there is currently no Route #6.) It was formerly the portion of Metro's Line 270 assumed by NTS effective 6/7/2016. As per the transfer agreement with Metro, NTS operates the southern portion of Metro #270 from the El Monte Bus Station in El Monte to the Metro Green Line Station in Norwalk. Service is provided with five (5) buses operating six (6) days a week, 359 days a year, with no service on Sunday. Span of service is from 4:01 a.m. to 9:11 p.m. totaling 17 complete trips per day. In 2016-17, Norwalk Transit budgeted 222,397 scheduled revenue miles and 20,925 scheduled revenue hours. Route #7 weekday and Saturday. Schedule information is attached to this application.	\$23,639	792	Los Angeles	2017
16-17-D07-089	Ticket Vending Machines (TVM)	Low Carbon Transit Operations Program	This project will install new Ticket Vending Machines (TVMs) at three of Gold Coast Transit District's (GCTD) busiest transit centers. Due to the limited availability of ticket outlets, our passengers often have to make an extra trip to purchase fare media. In addition, the Ventura Transit Center (VTC) and C Street Transfer Center (CTC), which each have over 2,500 average daily boarding's do not have any nearby sales outlets making purchasing passes extremely difficult. Adding to this difficulty, in fall of 2015, our second largest in-person outlet near the Ventura Transit Center closed, causing a decrease in pass	\$59,487	87	Ventura	2017

			sales and ridership. Additionally, the TVMs will be programmed to accept credit/debit cards, a feature currently not offered at any sales outlets, making purchasing multi-ride and 31-day passes easier.				
16-17-D07-092	Metro Exposition (Expo) Phase 2 Operations	Low Carbon Transit Operations Program	The Expo Phase 2 extends the Metro Expo Line west to Santa Monica from the Culver City Station, running along the old Pacific Electric Exposition right-of-way to 4th St. and Colorado Ave., in downtown Santa Monica. This is a 6.6-mile extension that includes seven new stations, some that include new parking, with trains running 7 days a week, and every 6 minutes during peak times, and every 12 minutes during non-peak times. Approximately 90% of the 1st phase of the Expo Line is located in areas designated as Disadvantaged Communities, and the Expo line extension links these communities and additional disadvantaged communities throughout the 105 mile rail system in the County of Los Angeles. Approximately 50% of the service area scored between 61-80% in the CalEnviroScreen 2.0 results, two of the top four highest scores ranges possible...	\$1,772,962	71,930	Los Angeles	2017
14-15-D03-13	Lincoln Saturday Route	Low Carbon Transit Operations Program	Improved transit amenities to attract new riders and improve transit options	\$12,234	0	Placer	2015
14-15-D03-14	Rocklin Route	Low Carbon Transit Operations Program	Improved transit amenities to attract new riders and improve transit options	\$10,000	0	Placer	2015
16-17-D08-111	Route 19 Frequency Improvements	Low Carbon Transit Operations Program	Route 19 currently operates from Moreno Valley Mall to Perris Station Transit Center at 30-40 minute intervals Monday-Sunday (Attachment B). The RTA Comprehensive Operational Analysis (COA) recommends improving frequency on Routes 16 and 19 to 15 minutes in preparation for the launch of the future RapidLink Blue Line service. RapidLink Blue Line will be the second phase of the RapidLink program and will connect UC Riverside, Moreno Valley and Perris once funding is secured for operations. In order to build ridership in anticipation of the future launch of the Blue Line, increasing the frequency along the routes that currently serve this corridor is a vital first step. Route 19 frequency improvements will result in 53 new bus trips on a route that already has a strong ridership of approximately 25 boarding's per revenue hour. This project will provide a vital connection for the growing warehouse and retail/commercial jobs along this	\$503,252	14	Riverside	2017

			corridor. This project is anticipated to utilize multiple years of LCTOP funding.				
15-16-D6-128	Construct Lamont Transit Center	Low Carbon Transit Operations Program	Construct saw tooth bus pull outs, ADA accessible entry, add covered shelters: benches, weather protection, solar lighting, bike racks. Install information kiosks and real time bus data display. Plant landscaping for shade comfort and aesthetics.	\$161,241	98	Kern	2016
15-16-D6-69	Bus Stop Amenities	Low Carbon Transit Operations Program	Add street furniture, lighting and concrete necessary to facilitate path of travel to other modes at approximately 8 bus stops. At least half will be located in the DAC.	\$63,921	1	Fresno	2016
15-16-D8-103	Expansion of Commuter Route 120	Low Carbon Transit Operations Program	Expand Commuter Route 120 to include more trips to transportation hubs in San Bernardino and Loma Linda. Expansion will include adding additional buses at peak times to connect our DAC with the surrounding area.	\$63,619	41	Riverside, San Bernardino	2016
15-16-D7-95	Torrance Transit Upgraded Bus Bicycle Racks	Low Carbon Transit Operations Program	Torrance Transit will use funds to upgrade the portable bicycle racks on all Transit buses, increasing the number of bicycles that can be transported on a bus from two to three.	\$128,883	6,903	Los Angeles, Orange	2016
15-16-D6-86	New and Improved Bus Stops and Amenities	Low Carbon Transit Operations Program	The City of Madera proposes to implement bus shelters and amenities that will attract new transit riders.	\$67,160	225	Madera	2016
15-16-D8-104	Freeway Express Service Expansion	Low Carbon Transit Operations Program	Freeway Express pilot program modeled after 290 express but in opposite direction. Service area will be Yucaipa, Redlands, Hospitality Lane and San Bernardino Transit Center.	\$300,000	946	San Bernardino, San Diego	2016
15-16-D4-39	Local Bus Fleet Replacement	Low Carbon Transit Operations Program	Purchase of seven new diesel-electric hybrid vehicles. The FY 2015-2016 LCTOP funds will be rolled over this fiscal year.	\$325,052	1,311	Solano	2017
15-16-D4-57	Continued Expanded Service on Route 11	Low Carbon Transit Operations Program	Service on the Route 11 was expanded when WCCTA received LCTOP funds in FY14/15, this service expansion shall continue to be funded with this allocation of LCTOP FY15/16 funds	\$130,172	6	Contra Costa	2016

15-16-D4-55	Purchase of Zero Emission Bus for New and Expanded Service	Low Carbon Transit Operations Program	Purchase of an electric bus to replace a fully depreciated diesel bus and partial use of a Hybrid Diesel bus to be used on local routes with new service or expanded service	\$336,011	3,516	Solano	2016
15-16-D4-54	Battery Electric Zero Emission Bus and Infrastructure Project	Low Carbon Transit Operations Program	VTA will purchase five (5) new forty-foot zero emission electric transit buses, three (3) fast- speed electric vehicle charging stations, and will make all related connectivity improvements at VTA.	\$3,562,582	12,285	Santa Clara	2016
15-16-D5-61	Continued Expansion of Intercounty Services	Low Carbon Transit Operations Program	Prior to the allocation of the FY14/15 LCTOP funds, San Benito County Express operated 14 routes up into Santa Clara County (DAC in Gilroy). As part of the SRTP/LRTP (that was adopted in Feb 2016) we will be restructuring the commuter...	\$56,513	113	San Benito, Santa Clara	2016
15-16-D5-60	South Coast Transit Marketing and Try Transit Program	Low Carbon Transit Operations Program	Free trial transit passes will be issues to new passengers	\$20,000	124	Santa Barbara	2016
15-16-D5-58	Guadalupe Transit Expansion	Low Carbon Transit Operations Program	Expand intercity transit Flyer service between Guadalupe and Santa Maria to provide two additional Saturday morning loops, one additional Saturday evening loop, and eight new Sunday loops.	\$71,000	1	Santa Barbara	2016
15-16-D5-63	Expanded Saturday Intercity Transit Service in Santa Barbara	Low Carbon Transit Operations Program	Service will provide expanded transit service on Saturdays between the DAC and multiple cities and the unincorporated area of Santa Barbara County that will benefit the DAC identified in Santa Barbara County.	\$169,422	44	Santa Barbara	2016
15-16-D5-62	Paso Robles Facility Improvement	Low Carbon Transit Operations Program	This capital project would consolidate two remote bus facilities and an office into a new single facility co-located at the County Corp Yard in Paso Robles to expand transit services.	\$291,301	45,116	San Luis Obispo	2016
16-17-D12-129	Fare Adjustment Program	Low Carbon Transit Operations Program	The program proposes to provide reduced or free fares for all students at Santa Ana College for up to 12-month period. Using the Simpson Curtin rule and Orange County Transportation Authority's (OCTA's) past experience, this fare reduction is expected to achieve a 33.3% increase in Santa Ana College ridership. The project will increase system wide ridership by 0.68%, reduce Greenhouse Gas (GHG) emissions by 1,164.55 tons, reduce Vehicle Miles Traveled (VMT) by 2,289,815, and	\$886,480	376	Orange	2017

			58.6% of the college students live in Disadvantaged Communities (DACs) and associated Benefit Zones 1/2 mile around the DACs. Total GHG emission reductions over Greenhouse Gas Reduction Fund (GGRF) funds requested is 0.00131368. Depending upon the success of the program, OCTA may make this a continuing program throughout the life of the LCTOP and expand to other colleges.				
15-16-D10-122	Law and Justice Center Transit Hub	Low Carbon Transit Operations Program	Improve the overall efficiency and performance of Tuolumne County Transit with the new transit hub	\$52,632	10	Tuolumne	2017
16-17-D10-119	Saturday Hopper	Low Carbon Transit Operations Program	Calaveras Transit's Saturday service began July 24, 2016, as an LCTOP funded new route under the project name "Pilot Saturday Service." The Saturday Hopper connects the County's densest population centers with commercial and recreational opportunities. A survey conducted for the 2015 Calaveras Transit Short Range Transit Plan showed that 57% of passengers said that initiating Saturday service is the most important improvement needed for Calaveras Transit. Saturday service benefits residents who work on weekdays and have errands to run on Saturdays. Public transportation is also be used by visitors staying at WorldMark Resort and other County lodging. Residents and visitors all appreciate service to Murphys for shopping, wine tasting, dining, and community events. Performance goals include attaining an average of 70 passengers each Saturday. It is anticipated that this pilot program will be a springboard for developing partnerships with lodging sites and tourist destinations aided by the Calaveras County Visitors Bureau and Destination Angels Camp.	\$19,938	1	Calaveras, Tuolumne	2017
16-17-D10-120	Free-fare Day Program	Low Carbon Transit Operations Program	TJPAMC will provide free bus service at various times (i.e. start of school year) and during promotional events (i.e. Free Fare to the Fair, Spare the Air Days, Free Summer School lunches offered by school districts, etc.) throughout the year to the general public. The amount of days that free fare will be offered will be dependent on the popularity of the program. The goal of this program is two-fold, to offer free rides and remove vehicles from our roads to effectively reduce GHG Emissions, and also to increase awareness of public transportation as a viable-convent means of transportation and thereby permanently increase ridership.	\$125,925	6	Merced	2017
16-17-D08-114	Fare Media Subsidy	Low Carbon Transit Operations Program	For this fare media subsidy, VVTA will accept program applications, review and update the guidelines and eligibility criteria that was established in the previous cycle. VVTA will continue to prioritize the DAC service area and will determine	\$11,274	38	San Bernardino	2017

			which agencies have the capacity to meet the eligibility criteria for this program. The agencies that qualify, would be able to apply for funds in order to procure fare media specific to each client's needs. The goal of this program is to offer free transportation services by improving accessibility to public transportation options, remove vehicles from our roads to reduce Greenhouse Gas Emissions, and to increase awareness of public transportation.				
16-17-D08-115	New and Expanded Barstow Service	Low Carbon Transit Operations Program	VVTA's project will be increasing the service span, making routing improvements on routes 1, 2, 3, 28, 29, and starting a new route 6 in the Barstow area. The increased span of service will be 6:00 AM to 8:00 PM weekdays, 8:00 AM to 5:00 PM Saturday and Sunday. Current service hours are 7:00 AM to 7:00 PM weekday, 9:00 AM to 5:00 PM Saturday and 8:00 AM to 4:00 PM Sunday. The existing routes will be modified to better serve the Barstow area. The new route 6 will expand service coverage to unserved/underserved DAC areas and improve on-time performance of routes 1 and 2.	\$34,604	77	San Bernardino	2017
14-15-D03-09	Free Fare Day Program	Low Carbon Transit Operations Program	Improved transit amenities to attract new riders and improve transit options	\$7,438	0	Colusa	2015
14-15-D04-23	Division 3 Re-Opening for service expansion	Low Carbon Transit Operations Program	Reduction in deadhead miles of 528,436 if the Division 3 facility is opened for 24/7 operations and service is increased by 10%. Re-opening Division 3 will allow for more buses to be added to the fleet, which with the District can expand service.	\$573,226	0	Contra Costa	2015
14-15-D03-17	Connect Card	Low Carbon Transit Operations Program	Estimated increase of 500 trips per day system wide. VMT reduction is estimated to be 25 miles per person round trip.	\$75,150	0	Sacramento	2015
14-15-D10-91	Free-Fare Bus Passes and Promo materials to increase ridership to promote transit	Low Carbon Transit Operations Program	1,700 free-fare passes given away at the promotion event. Free fares expected to reduce approx. 66,500 auto trips. Reduced auto VMT is determined to be 332,500.	\$90,933	0	Merced	2015
14-15-D07-67	Fixed Route Bus Transit Operations	Low Carbon Transit Operations Program	New routes will introduce new bus service from downtown Santa Monica to West Los Angeles to surrounding communities. New service will reduce VMT and GHG emissions. Estimated additional 11% increase in ridership.	\$131,075	0	Los Angeles	2015

14-15-D06-50	Increasing Tripper Service	Low Carbon Transit Operations Program	Expansion could add 1,050 commuter bus riders per day to replace and average of 3 auto trip miles each way. FAX's fixed route fleet is virtually 100% CNG powered, thus furthering the emission reduction goal.	\$249,311	0	Fresno	2015
14-15-D03-20	Yolo Bus Fare Reduction Program	Low Carbon Transit Operations Program	Reduce VMT and GHF emissions by replacing auto trips with transit trips. Programs could improve over 70,000 single occupancy vehicle trips by adding over 70,000 additional bus rider per year.	\$58,883	0	Yolo	2015
14-15-D07-69	Route Extension Project	Low Carbon Transit Operations Program	Proposed service expansion will introduce new, direct link bus service from downtown Long Beach to CSU Dominguez Hills. Project will increase the use of transit. Will allow customers to take a one-seat rider to new destinations.	\$163,267	0	Los Angeles	2015
14-15-D08-81	Downtown San Bernardino Passenger Rail Project will extend Metrolink regional passenger rail service approximately 1 mile	Low Carbon Transit Operations Program	Improved transit amenities to attract new riders and improve transit options	\$679,599	0	San Bernardino	2015
14-15-D08-82	Weekend Frequency Transportation to provide a wider range of travel purposes	Low Carbon Transit Operations Program	Anticipation of increased ridership by 20% or an additional 89 riders per weekend day when the weekend frequency is increased.	\$155,907	0	Riverside	2015
14-15-D06-51	New Bus Stops and amenities for enhanced transit	Low Carbon Transit Operations Program	Install new bus stop amenities in newly expanding transit corridors on the city's Madera Area Express/MAX fixed route bus system serving disadvantaged city residents.	\$50,146	0	Madera	2015
14-15-D06-56	Green Commuting Zero Emission	Low Carbon Transit Operations Program	Will reduce GHG emissions by replacing single occupant vehicle trips with shared-ride trips, through both vanpooling and car sharing.	\$69,760	0	Fresno, Madera	2015
14-15-D10-85	Calaveras Transit Green Tickets will distribute	Low Carbon Transit Operations Program	Project Benefits	\$14,549	0	Calaveras	2015

	transit vouchers to county citizens who would otherwise use a personal vehicle						
16-17-D09-116	Lone Pine Express Fixed Route Service	Low Carbon Transit Operations Program	The expansion of the Lone Pine Express fixed-route commuter bus service started in October 2016 and meets the requirements for eligibility. The expansion of the Lone Pine Express fixed commuter route bus service will provide an additional northbound run departing Lone Pine mid-day, three days per week, to permit passengers to spend a half day in Bishop, when coordinated with the existing Lone Pine Express route departing Bishop at 6:30pm. The communities of Southern Inyo County including Lone Pine, Independence and Big Pine have a lower economic base than the community of Bishop. Southern Inyo County communities do not offer many services such as full service grocery stores or hospital services to the residents making additional opportunities to travel to Bishop, Inyo County's population center, for medical, social services, shopping, work and vital lifeline services. The net operating cost for the additional fixed route is \$13,225. The expected revenue is \$3,132, which is based on 607 annual passenger trips and average fare of \$5.16.	\$11,799	6	Inyo	2017
16-17-D08-109	Operations Facility Enhancement Project	Low Carbon Transit Operations Program	The proposed project would purchase, construct and install bus stop enhancements including but not limited to benches, shelters, trash cans, solar lighting, bike racks, bus shelter concrete pads, passenger waiting areas, sidewalk, and parking lot at the PVVTA Park-N-Ride (PNR). These improvements to the PNR will be served by all local deviated fixed routes as well as the new Blythe Wellness Express and provide access to the DAC; to retail, schools, medical facilities, and county services in the community and region.	\$45,741	19	Riverside	2017
15-16-D6-74	Shafter Saturday DAR Service	Low Carbon Transit Operations Program	Shafter Dial-A-Ride does not currently operate on Saturdays. This project adds Saturday Service	\$18,256	0	Kern	2016
15-16-D6-76	Electronic Fareboxes for Enhanced Fare Integration	Low Carbon Transit Operations Program	The City of Tulare proposes to implement an electronic farebox system that will provide seamless, accessible trips throughout Tulare County utilizing integrated fare media coordinated with other County transit systems.	\$65,918	49	Tulare	2016

15-16-D6-77	Expansion of V-LINE Shuttle Service	Low Carbon Transit Operations Program	The City of Visalia proposes to expand the V-LINE shuttle transit service operations to seven days a week and adding early and later runs. V-LINE provides service from Visalia to Fresno.	\$286,466	298	Fresno, Tulare	2016
15-16-D6-78	Temporary Extra-Help Driver Project	Low Carbon Transit Operations Program	The project will fund a temporary extra-help transit driver to extend the service hours to weeks and weekday afternoons/evenings.	\$26,031	24	Kern	2016
15-16-D6-79	Electric Transit Vehicles	Low Carbon Transit Operations Program	Acquisition of four (4) Zenith Zero Emission Electric Vans for use in existing Demand Response service in rural unincorporated areas of Fresno County.	\$208,734	534	Fresno	2016
15-16-D6-82	Free or Reduced Fare Transit Passes/Vouchers	Low Carbon Transit Operations Program	Working with educational institutions, low-income housing facilities, and other social service agencies to provide free transit days system wide. Free transit day will be scheduled during the first week of every month. This will allow low-i ...	\$10,000	5	Kings	2016
14-15-D10-88	Shuttle for Ace passengers and fixed route bus services free of charge	Low Carbon Transit Operations Program	Expansion could add 50 commuter bus riders per day to replace an average auto trip of 10 miles each way.	\$14,627	0	Santa Clara	2015
14-15-D01-01	Reduced Fare Project for college students	Low Carbon Transit Operations Program	Improved transit amenities to attract new riders and improve transit options	\$31,142	0	Mendocino	2015
14-15-D04-27	Heavy-Duty Transit Vehicle Procurement	Low Carbon Transit Operations Program	Improved transit amenities to attract new riders and improve transit options	\$34,267	0	Alameda	2015
14-15-D11-94	Old Town Transit Center Renovation will upgrade transit stops/stations to support active transportation and encourage ridership	Low Carbon Transit Operations Program	Improved transit amenities to attract new riders and improve transit options	\$473,141	0	San Diego	2015

14-15-D04-32	Electrification Project	Low Carbon Transit Operations Program	Will reduce GHG emissions by converting the railroad from a diesel powered commuter rail system to an electrified system.	\$935,322	0	San Francisco, San Mateo, Santa Clara	2015
14-15-D04-22	Vine Bus Service to San Francisco ferry in Vallejo	Low Carbon Transit Operations Program	Reduction of GHG by reducing passenger vehicle miles traveled through expansion of service hours.	\$61,689	0	Contra Costa, Napa, Solano	2015
14-15-D08-77	Bus Stop Improvements including Solar Panels, EV Charging Station and Lighting	Low Carbon Transit Operations Program	Expansion could add 50 commuter bus rider per day.	\$8,885	0	Riverside	2015
14-15-D07-73	Purchase New Transit vehicle for service Expansion	Low Carbon Transit Operations Program	Improved transit amenities to attract new riders and improve transit options	\$295,041	0	Ventura	2015
14-15/D06-53	Purchase Transit Passes and Tickets For the Promotion To Increase Ridership and Reduce Greenhouse Gases	Low Carbon Transit Operations Program	Improved transit amenities to attract new riders and improve transit options	\$4,913	0	Kern	2015
14-15-D11-93	El Cajon Transit Center Renovation will upgrade transit stops/stations to support active transportation and encourage ridership	Low Carbon Transit Operations Program	Improve transit amenities to attract increased ridership.	\$630,000	0	San Diego	2015

15-16-D9-112	Expansion of the Lone Pine Express Fixed Route Service	Low Carbon Transit Operations Program	Addition of a mid-day Lone Pine Express fixed route service between Lone Pine and Bishop	\$24,715	10	Inyo	2016
15-16-D7-97	Ticket Vending Machines	Low Carbon Transit Operations Program	This project will install ticket vending machines (TVM) at three transit centers in the GCTD service area. As two of these transit centers do not currently sell passes, the TVMs will make it easier and more convenient to ride transit.	\$40,701	0	Ventura	2016
15-16-D4-48	ZEB's for Vine Commuter Service to SMART	Low Carbon Transit Operations Program	Napa County Transportation and Planning Agency (NCTPA) would like to expand commuter service to Petaluma to create a connection to SMART. Providing this service will require at least two buses. NCTPA will use three years of LCTOP funding to ...	\$152,830	1,158	Sonoma	2016
15-16-D4-46	MCTD 2016	Low Carbon Transit Operations Program	Add new service on Route 23 to provide express service through high ridership areas and attract new riders.	\$275,413	66	Marin	2016
15-16-D8-110	Fare Media Outreach and Educational Program II	Low Carbon Transit Operations Program	Extension of previous year project, Transit Fare Media Outreach and Educational Program providing assistance to non-profit, human and social service agencies who service individuals with disabilities, seniors and low-income individuals.	\$10,000	25	San Bernardino	2016
16-17-D07-094	MBL Route 10 Overload Reduction	Low Carbon Transit Operations Program	MBL will increase the already provided service in order to reduce overcrowding on Route 10 during peak hours. This will also reduce potential pass-ups of customers.	\$82,553	15	Los Angeles	2017
16-17-D07-093	Metro Gold Line Foothill Extension Phase 2A Operations	Low Carbon Transit Operations Program	The Foothill Gold Line Phase 2A extension that began on March 5, 2016 added 6 new station to Pasadena to Azusa, and runs 7 days a week. The pan of service is from 5am-12am on Sunday-Thursday, and 5am-2am on Friday and Saturday. Annual vehicle revenue service hours are approximately 42,000. LACMTA requests FY 16/17 LCTOP funds for operational assistance in the Foothill Gold Line Phase 2A extension project. These operation funds will leverage LACMTA'S FY14/15 AND FY15/16 allocation requests. 50% of this extension is located in disadvantaged communities; and will directly link disadvantaged communities in Monrovia, Duarte, and Irwindale to integrated transportation opportunities throughout the 105-mile rail system in the County of Los Angeles. This increases connectivity to jobs, hospitals, education, shopping and recreational opportunities located in the San Fernando Valley, West Los Angeles.	\$5,977,936	20,754	Los Angeles	2017
16-17-D07-097	Fixed Route Bus Transit Operations	Low Carbon Transit Operations Program	Funds will be used for expanded and enhanced operating service. With the opening of LA County Metro's Expo Light Rail Line, BBB has been making changes to its service since August 2015. These expanded and enhanced services on existing lines improve	\$178,703	476	Los Angeles	2017

			<p>mobility and job access by enhancing public transit service and accessibility. The service enhancements also address numerous existing service gaps which limit a customer's ability to travel directly and efficiently between the densely populated areas of Santa Monica and West Los Angeles. The expanded and enhanced service will provide greater opportunities to entice additional transit customers onto the Big Blue Bus and out of their cars, thus reducing greenhouse gas emissions and improving air quality within the region. The LCTOP funds of \$178,703 will help fund part of Route 15, 16, and 17.</p>				
16-17-D07-101	VCTC East - West County Connector Project	Low Carbon Transit Operations Program	<p>The project would establish a new route that provides a direct connection from East Ventura County to West Ventura County, using the Highway 118-Highway 34 corridor. The route is envisioned to traverse Simi Valley, Moorpark, Somis, Camarillo, Oxnard and Ventura. The requested funding would enable the provision of weekday service from 6:00 am to 7:00 pm, with 90 minute headways. In addition, this route will allow for work and medical trips, and also open up access to employment in all the communities served. Access would also be improved for local students as this route will provide: A one-seat trip between Ventura College and Moorpark College; Direct service from the Cities of Ventura, Oxnard and Camarillo to Moorpark college; Improved transit access from Simi Valley and Moorpark to the CSUCI campus; Connections with the CSUCI bus at the Camarillo Metrolink station ...</p>	\$52,303	1,250	Ventura	2017
14-15-D08-83	Fare Media Outreach and Educational Program will expand transportation options available to underserved populations in Victor Valley	Low Carbon Transit Operations Program	<p>The Victor Valley Transit Authority Fare Media Outreach and Educational Program, with reduced transit fares to nonprofit and social service agencies will encourage use of public transportation to help eliminate 416 one-way trips per week.</p>	\$7,478	0	San Bernardino	2015
14-15-D06-46	Free Ride Day for Transit	Low Carbon Transit Operations Program	<p>Allows the City of Arvin to offer services for free not only to Arvin but also to Lamont and into the City of Bakersfield.</p>	\$6,878	0	Kern	2015
14-15-D11-92	Upgrade transit stops/stations in order to	Low Carbon Transit Operations Program	<p>Project would add an extension on to the back of the existing sidewalk to widen the bus stop boarding locations to 8' or 10'. A 6''' - 8''' curb also may be added at the back of the bus stop where there is a grade change.</p>	\$101,000	0	San Diego	2015

	access to Transit Improvements						
14-15-D07-72	Upgrade Bus Bicycle Racks	Low Carbon Transit Operations Program	Expansion could add 50 commuter bus riders per day. Installation of bike racks on transit buses addresses ""First Mile/Last Mile"" travel.	\$39,556	0	Los Angeles	2015
14-15-D12-95	Funds will be used for marketing and community outreach program to promote Fare Discount	Low Carbon Transit Operations Program	Decrease in fares is estimated to result in a 1.67% increase in ridership. Increased ridership would reduce weekday auto trips by 2,149.	\$1,346,536	0	Orange	2015
14-15-D10-86	Free Grapeline Fare Days will increase ridership by 25% and reduce the number of vehicles	Low Carbon Transit Operations Program	The free vouchers/rides will reduce VMT and GHG emissions by replacing trips with transit trips. Will make it easier for new passengers to travel on the bus without the concern of paying the fare.	\$12,408	0	San Joaquin	2015
15-16-D4-43	Continue Expanded Service Route 201	Low Carbon Transit Operations Program	Continue operating Route 201 expanded service which include frequency increases.	\$354,460	82	Contra Costa	2016
15-16-D4-41	Reimagine City Bus Marketing and Implementation	Low Carbon Transit Operations Program	Increase service on routes 1 and 9 which provide frequent service on the major corridors of the City of Santa Rosa	\$446,509	103	Sonoma	2016
15-16-D4-42	Solar Panels for Union Landing Transit Center	Low Carbon Transit Operations Program	Install solar panels and energy storage units at the Union Landing Transit Center to remove its operational electricity demand from the grid and demonstrate a commitment to renewable energy.	\$79,718	65	Alameda	2016
15-16-D4-47	Clipper Fare Payment System	Low Carbon Transit Operations Program	Replace universal fare card equipment and devices on transit operator vehicles including buses and rail vehicles. Equipment includes network equipment, hardware, software and peripherals that have reached the end of its useful service life. ...	\$3,559,290	4,370	San Francisco	2016

15-16-D4-45	Purchase Two (2) Hybrid Replacement Buses	Low Carbon Transit Operations Program	The purchase of two (2) hybrid 40' buses to replace two (2) diesel buses that have exceeded useful life	\$253,365	4,595	Alameda, Contra Costa	2016
15-16-D3-35	Transit Stop Enhancements	Low Carbon Transit Operations Program	Upgrade Yuba-Sutter Transit's bus stops and transit centers including installation of new or replacement shelters, benches, new or expanded passenger waiting areas; improved signage, passenger information features, lighting and bicycle facilities.	\$180,417	94	Yuba	2016
15-16-D4-56	Electric Bus Purchase for Route 24 Service Expansion	Low Carbon Transit Operations Program	Purchase Zero-Emission Vehicle for route 24 service expansion.	\$47,711	476	Sonoma	2016
14-15-D03-16	Bus Route 25 Enhancement Operations	Low Carbon Transit Operations Program	Bus Route 25 enhancement will result in approx. 500 fewer VMT per weekday, ultimately reducing GHG emissions.	\$45,292	0	Sacramento	2015
14-15-D03-05	Bus Shelter Construction	Low Carbon Transit Operations Program	Improved transit amenities to attract new riders and improve transit options	\$3,782	0	Placer	2015
16-17-D01-002	Lake Transit Bus Stop Enhancement Project	Low Carbon Transit Operations Program	The proposed project would purchase, construct and install bus stop enhancements including shelters and/or benches, solar lighting, and bike racks at four (4) locations in the communities of Kelseyville, Nice, and Lucerne in Lake County. Shelters with solar lighting, benches, and information displays will be installed at two locations: (1) Kelseyville - Kit's Corner rural transfer bus stop, intersection of SR175 and SR29; (2) Nice - intersection of SR20 and Collier St. Bus stop pads, benches and bicycle racks will be installed at two (2) locations: Lucerne - Alpine Park at SR20 and 1st Street; Lucerne - Community Garden at SR20 and 13th Street. These bus stops provide comfortable waiting locations for inter-community and intercity travel, retail, county services, medical facilities, schools, and parks.	\$30,784	88	Lake	2017
16-17-D04-037	East Bay Bus Rapid Transit Project	Low Carbon Transit Operations Program	AC Transit is seeking LCTOP funds to complete the construction of the East Bay BRT project. This will include dedicated bus lanes, signal priority and real time information, fare collection, and other passenger amenities on a 9.52 mile corridor connecting the Cities of Oakland and San Leandro.	\$2,884,933	683,372	Alameda	2017
14-15-D06-58	Bus Stop Enhancements	Low Carbon Transit Operations Program	Upgrade transit stops/stations to support active transportation and encourage ridership. Stops to include 4 sided shelter, benches, solar lighting, bike racks, and trash receptacles.	\$65,035	0	Kern	2015

14-15-D06-61	Electric Bus Infrastructure Improvements	Low Carbon Transit Operations Program	Improved transit amenities to attract new riders and improve transit options	\$40,687	0	Los Angeles	2015
14-15-D06-47	Bus Stop Improvements	Low Carbon Transit Operations Program	Improved transit amenities to attract new riders and improve transit options	\$4,440	0	Kern	2015
14-15-D05-44	SBMTD Line 1 and 2 A.M. Peak Period Frequency Improvement	Low Carbon Transit Operations Program	Improved transit amenities to attract new riders and improve transit options	\$101,679	0	Santa Barbara	2015
14-15-D05-43	South Coast Transit marketing and Try Transit Program	Low Carbon Transit Operations Program	Improved transit amenities to attract new riders and improve transit options	\$10,000	0	Santa Barbara	2015
14-15-D04-38	Sonoma Valley Connector	Low Carbon Transit Operations Program	Improved transit amenities to attract new riders and improve transit options	\$338,943	0	Sonoma	2015
15-16-D7-99	Operations Expenditures for the Expo Phase 2 Project	Low Carbon Transit Operations Program	Exposition Transit Corridor Phase 2 extends the Metro Expo Line west to Santa Monica from Culver City running along the old Pacific Electric Exposition right-of-way to 4th St. and Colorado Av. in downtown Santa Monica. The project is a 6.6- ...	\$9,818,511	26,428	Los Angeles	2016
15-16-D4-40	Petaluma Transit Weekday Afternoon Service Enhancements	Low Carbon Transit Operations Program	Addition of service to the afternoon Routes 2 and 11 in order to increase service frequency and reliability.	\$62,410	4	Sonoma	2016
15-16-D4-52	Expanded Service on the 9R, 28R, 31, 44, and 38R	Low Carbon Transit Operations Program	SFMTA will expand service on the 9R San Bruno Rapid, 28R 19th Ave Rapid, and 31 Balboa. SFMTA will also use LCTOP funds to continue expanded service on the 44 O'Shaughnessy and 38R Geary Rapid, which were funded by LCTOP in FY15.	\$8,156,592	329	San Francisco, San Mateo	2016
15-16-D3-13	Bus Stop Enhancement	Low Carbon Transit Operations Program	The purpose of the upgrades will comprise of modifying and upgrading bus stops along the cities current bus route in order to increase ridership. The Improvements will include, but are not limited to new built bus shelters, curb and gutter, ...	\$11,288	1	Placer	2016

15-16-D1-2	Electric Bus Charging Station/Electric Bus Purchase	Low Carbon Transit Operations Program	Purchase electric bus and changing station to increase frequency on weekends and during weekday peak times on local routes within Humboldt Transit Authority's service area.	\$112,775	1,544	Humboldt	2016
15-16-D2-127	Lassen Rural Bus 2nd City Route	Low Carbon Transit Operations Program	Expand service to the City route, making the loop more efficient by reducing the amount of wait time for passengers between buses	\$33,208	1	Lassen	2016
15-16-D2-8	Saturday Demand Response Service Expansion	Low Carbon Transit Operations Program	Expand local demand response transit service to operate two Saturdays per month to provide local public transit service on the weekends.	\$9,104	12	Modoc	2016
15-16-D9-114	Expansion of Mammoth Express Fixed Route Service	Low Carbon Transit Operations Program	Continuation of the expanded Mammoth Express fixed commuter bus service between Bishop and Mammoth Lakes	\$23,812	6	Inyo, Mono	2016
15-16-D1-7	Upgrade Transit Stops	Low Carbon Transit Operations Program	Install passenger waiting shelters with solar lighting, benches, bicycle racks, and trash receptacles at two existing bus stops.	\$29,192	0	Del Norte	2016
16-17-D03-028	South Line Phase 2 Light Rail Extension Project	Low Carbon Transit Operations Program	Operating the newly constructed 4.3 mile light rail extension of the South (Blue) Line south from Meadowview Road to Cosumnes River College (CRC). RT seeks funding to operate the service in year 3 (July 1, 2017 to June 30, 2018). RT received LCTOP funding in years 1 and 2. Span of service and frequency remain the same as years 1 and 2- 15 minute headways weekdays to 7:30pm; 30 minutes weekdays after 7:30 pm and weekends/holidays. In year 3, service along the SLP2 Project corridor is forecasted to increase ridership on RT's Blue Line by 6% or 1,200 passenger boarding's per weekday compared to boarding's prior to the rail extension.	\$771,475	378	Sacramento	2017
16-17-D04-045	MCTD 23x Transit Expansion	Low Carbon Transit Operations Program	Operate new service on Route 23x to provide express service through high ridership areas and attract new riders.	\$128,676	19	Marin	2017
16-17-D04-040	Martinez Shuttle	Low Carbon Transit Operations Program	Continuation of project that expands access to social and health services for Martinez residents, including individuals residing in the DAC. The service operates between the Amtrak Station in downtown Martinez and the freeway oriented shopping along Arnold Road and social service destinations on Center Avenue. Due to funding limitations, service is available Monday-Friday between 7am and 9pm, once every hour.	\$285,190	4	Contra Costa	2017

16-17-D04-044	Las Positas College Easy Pass Fare Voucher Program	Low Carbon Transit Operations Program	Fund fare vouchers for local community college students to encourage transit ridership and promote mode shift toward sustainable transportation choices by connecting a key trip destination to local and regional transit routes.	\$141,542	102	Alameda	2017
16-17-D04-054	Increased frequency on trunk routes-Santa Rosa CityBus Operating	Low Carbon Transit Operations Program	Operate and promote the New CityBus system which has redesigned the existing fixed-route system with extensive public input, providing more frequent and direct service in the highest ridership corridors.	\$93,257	68	Sonoma	2017
16-17-D04-056	Electric Bus Purchase	Low Carbon Transit Operations Program	Purchase Electric Bus for Local Service (Note: Final resolutions, signed Authorized Agent form and signed Certification and Assurances document will be submitted upon approval from the Sonoma County Board of Supervisors at their meeting scheduled for April 25, 2017.	\$135,730	690	Lake, Marin, Mendocino, Napa, Sonoma	2017
16-17-D04-038	AC Transit Rapid Bus Corridor Improvements	Low Carbon Transit Operations Program	AC Transit's Rapid Bus Corridor Improvement Project will improve transit operations on its most productive bus routes.	\$1,118,681	112,627	Alameda	2017
14-15-D04-36	Transit Assistance Program (TAP)	Low Carbon Transit Operations Program	Project will remove more than 355 vehicles traveling between 10 and 20 miles each trip, resulting in a reduction of more than 390,000 vehicle miles traveled each month.	\$802,508	0	Santa Clara	2015
14-15-D06-55	Bus Voucher Program	Low Carbon Transit Operations Program	Initial estimates indicate that the expansion could add 50 commuter bus riders per day to replace an average of 10 miles of auto trips each way. Reduce GHG emissions by making bus fares more affordable.	\$8,622	0	Kern	2015
14-15-D03-21	North Beale Red Transit Center Enhancement	Low Carbon Transit Operations Program	Reduction in VMT and GHG emissions by replacing auto trips with transit trips by making the busiest of local bus stops and the overall system more accessible and attractive for both current and future passengers.	\$60,305	0	Yuba	2015
14-15-D02-03	Bus Shelter Installation Project	Low Carbon Transit Operations Program	Installation of shelters could potentially increase transit trips by 20 per day replacing an auto trip of 7 miles each way.	\$20,762	0	Tehama	2015
14-15-D07-68	2 Electric bus Charging Stations	Low Carbon Transit Operations Program	Expansion could add 50 commuter bus rider per day.	\$167,914	0	Los Angeles	2015
14-15-D06-52	Electric Bus	Low Carbon Transit Operations Program	Replacement of gas powered vehicles with electric vehicles will account for savings of 33.3 metric tons of carbon dioxide per year.	\$5,784	0	Kern	2015

14-15-D04-35	N. 1st St. Light Rail Improvements	Low Carbon Transit Operations Program	Improvement in travel times for a large number of potential trips on the light rail line.	\$1,107,878	0	Santa Clara	2015
15-16-D8-105	Operations Facility Solar Project	Low Carbon Transit Operations Program	This project consists of procurement, installation and operation of an integrated solar energy collection system (panels) with infrastructure and public use of an electric vehicle (EV) charging station at the PVVTA Operations Center / Park-N ...	\$25,345	390	Riverside	2016
16-17-D03-026	Connect Card Implementation (Universal Fare Card)	Low Carbon Transit Operations Program	<p>The Connect Card system will electronically streamline the accessibility of transit fare for nine (9) different transit agencies in the Sacramento Region. The Connect Card is a credit card-sized card with a microchip and antenna embedded inside. It has the data storage capacity and processing power to electronically accommodate the different fares of each transit agency. This gives each transit user the convenience of using a single fare card for travel on any participating transit service in the region.</p> <p>Boarding times will be decreased allowing for increased reliability and better route performance. Smart Card fare collection systems have proven to reduce fraud and reduce operations costs for the transit agencies. Riders will also be provided multiple benefits that result from a more secured, seamless, and accessible electronic transit fare payment system.</p>	\$61,532	1,385	Alpine, Amador, Butte, Colusa, El Dorado, Lake, Napa, Nevada, Placer, Sacramento, San Joaquin, Sierra, Solano, Sutter, Yolo, Yuba	2017
16-17-D03-014	E-tran Local Route 156 Transit Service Frequency Improvements	Low Carbon Transit Operations Program	The project consists of increasing service frequency on e-tran's local Route 156 during peak weekday AM/PM peak commute periods. Increased service frequency during commute periods is anticipated to attract more passengers to utilize this bus service in order to connect to the CRC Blue Line light rail station, rather than commute to/from downtown Sacramento from Elk Grove via single occupancy vehicle modes. It is a goal that this improved Route 156 service would lead to up to a 5% ridership increase from September 2015 levels (start of service frequency improvements).	\$81,494	6	Sacramento	2017
16-17-D03-022	Lincoln Saturday Service - Year 3	Low Carbon Transit Operations Program	The purpose of the project is to add Saturday fixed route service to Lincoln Transit. The service was only operated Monday through Friday through June 30, 2015. This project will be expanded transit service and is the 3rd year that LCTOP funds are being requested for the route. Placer County added Saturday service in July of 2015 with the assistance of LCTOP funds. The service will provide Lincoln residents with the opportunity to access shopping and recreation on Saturdays, and will substantially improve the ability to live in Lincoln without the	\$17,204	1	Placer	2017

			need for a car. The service will provide a regular hourly connection with Placer County Transit at the 12 Bridges Library.				
16-17-D03-023	Rocklin Route Modification Year 3	Low Carbon Transit Operations Program	The purpose of this expanded transit service project is to add regularly scheduled fixed route service to two new significant shopping centers in Rocklin at I-80 and Sierra College Boulevard. the east end of the PCT Lincoln-Sierra College route would run in a one-way clockwise loop from Sierra Meadows Drive, north on Granite Drive serving the Commons bus stop on Granite Drive, continue to Sierra College Boulevard, turn south over the freeway, pull through the Crossings bus stop , return to southbound Sierra College Boulevard and then west on Rocklin Road. The bus would serve the Sierra College bus stop and then continue on the route back to Granite Drive and to Sierra Meadows Drive. The rest of the route heading west to the Galleria and then back through Rocklin and on to the Casino and Lincoln would remain unchanged. This change adds the Commons and Crossings shopping centers to the Lincoln-Sierra College route. It would connect all of the locations on the bus route within Rocklin to these new destinations. The concept of this route change comes from the alternative recommended in the Rocklin Community Transit Study on pages 75 and 76.	\$10,000	4	Placer	2017
16-17-D03-020	Gold Country Stage Fare Incentive Project III	Low Carbon Transit Operations Program	This is a fare incentive project to improve access to our small urban/rural fixed route public transit and will offer free fare days connected to community events as an alternative to using cars to reduce emissions and increase ridership. The free fare days cover a project timeline projected to be July 2018 through August 2020. We will increase the current fare incentive program by offering up to 40 free fare days (versus current 30 days) per fiscal year over the project timeline schedule. The project will be an effective component to our overall operational effort to increase ridership/boarding up to 10% on the fare incentive days. The project is consistent with our recently updated "Nevada County Coordinated Public Transit-Human Services Transportation Plan" and "Western Nevada County Transit Development Plan Update" and relevant sections are included application. Public outreach will be ongoing and appropriate to the various community events and activities targeted.	\$38,243	3	Nevada, Placer, Sierra, Yuba	2017
16-17-D03-021	TART Highway 89- Tahoe City - Squaw Valley	Low Carbon Transit Operations Program	This project will add bus service on the Tahoe Truckee Area Regional Transit Highway 89 route between Tahoe City and Squaw Valley in peak morning and evening times during the winter season which is about 115 days of service. Specifically 2 morning and 2 evening runs are added to convert 60 minute headways to 30 minute headways for 2.5 hour spans. This service	\$16,287	14	Nevada, Placer	2017

			was offered as a pilot program for the first time in winter of 2016/17 and is being proposed again for winter of 2017/18. This addition of the service will result in 9,500 additional passengers per year and 928 additional vehicle revenue hours. This added service is in the TART Systems Plan Update adopted by the Placer County Board of Supervisors in April of 2016.				
16-17-D03-017	Bicycle E-Locker Purchase and Installation	Low Carbon Transit Operations Program	The proposed project is only a small component of a much larger initiative by UC Davis to encourage alternative commute modes to and from Davis. A summary of this initiative is available at the Campus Tomorrow web site (http://campustomorrow.ucdavis.edu/app_pages/view/77). The City of Davis proposes to purchase and install 12 lockers with FY 2016-2017 LCTOP funds currently allocated to the City of Davis. ELockers would be available to users on an as-needed basis using a pre-paid smart card technology that deducts an established rental fee for the length of time that the locker is used by the customer. This feature eliminates the need to assign a bike locker to a single individual for exclusive use over a time period, but instead allows all subscribers to use any available locker 24 hours a day, 7 days a week. This increased flexibility in use opens up opportunities for new users who would consider switching to alternative transportation.	\$42,738	54	Yolo	2017
16-17-D03-018	Continuation of the Cameron Park Service Enhancement Project	Low Carbon Transit Operations Program	This project is implementing recommendations derived from the 2014 Western El Dorado County Short and Long Range Transportation Plan. The project plan is local fixed route service expansion in Cameron Park in El Dorado County. Current service levels are based on three (3) hour headways providing a total of four (4) runs per day with one (1) limited stop Express run for commuters in the morning. The proposed service expansion involves an increase in frequency to 60minute headways providing a total of twelve (12) runs per day within the local Cameron Park service area. This amounts to approximately 765 additional revenue service hours per year. This additional service is projected to increase ridership by approximately 22,000 trips annually per the Short and Long Range Transit Plan.	\$251,160	9	El Dorado	2017
16-17-D03-015	Louis Orlando Transfer Point Improvements and Fixed-Route Service Enhancements	Low Carbon Transit Operations Program	The project enhances transit travel by providing improved passenger facilities that are expected to result in increased ridership and mode-sharing opportunities. Improvements include one new passenger facility including a larger area for bus stacking, increased passenger queuing area, two covered bus shelters with solar powered LED lighting, bike rack and drinking fountain. Expansion includes the addition of one 44-space regional Park/Ride lot with two charging stations for zero-emission or hybrid vehicles, electronic bike lockers and	\$277,349	2,752	Yolo	2017

			pedestrian facilities improvements including crosswalks, curb ramps, and directional signing for site circulation from the parking lot, passenger drop-off areas, and adjacent commercial areas. FY2014/15 LCTOP funds in the amount of \$45,465 are dedicated to this project. A CAP for this allocation to adjust for an updated performance period is submitted. Also, \$162,221 in FY2015/16 LCTOP funds are being allocated to this project.				
16-17-D03-016	Free Fare Day Program	Low Carbon Transit Operations Program	For this Free Fare Day Program, CC Transit aims to offer free rides to members of the general public on days to be determined by the CC Transit Board. At our current fare structure, this program will provide between 11,000 and 15,000 free rides over the course of the program. The amount of days that free fare will be offered will be dependent on the popularity of the program. The goal of this program is twofold: 1) To offer free rides and remove vehicles from our roads to effectively reduce Greenhouse Gas (GHG) emissions, and 2) To increase awareness of public transportation as a viable and convenient means of transportation and thereby strongly encouraging an increase in ridership.	\$10,133	13	Butte, Colusa, Glenn, Lake, Sutter	2017
16-17-D10-118	Amador County Transit Mobility Enhancements	Low Carbon Transit Operations Program	This project will fund \$15,000 to be used for marketing for Amador Transit so that they may promote their services and expand awareness of their Amador Rides program. The remaining available balance (\$3,159) will be used to purchase transit vouchers to be distributed to disadvantaged community members and local service organizations that represent disadvantaged community members in order to increase transit ridership and improve visibility of the transit system in order to reduce single-occupancy vehicle trips thereby reducing GHG emissions.	\$18,155	79	Amador	2017
16-17-D09-117	Mammoth Express Fixed Route Service	Low Carbon Transit Operations Program	The expansion of the Mammoth Express fixed route commuter bus service began in July 2015 with LOCTOP funds and meets the requirements for eligibility. The expansion of the Mammoth Express fixed commuter route bus service will provide an additional northbound run departing Bishop at 6:50am to permit passengers to arrive in Mammoth Lakes in time to work a Monday - Friday 8:00am to 5:00pm shift, and an additional south bound run departing Mammoth Lakes at 7:00pm to permit passengers who work later shifts, or wish to stay in Mammoth Lakes for the early evening hours for shopping, dining or socializing, to travel back to the bedroom communities of Crowley Lake, Tom's Place or Bishop. The net operating cost for the additional fixed route is \$23,057. This route will have 255 days of operation in FY 2017/18.	\$14,390	1	Inyo, Mono	2017

16-17-D08-103	New Commuter Link 125	Low Carbon Transit Operations Program	Implementation of a new commuter service, Commuter Link 125 will bring a connection from Beaumont Walmart (33°55'23.6"N 116°57'06.7"W) and Beaumont Civic Center (33°55'46.4"N 116°58'29.0"W) to Loma Linda Veteran's Affairs Ambulatory Care Center (34°03'46.6"N 117°14'07.9"W) and Kaiser Medical Facilities (34°04'19.7"N 117°13'35.0"W). Currently, there is not a public transportation means to travel to these areas and these facilities are not available other than outside of the current service area. Additionally, passengers will be able to connect with regional transportation agencies, along with increased availability to commercial and employment opportunities. Commuter Link 125 will operate weekdays, Monday through Friday.	\$80,518	2	Riverside	2017
15-16-D1-1	Transit Takes Off: Expansion and Enhancement	Low Carbon Transit Operations Program	Project will expand Saturday night transit serving seven communities, for two years. Also offers free vouchers for Sat. night rides to people attending monthly "Arts Alive" or other communitywide event.	\$34,694	10	Humboldt	2016
14-15-D02-04	Increase Awareness of Transit System	Low Carbon Transit Operations Program	Improved transit amenities to attract new riders and improve transit options	\$4,618	0	Trinity	2015
14-15-D04-29	Central San Rafael/SRTC Commuter Ferry Shuttle	Low Carbon Transit Operations Program	Improved transit amenities to attract new riders and improve transit options	\$261,000	0	Marin	2015
14-15-D03-11	Gold Country Stage	Low Carbon Transit Operations Program	Improved transit amenities to attract new riders and improve transit options	\$27,626	0	Nevada	2015
14-15-D08-76	Freeway Express Service	Low Carbon Transit Operations Program	Route 290 is expected to deliver 380 unlinked passenger trips per weekday. Will increase mode share by improving the travel time competitiveness with driving times.	\$54,868	0	San Bernardino	2015
15-16-D10-121	Free-fare bus promotions	Low Carbon Transit Operations Program	Free-fare bus service in Merced County at various periods/events throughout year	\$271,109	42	Merced	2016
16-17-D02-011	Trinity Transit Free Fare Day and Voucher Program	Low Carbon Transit Operations Program	This program will offer free rides to the general public on days that will be determined. It will also offer free student passes to those students who use public transportation to attend classes (including ROP), school activities, and work programs. At our current fare structure, this program will provide between 1,282 free rides over the life of the program. The amount of days that the program will be offered will depend on its popularity. The	\$6,411	14	Trinity	2017

			goal is to offer free rides, which will remove vehicles from our rural roads and effectively reduce Greenhouse Gas (GHG) Emissions. It will also increase awareness of public transportation as an alternative means of transportation and thereby permanently increase ridership.				
16-17-D02-010	TRAX Saturday Service	Low Carbon Transit Operations Program	Provide TRAX service on Saturdays. Approximately eight hours of service on the following routes: 1 and 2 (Red Bluff), 3 (Regional/Los Molinos), 5-Express (Corning). TRAX ridership is significantly higher in the morning with a decrease in ridership in the afternoon. Thus, actual service hours may be adjusted based on ridership levels.	\$28,197	83	Tehama	2017
16-17-D01-004	RCTA Free Bus Project	Low Carbon Transit Operations Program	The Free Bus Project is a demonstration project, to assess the level of trip diversion from auto to bus for a specific target population, when the cost is reduced to zero for the rider. By monitoring the number of trips and collecting other data, the VMT reduction can be quantified, GHG generation estimated more accurately, and the benefits of reduced parking and student satisfaction can be demonstrated to the target institution. For this phase, the institution is a community college, University of the Redwoods, located on two of the Redwood Coast Transit's city lines. Follow-up will be done to determine whether the program can be sustained with community/university funding. The test period is planned for Jan-Mar 2018, and the estimated diversion from car to bus is 4,252 rides.	\$12,766	2	Del Norte	2017
16-17-D01-003	Mendocino College Student Fare Free Program	Low Carbon Transit Operations Program	The Mendocino College Fare Free Ride Program is a collaborated effort between MTA, Mendocino College, the Mendocino College Student Association and the Mendocino College Foundation to provide awareness of public transportation for students by providing enrolled students fare free rides on MTA. Currently MTA provides 30 minute headway trips to Mendocino College throughout the weekends, with hourly service on Saturdays. Connectivity to Mendocino College is also available to satellite college properties along with service from Mendocino, Fort Bragg to Ukiah. The goal of this program is three-fold: To reduce greenhouse gas emissions within Mendocino County, increase awareness of public transportation and increase "choice ridership", permanently increasing public transportation usage.	\$41,878	13	Glenn, Lake, Mendocino, Sonoma, Tehama, Trinity	2017
15-16-D3-24	Rocklin Route Modification Year 2	Low Carbon Transit Operations Program	Extend Placer County Transit (PCT) Lincoln-Sierra College route to include two new significant retail centers in Rocklin.	\$10,000	4	Placer	2016
15-16-D3-29	Bus Route 65 Expansion-Operations	Low Carbon Transit	Route 65 service improvements includes relocating resources and expanding coverage, providing new bus service from Florin Towne Centre to University/65th Street light rail station.	\$130,000	43	Sacramento	2016

		Operations Program					
15-16-D3-28	Bus Route 25 Enhancement -Operations	Low Carbon Transit Operations Program	Beginning Sept. 2015 improvement of headways from every 60 min to every 30 min on a portion of the route on Fair Oaks Blvd by extending trips from Marconi Ave and Fair Oaks Blvd to a new terminus further north to Manzanita Ave and Locust Ave.	\$69,000	7	Sacramento	2016
15-16-D3-25	TART Bus Stop -Dollar Hill	Low Carbon Transit Operations Program	Improve existing bus stop on Highway 28 west of Dollar Hill Drive. Improvements include new shelter, ADA improvements and connection to existing bike and pedestrian trail.	\$31,196	1	Placer	2016
15-16-D3-27	Connect Card Implementation (Universal Fare Card)	Low Carbon Transit Operations Program	Support the operations of the Connect Card System. This project includes: installation of smart card readers and associated computer systems into transit buses; support for wireless technology in garage; connections to a centralized server ...	\$126,847	8,247	El Dorado, Placer, Sacramento, Sutter, Yolo, Yuba	2016
15-16-D3-26	TART Highway 267 Year-Round Service Year 2	Low Carbon Transit Operations Program	Expand Highway 267 Route Service year-round on the Tahoe Area Regional Transit System.	\$71,271	19	Nevada, Placer	2016
15-16-D3-20	Gold Country Stage Fare Incentive Project II	Low Carbon Transit Operations Program	The Gold Country Stage Fare Incentive Project (GCS-FIP) II will provide incentive opportunities for the community to use our local public transit as an alternate mode of transportation to using their cars. We offer "free fare days" that con ...	\$83,222	20	Nevada	2016
15-16-D3-19	Transit Facilities Solar Installation	Low Carbon Transit Operations Program	Install solar lighting at existing transit stops starting with stop with existing bus shelters.	\$27,827	26	Butte, Glenn	2016
15-16-D3-23	Lincoln Saturday Service	Low Carbon Transit Operations Program	Expand local fixed route transit service within Lincoln to include Saturdays. New Saturday service will allow Lincoln residents to access shopping and recreation and will connect to Placer County Transit (Intercity service) at the 12 Bridges Library.	\$36,888	0	Placer	2016
15-16-D3-21	Town of Truckee Employee Winter Shuttle	Low Carbon Transit Operations Program	Provide employee shuttle between Truckee and Donner Summit ski resorts between December and March.	\$15,702	10	Nevada, Placer	2016
15-16-D5-66	Watsonville ZEB Transit Service	Low Carbon Transit Operations Program	Purchase, operate and maintain one electric bus to provide new transit service in Watsonville, CA.	\$709,292	1,681	Santa Cruz	2016
15-16-D10-119	Metro Hopper Expansion	Low Carbon Transit	The project will implement RTD's Metro Hopper 9 that provides a deviated fixed route within Stockton's disadvantaged	\$221,773	9	San Joaquin	2016

		Operations Program	communities. The Hopper routes provide curb to curb service upon request of our ADA customers.				
16-17-D03-013	New B-Line Commuter Express Service	Low Carbon Transit Operations Program	This proposed project will add a new Commuter Express route that will provide service for riders within Butte County DAC area to the Chico Municipal Airport Industrial Park and destinations in-between. The Airport Industrial Park includes manufacturing, warehousing, and other production-related services, in addition to aviation-oriented business. There will be at least 50% of the revenue service miles provided towards the DAC.	\$257,264	56	Butte	2017
0016000275	Monterey Bay Operations and Maintenance Facility/Salinas Transit Service Project	Transit and Intercity Rail Capital Program	Renovation and expansion of an existing maintenance facility to reduce buses traveling without carrying passengers resulting in fuel savings and more frequent transit service using a new zero-emission bus in a heavily traveled corridor.	\$10,000,000	9,964	Monterey	2016
0016000119	Pacific Surfliner Transit Transfer Program	Transit and Intercity Rail Capital Program	Collaborative effort among transit agencies to demonstrate the ability to increase use of transit for access to and from intercity rail services through the use of seamless ticketing and transfer policies, combined with free or discounted transfers.	\$1,675,000	137	Los Angeles, Orange, San Diego, San Luis Obispo, Santa Barbara, Ventura	2016
016000048	Regional Transit Interconnectivity and Environmental Sustainability	Transit and Intercity Rail Capital Program	Purchase of at least 29 electric buses to develop BRT featuring increased service frequency, as well as electrification of at least two long-distance commuter routes.	\$24,403,000	185,206	Los Angeles	2016
0016000329	Willowbrook/Rosa Park Station and Blue Line Light Rail Operational Improvements Project	Transit and Intercity Rail Capital Program	Infrastructure improvements to a major transfer station; including upgrades to the signal and crossover system and near downtown storage capacity will allow increased service frequency, more reliable service, improve safety and connectivity.	\$38,494,000	104,946	Los Angeles	2016

001600027 6	Travel Time Reduction Project	Transit and Intercity Rail Capital Program	Partners with Union Pacific Rail Road and Altamont Corridor Express on track and curve improvements that will result in faster journeys and ridership increases. Travel time savings estimated of up to 10 minutes.	\$4,620,000	24,747	Alameda, Contra Costa, Santa Clara	2016
001700012 8	Zero Emission Bus and Vanpool Expansion in the Antelope Valley, Kern County and the Coachella Valley	Transit and Intercity Rail Capital Program	On behalf of the Southern California Regional Zero Emission Consortium (Antelope Valley Transit Authority Sunline Transit Agency and Kern Regional Transit system) this project aims to increase ridership, reduce greenhouse gas emissions, increase integration between Metrolink rail and local bus networks, and improve service to disadvantage communities through conversion of transit routes to zero emission operations and more frequent service on a number of routes across three different transit systems. This project includes the procurement of fifteen zero emission buses to be implemented in new and existing service as well as ten vanpool vehicles.	\$8,930,000	64,000	Los Angeles, Riverside	2017
001600023 7	SMART Rail Car Capacity Project	Transit and Intercity Rail Capital Program	Leverages a one-time opportunity to purchase 3 additional rail cars, allowing additional capacity to be available for weekend, peak period, seasonal and special event demand periods.	\$11,000,000	82,630	Marin, Sonoma	2016
001600023 8	MLK Corridor and Crosstown Miner Corridor Project	Transit and Intercity Rail Capital Program	Expands BRT system to improve transit attractiveness through high-frequency, limited-stop BRT services. Provides significant time savings and connectivity compared to current services. Includes the purchase of 12 new diesel-hybrid buses.	\$6,841,000	15,098	San Joaquin	2016
001600000 9	Purchase of 9 Fuel-Efficient Tier IV Locomotives	Transit and Intercity Rail Capital Program	Provides cleaner, safer, more reliable and faster travel to current services throughout the entire service area by replacing 7 locomotives, and also acquiring 2 additional locomotives that will be used to increase service and improve safety.	\$41,181,000	137,395	Los Angeles, Orange, Riverside, San Bernardino, San Diego, Ventura	2016
001600012 1	Expanding the SFMTA Light Rail Vehicle Fleet Project	Transit and Intercity Rail Capital Program	The purchase of 8 zero-emission light rail vehicles to allows for an increase of capacity and frequency on the system to accommodate increased ridership, especially in peak hours.	\$41,181,000	24,429	San Francisco	2016
001600027 7	Altamont Corridor Express Wayside Power	Transit and Intercity Rail Capital Program	Installation of wayside power sources at ACE's Downtown Stockton Maintenance Facility, will eliminate the need for overnight idling of diesel engines during maintenance, and result in fewer emissions and less noise in adjacent disadvantaged community.	\$200,000	194,156	San Joaquin	2016

0016000008	South Bay Bus Rapid Transit Project	Transit and Intercity Rail Capital Program	Completes a higher-speed BRT route with service as frequent as every 15 minutes. Includes a new intermodal transportation center and the purchase of 15 60-foot, low-floor articulated CNG buses.	\$4,000,000	57,379	San Diego	2016
0016000188;0017000040	San Diego Metropolitan Transit System Trolley Capacity Improvements Project	Transit and Intercity Rail Capital Program	Provides a new trolley station and includes the purchase of at least 8 new trolley vehicles that will provide additional service and increased ridership, addressing overcrowded conditions on the current system.	\$31,936,000	12,000	San Diego	2016
0016000041	Bravo! Route 560 Rapid Buses	Transit and Intercity Rail Capital Program	Purchase of five 40-foot CNG buses to launch BRT, increasing mode share to transit by providing a frequent limited stop service in a busy corridor.	\$2,320,000	2,978	Los Angeles, Orange	2016
0016000007	Sacramento Regional Transit's Refurbishment of 7 Light Rail Vehicles	Transit and Intercity Rail Capital Program	Refurbishment of 7 vehicles in order to support 15 min peak hour service frequencies throughout the RT light rail system and enable future limited stop service on the RT Gold and Blue Lines during the next 15 years.	\$6,427,000	18,062	Sacramento	2016
0017000183	Peninsula Corridor Electrification Project	Transit and Intercity Rail Capital Program	Electrification of the Caltrain corridor between San Jose and San Francisco, including the purchase of Electric Multiple Unit trainsets, which allows for an increase in frequency and capacity.	\$20,000,000	734,000	San Francisco, Santa Clara	2017
0017000205	Light Rail Modernization and Expansion Program	Transit and Intercity Rail Capital Program	The purchase of 10 zero-emissions light rail vehicles that contributes to the overall fleet expansion. The project allows for an increase of capacity and frequency on the system to accommodate increased ridership, especially in peak hours.	\$45,092,000	161,000	San Francisco	2017