TO: Greenhouse Gas Reduction Fund Program
FROM: Louise Bedsworth
Executive Director
Strategic Growth Council
DATE: October 14, 2019
SUBJECT: GREENHOUSE GAS REDUCTION FUND:
Strategic Growth Council
:EXPENDITURE RECORD, Fiscal Year 2019-2020
Transformative Climate Communities Program

This Attestation Memorandum documents that Strategic Growth Council completed the attached Expenditure Record on October 14, 2019 for Transformative Climate Communities. The Expenditure Record is consistent with the statutory requirements of Government Code Section 16428.9 to support expenditures from the Greenhouse Gas Reduction Fund.

This Attestation Memorandum and Expenditure Record will be submitted to CARB for public posting on the CARB website at: www.arb.ca.gov/caclimateinvestments.

Questions on this Attestation Memorandum or Expenditure Record may be directed to Saharnaz Mirzazad at Saharnaz.mirzazad@sgc.ca.gov, or 916-322-3932.

Attachment: Greenhouse Gas Reduction Fund: Expenditure Record
Fiscal Years: 2019-20
Strategic Growth Council
Transformative Climate Communities Program

Louise Bedsworth, Executive Director
Greenhouse Gas Reduction Fund: Expenditure Record

Strategic Growth Council
Transformative Climate Communities


Element (1) A description of each expenditure proposed to be made by the administering agency pursuant to the appropriation.

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
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<tbody>
<tr>
<td>Agency that will administer funding</td>
<td>Strategic Growth Council (SGC), with administration by the Department of Conservation (DOC).</td>
</tr>
<tr>
<td>Amount of proposed expenditure and appropriation reference</td>
<td>The total expenditure is $60 million, per Section 0650-101-3228 of the Budget Act of 2019 (Chapter 23, Statutes of 2019).</td>
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<tr>
<td>Estimated amount of expenditures for administering agency administrative costs</td>
<td>Administering agency administrative costs are estimated to be approximately $3 million or five (5) percent for SGC, and DOC.</td>
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<td>If applicable, identify laws or regulations that govern how funds will be used</td>
<td>AB 1532 (Pérez, Chapter 807, Statutes of 2012), Senate Bill (SB) 535 (de León, Chapter 830, Statutes of 2012), SB 1018 (Budget and Fiscal Review Committee, Chapter 39, Statutes of 2012), SB 862 (Budget and Fiscal Review Committee, Chapter 36, Statutes of 2014), and AB 1550 (Gomez, Chapter 369, Statutes of 2016) provide the general framework for how the auction proceeds will be administered to further the purposes of AB 32. The Budget Act of 2019 (Chapter 23, Statutes of 2019) provides direction on the amount of money that the Transformative Climate Communities Program should receive. AB 2722 (Burke, Chapter 371, Statues of 2016) established the TCC Program and provides direction on how the funds will be allocated to recipients, including requirements for project eligibility and program implementation. All funds will be allocated and managed in accordance with this law.</td>
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<tr>
<td>Continuation of existing</td>
<td>This is an update to an existing Expenditure Record. The Expenditure Record element being updated includes the</td>
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Expenditure Record following: allocation of $60 million per the Budget Act of 2019, as amended by AB 74 (Chapter 23, Statutes of 2019). This update will support a continuing program that will largely fund the same types of projects that have been previously funded under an existing Expenditure Record.

- **Project type(s):**
  - Low carbon transportation
  - Transit
  - Affordable housing and sustainable communities
  - Land Acquisition
  - Active transportation
  - Energy efficiency and renewable energy
  - Water use and energy efficiency
  - Urban forestry and urban greening
  - Waste diversion and utilization
  - Planning grants

- **Describe the projects and/or measures that will be eligible for funding:** TCC is placed-based investment in the most disadvantaged communities of California that maximizes the GHG reduction, health, and economic benefits by integrating projects. TCC eligible projects and fundable elements include elements that have a CARB GHG quantification methodology as of November 1, 2019, and have an Expenditure Record posted at: [http://www.arb.ca.gov/cc-expenditurerecords](http://www.arb.ca.gov/cc-expenditurerecords).
  - TCC-fundable elements also include non-quantifiable elements that do not reduce GHG emissions directly, but support GHG emission reductions. A detailed list of elements eligible for funding is provided in Attachment A.

- **Intended recipients:** Eligible applicants may include, but are not limited to: community-based organizations, local governments, nonprofit organizations, philanthropic organizations and foundations, faith-based organizations, coalitions or associations of nonprofit organizations, community development finance institutions, community development corporations, joint powers authorities, and/or tribal governments serving areas within with a majority of Census Tracts that fall within the top five percent (5%) of disadvantaged communities, as defined by the California Environmental Protection Agency using CalEnviroScreen 3.0.
  - Eligible applicants must form a collaborative governance structure, identifying a lead applicant and all co-applicants, which must be outlined in a Memorandum of Understanding.
  - Collaborative stakeholder structures must include a public agency as co-applicant or lead applicant.

- **Program structure and process for selecting projects for funding:** The process for selecting projects for funding will be through a competitive process, based on the merits of applications submitted and the proposed use of funds within the identified project area. The program requirements and application
selection criteria focus on the extent to which proposed plans and projects meet the TCC Program objectives of reducing GHG emissions, improving public health and environmental benefits, and expanding economic opportunity and shared prosperity, and other transformative requirements, as outlined in the October 2019 Proposed Final Guidelines, which can be found on the SGC website at www.sgc.ca.gov.

Element (2) A description of how a proposed expenditure will further the regulatory purposes of Division 25.5 (commencing with Section 38500) of the Health and Safety Code, including, but not limited to, the limit established under Part 3 (commencing with Section 38550) and other applicable requirements of law.

☐ How the expenditure is consistent with the Investment Plan and the Scoping Plan

- AB 1532 requires that GGRF monies be appropriated in a manner that is consistent with the three-year Investment Plan (Health and Safety Code Section 39718). The “Cap-and-Trade Auction Proceeds Third Investment Plan: FY2019-20 through 2021-22” (Investment Plan) states that reductions in GHG emissions and other short-lived climate pollutants from the transportation sector are goals in particular for the California Climate Investment (CCI) programs.
- The Investment Plan states that investment strategies that emphasize both GHG emission reductions and benefits to disadvantaged communities are priorities for CCI funding.
- In addition, the Investment Plan describes and recommends integrated projects that support local climate action in disadvantaged communities as a potential ‘cross-cutting’ approach to investment. This approach is described as particularly advantageous in the 2,000 census tracts identified as disadvantaged communities where significant capital and jobs are needed to improve areas that have traditionally lacked investment.
- California’s 2017 Climate Change Scoping Plan identified key strategies and recommendations to continue reducing GHG emissions and achieve the goals and purposes of AB 32 and related statutes. The recommended actions for the energy sector include continuing to enhance energy efficiency, increasing distributed generation, and implementing smart-grid technologies.
Element (3) A description of how a proposed expenditure will contribute to achieving and maintaining greenhouse gas emission reductions pursuant to Division 25.5 (commencing with Section 38500) of the Health and Safety Code.

- TCC will reduce GHG emissions by supporting integrated projects through a variety of strategies, such as promoting compact, infill development patterns, encouraging active transportation and public transit, expanding zero and near-zero emission transportation and infrastructure, promoting car sharing, reducing energy consumption through energy efficient appliances and building retrofits, reducing waste and materials going to landfills, urban forestry and green infrastructure, and land conservation and restoration. The following outlines how selected projects will reduce GHG emissions:
  - Equitable Housing and Neighborhood Development:
    - Projects will reduce GHG emissions by supporting more compact, infill development patterns, which can reduce VMT and/or increase transit ridership by siting affordable housing and riders in close proximity to transit options
  - Transit Access and Mobility:
    - Transportation-related projects, such as transit vehicles with lower emissions, transit expansion, increasing transit ridership, and reducing auto vehicle miles traveled (VMT) by shifting to zero-emission active transportation modes, such as biking and walking, will reduce GHG emissions. Projects may achieve GHG reductions by supporting the purchase of zero or near zero-emission vehicles which emit less GHG emissions than comparable conventionally fueled vehicles.
    - Transit facility/system upgrades and efficiency improvements will require less energy and fuel consumption for operations, thus reducing GHG emissions.
    - New or improved infrastructure and equipment that supports zero or near zero-emission vehicles will improve access to alternative fueling technologies, which emit less GHG emissions.
  - Decarbonized Energy and Energy Efficiency, and Water Efficiency:
    - Immediate and long-term GHG emission reductions will be achieved by reducing on-site energy consumption and generating clean energy for households.
- Water efficiency measures such as high-efficiency appliances and fixtures will yield immediate and long-term GHG emission reductions reducing energy use for households and commercial uses.
  - Urban Greening and Materials Management:
    - Sequester carbon by planting trees
    - Reduce building energy use from strategically planting trees to shade buildings.
    - Organics projects achieve net GHG benefits by redirecting organic materials from landfills to composting and in-vessel digestion facilities.
    - Recycled fiber, plastic, and glass projects achieve net GHG benefits by substituting California-generated recyclable commodities for virgin materials in manufacturing processes, to produce recycled-content products.
    - New or expanded food rescue projects that provide food to the project area, with residuals being sent composting or digestion and when available within the project area.
- Planning Grants:
  - Planning grants for Round 3 will assist awardees with developing their plans and project types to apply for a future implementation grant.
  - The list of eligible projects in the October 2019 Final Guidelines include those that have a CARB GHG quantification methodology and those approved for funding without a CARB GHG quantification methodology, as of November 1, 2019, and that have an Expenditure Record posted at: [http://www.arb.ca.gov/ccicci-expenditurerecords](http://www.arb.ca.gov/ccicci-expenditurerecords)
  - A detailed list of projects eligible for funding is provided in Attachment A.

Explain when GHG emission reductions and/or co-benefits are expected to occur and how they will be maintained

- TCC projects will be implemented within a 5-year grant term and it is expected that the TCC proposal locations as a whole will begin to yield GHG emission reductions and co-benefits in 2025.
  - Individual TCC projects may begin to yield GHG emission reductions and co-benefits sooner if they are completed prior to 2025.
  - TCC proposals will yield long term GHG emission reductions for an expected quantification period of up to 40 years based on tree planting projects.
  - TCC Planning Grants will be completed within a two-year timeframe and may generate additional co-benefits, but are not anticipated to result in GHG emission reductions.
Element (4) A description of how the administering agency considered the applicability and feasibility of other non-greenhouse gas reduction objectives of Division 25.5 (commencing with Section 38500) of the Health and Safety Code.

- In addition to achieving GHG benefits, these expenditures will address public health and safety, environmental, social, and economic benefits. All of these benefits, through the TCC Program, will be directed to California’s most disadvantaged communities; those communities most overburdened by environmental, socioeconomic, and health inequities.

Projects funded by TCC are expected to result in the following co-benefits:

### Public Health and Safety Benefits:
- Reduce health harms (e.g., asthma) suffered disproportionately by low-income residents/communities due to reduction of air pollutants from vehicle emissions (reduced VMT and/or zero- or lower-emitting vehicles).
- Reduce health harms (e.g., obesity) suffered disproportionately by low-income residents/communities due to the location of the built environment, access to parks and other natural green spaces, and robust/healthy food systems. Active transportation improvements (e.g., bicycling and walking paths connecting to transit stations) will support increased public health benefits.
- Increase safety through improved transportation and transit infrastructure.
- Improved comfort and well-being through building insulation and energy efficiency retrofits.
- Encourage healthy life style by providing access to fresh food produced locally.

### Environmental Benefits:
- Improve air quality resulting from cleaner transit vehicles and/or reduced VMT that reduce emissions of criteria pollutants, toxic air contaminants, and particulate matter.
- Encourage zero-emission vehicles and infrastructure.
- Reduce building energy usage.
- Improved air quality resulting from renewable and cleaner energy sources that reduce emissions of criteria pollutants, toxic air contaminants, and particulate matter.
- Improved wildlife habitat from creation and restoration of natural and green spaces.
Economic Benefits:
- Support the construction of affordable housing near transit for low-income households, reducing economic costs of housing near transit.
- Increase economic benefits through reduced transportation costs and improved mobility for transit riders through improved and expanded service.
- Increase economic development opportunities for communities through improved transportation infrastructure to attract and retain businesses.
- Increase access to employment through better connectivity of homes and jobs, especially for disadvantaged communities.
- Increase economic benefits for low-income households through energy efficient building and retrofits, thereby reducing energy costs.
- Increase economic benefits through implementation of displacement avoidance strategies for low-income households.
- Increase economic benefit to community and low-income households by incentivizing investment through required leverage funding for co-benefit projects.
- Increase economic benefit to community and low-income households through workforce development and job creation related to project implementation.

Climate Resiliency:
- Address needs of vulnerable populations through project design considerations.
- Reduce health risks by encouraging the incorporation of project components that address urban heat island effect (e.g. shade trees, structures) around housing and transportation.

- How the project will support other objectives of AB 32 and related statutes
  - Projects will align and complement the State’s efforts to improve air quality and direct public investment toward the most disadvantaged communities in California.
  - In addition, funded projects will provide an opportunity for small businesses, schools, local residents, non-profits and other community organizations to participate in and benefit from statewide efforts to reduce GHG emissions.
  - Achievement of multiple community co-benefits is strengthened through the requirement of development of a vision statement that articulates how the project proposed in the overall TCC proposal will be coordinated and integrated to achieve all three program objectives that include: greenhouse gas reduction, public health and environmental benefits, and economic and
Strategic Growth Council Expenditure Record for Transformative Climate Communities

shared prosperity. Other AB 32 benefits, depending on project types included in the selected TCC proposals include, but are not limited to:
- Improve and modernize California’s energy infrastructure.
- Maintain electric system reliability through energy efficiency and reduced consumption.
- Maximize additional environmental and economic co-benefits for California.
- Complement the State’s efforts to improve air quality.
- Direct public and private investment toward the most disadvantaged communities in California.

Percentage of total funding that will be expended for projects that are located in and benefit priority populations\(^1\) per CARB guidance

- As outlined in the October 2019 Proposed Final Guidelines, applicants must define a contiguous project area that is no larger than five-square miles and is within the boundary of a single city.
- According to the October 2019 Proposed Final Guidelines, eligible plans must contain:
  - At least 51 percent of the project area overlapping with census tracts within the top ten percent (10%) of disadvantaged communities as identified by CalEnviroScreen 3.0;
  - The remaining 49 percent of the project area must be within either a top 25 percent census tract per CES 3.0 or AB 1550 defined low-income community; and
  - GGRF funds provided only go to projects that benefit disadvantaged communities according to CARB’s Funding Guidelines.
- SGC anticipates that 100 percent of funding will be expended for projects that are located within and provide benefits to disadvantaged communities.

Describe the benefits to priority populations per CARB guidance

- In addition to GHG emission reductions as a program objective, the TCC Program outlines two additional program objectives, Improving Public Health and Environmental Benefits and Expanding Economic Opportunity and Shared Prosperity. Applicants are required to define a vision for the Project Area, and to identify a minimum of three strategies for achieving the TCC Objectives.
- Once applicants have identified at least three strategies, they may select quantifiable and non-quantifiable projects that fall under the strategy categories. The project types include:
  - Affordable housing

\(^1\) Priority populations include residents of: (1) census tracts identified as disadvantaged by California Environmental Protection Agency per SB 535; (2) census tracts identified as low-income per AB 1550; or (3) a low-income household per AB 1550. See Section VII.B for more information on the definitions of priority populations.
- Land acquisition for affordable housing development
- Active transportation
- Transit and rail access
- Car sharing and mobility enhancements
- Solar installations and energy efficiency improvements
- Water efficiency projects

Transformative requirements have been identified as a strategy to maximize benefit to disadvantaged communities. TCC proposals must include several plans that will outline how projects will benefit disadvantaged communities, including:

- Track and Monitor GHG Emission Reductions, Community Benefits, and Other Indicators – TCC awardees must work with an evaluation consultant to track and document GHG emission reductions, co-benefits and other information for projects that contain quantifiable elements per the TCC Quantification Methodology, in accordance with the requirements of the CARB Funding Guidelines.
- Displacement Avoidance Plan – TCC proposals must incorporate strategies that will reduce displacement risk and avoid displacement of existing households and small businesses within the Project Area.
- Community Engagement Plan – TCC proposals are required to include a Community Engagement Plan, which outlines the collaborative stakeholder structure established by the lead and co-applicants to plan and implement the project. Collaborative stakeholder structures must identify a process for involving community representatives in decision-making. Additionally, proposals will be given selection priority based on the quality and integration of their Community Engagement Plan during all phases on the project.
- Leverage Funding Match – TCC proposals must secure a minimum of 50% match of the awarded grant amount to incentivize investment in projects that benefit disadvantaged communities. The leverage funding requirement may be secured through a mix of leverage dollars included in grant-funded projects and standalone leverage projects.
- Climate Adaptation and Resiliency – TCC proposals must describe how the project will increase resiliency of the project area to anticipate impacts from climate change, including identification of risks within the project area and measures and programs that will be incorporated in the design of the TCC Plan.
As outlined in the October 2019 Proposed Final Guidelines, TCC proposals will be evaluated based on the quality of their vision and their selection of strategies and projects to achieve the GHG reduction, as well as health and economic objectives of the TCC Program.

**Element (5) A description of how the administering agency will document the result achieved from the expenditure to comply with Division 25.5 (commencing with Section 35800) of the Health and Safety Code.**

- SGC and DOC will require funding recipients to maintain records and submit bi-monthly status reports. In addition,
The Strategic Growth Council (SGC) and the Department of Conservation (DOC) will conduct periodic reviews of selected projects.

- If a funding recipient does not perform in accordance with program requirements, the recipient will be subject to the remedies for non-performance, as identified in the program guidelines.
- Applicants are required to track and report on project implementation pursuant to CARB’s 2018 Funding Guidelines. Additional reporting requirements may also be required upon CARB, in consultation with the SGC, developing project outcome reporting requirements for the TCC Program.

**Describe the approach that will be used to document GHG emission reductions and/or other benefits before and after project completion.**

- The quantification methodology (QM) refers to existing QMs developed for similar projects under existing CCI programs, and will integrate the results for GHG emissions depending on selected projects.
- SGC will coordinate with CARB and a third-party Technical Assistance provider (contracted by SGC) to estimate net GHG emission reductions using CARB’s Quantification Methodology for each of the selected TCC proposals.

**Type of information that will be collected to document results, consistent with CARB guidance**

- SGC and DOC will collect any necessary data to document GHG emission reductions in accordance with CARB’s Funding Guidelines, quantification methodology and other guidance. Information collected will be dependent on selected projects as part of the TCC proposal. This may include, but is not limited to:
  - Project location and geographic area
  - Data for each project
  - Baseline and reduced VMT
  - Avoided GHG emissions over the project life
  - Number of affordable housing units developed to serve low income residents
  - Benefits to disadvantaged communities, including information on how community needs were meaningfully addressed
  - Other project benefits or results
- In addition to project data and results required by CARB Funding Guidelines, SGC will contract with a third-party entity to identify indicators, track and monitor TCC program impact and benefits to each of the communities in selected project areas. These will be identified following TCC proposal selection.

**How the administering agency will report to CARB consistent with CARB guidance.**

The administering agency will report to CARB consistent with CARB guidance. The administering agency will provide regular
| agency will report on program status | updates on the program, including expenditure amounts, GHG emission reductions, and other benefits, as applicable (e.g., jobs supported, vouchers issued, units retrofitted). Reports will also include information on project outcomes for 100 percent of operational projects over 5 years. |
Note: *Projects that contain “quantifiable elements” are quantifiable under CARB quantification methodologies and indicated by an asterisk (*). Quantifiable projects may contain a combination of both quantifiable and non-quantifiable elements.

**Equitable Housing and Neighborhood Development**

- Construction or substantial rehabilitation of affordable housing or mixed-use developments served by qualifying transit
  - Increased housing density achieved by compact design*
  - Integrated market rate and below market rate housing (TCC only provides funding for affordable housing units)*
- Housing related infrastructure
  - Capital improvements required by a locality, transit agency, or special district as a condition of the approval of the affordable housing development.
- New or expanded transit service (bus, train, ferry, shuttle, or vanpool)
  - Operation of new or expanded transit service*
    - Enhanced or expanded transit service by supporting construction or implementation of:
      - New or expanded bus or intercity commuter services, and urban rail projects
      - New or expanded water-borne transit (ferry)
      - Expanded intermodal transit facilities
      - Equipment acquisition
    - Operation of alternative transportation services
      - Capital or operational expenditures that increase transit mode share such as bus shelters/transit waiting areas and bicycle carrying structures on public transit
- Capital improvements to transit systems that result in increased ridership
  - Upgrades to transit stops, stations, or vehicles that encourage mode-shift
- Construction of new pedestrian facilities
  - New walkways that improve mobility/access of pedestrians*
  - Non-capacity increasing streetscape improvements, including but not limited to:
    - Installation of lighting
    - Installation of signage and way-finding markers
    - Other related amenities for pedestrians, cyclists and transit riders
  - Installation of new/improved pedestrian crossings or over-crossings
  - Benches or “street furniture”
  - Street crossing enhancements including accessible pedestrian signals
  - Traffic calming projects, including development of:
    - Curb extensions
    - Roundabouts
    - Median islands / road diets
Lane narrowing projects
- Construction of new bike paths or lanes (Class I, II, or IV)
  - New or expanded context sensitive bike paths or lanes (Class I, Class II, or Class IV)*
  - Non-motorized urban trails that provide safe routes for travel between residences, workplaces, commercial centers, and schools
- Purchase of bicycles and/or purchase and installation of infrastructure in support of new or expanded bike share
  - New or expanded bike share programs*
  - Publicly accessible bicycle parking
  - Bicycle repair kiosks
  - Bicycle carrying structures on public transit
- Increased ridership
  - Distribution of vouchers for free or reduced transit fares*

Land Acquisition

- Outreach and implementation
  - Community engagement for project planning post land acquisition
  - Land holding costs
  - Direct costs of the land acquisition program, including staff and benefits
- Land acquisition
  - Land cost
  - Fees
    - Legal fees associated with land acquisition
    - Escrow fees and transfer taxes
    - Other fees associated with land acquisition
  - Land lease rent prepayment (rent paid in advance for the year or years of the lease agreement)
  - Financing costs, including:
    - Predevelopment interest/holding cost (interest accumulated from a loan for land acquisition costs)
      - Other costs may include insurance, security, property management
    - Bank loan fees
  - Costs associated with obtaining a ground lease, deed of trust or convenant
  - Site clearance and environmental remediation
  - Environmental impact reports and assessments

Transit Access and Mobility Strategy

- Construction of new bike paths or lanes (Class I, Class II, or Class IV)
  - New or expanded context sensitive bike paths or lanes (Class I, Class II, or Class IV) *
  - Non-motorized urban trails that provide safe routes for travel between residences, workplaces, commercial centers, and schools
Bicycle carrying structures on public transit

- Construction of new pedestrian facilities
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  - Non-capacity increasing streetscape improvements, including but not limited to:
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  - New or expanded bike share program*
  - Publicly accessible bicycle parking
  - Bicycle repair kiosks
  - Bicycle carrying structures on public transit

- Transit and Rail Access

- New or Expanded Service
  - Operation of new or expanded transit service*
    - Enhanced or expanded transit service by supporting construction or implementation of:
      - New or expanded bus or intercity commuter services, and urban rail projects
      - New or expanded water-borne transit (ferry)
      - Expanded intermodal transit facilities
      - Equipment acquisition, fueling, and maintenance, and other costs to operate those services or facilities
  - Operation of alternative transportation services
  - Capital or operational expenditures that increase transit mode share such as bus shelters/transit waiting areas and bicycle carrying structures on public transit

- Technology Conversion
  - Purchase or replacement of zero-emission or low-emission vehicles*
  - Purchase, construction, and/or installation of infrastructure, equipment, or facilities to support zero emission or low emission vehicles

- New Service and Technology Conversion
  - Purchase of zero-emission or low-emission vehicles and equipment in support of new expanded/enhanced transit service*

- Fuel or Energy Reductions
- Purchase, construction, and/or installation of solar panels for transit facilities in support of new expanded/enhanced transit service*
- Implementation of system or efficiency improvements that result in fuel reductions from existing transit services, including projects that reduce transit VMT and idling*

**Increased Ridership**

- Distribution of vouchers for free or reduced transit fares*
- Implementation of system or efficiency improvements that result in increased ridership for existing routes, including project elements that increase service levels, reliability, or decrease travel time, including:*  
  - Rail, bus, and ferry integration implementation  
    - Integrated ticketing/scheduling systems and related capital investments  
    - Projects enabling/enhancing shared-use corridors without net air pollution increases  
    - Related planning efforts focused on integrated service without requiring major capital investment  
    - Other service integration initiatives  
  - Bus rapid transit or rail service and other bus and ferry transit investments  
    - Vanpool services operated as public transit  
    - Operating agreements, schedules, and minor capital investments to increase ridership  
  - Efforts to improve existing rail service effectiveness with a focus on improved operating agreements, schedules, and capital investments that increase ridership*

- Purchase and construction of active transportation facilities that connect to stops/stations and encourage transit ridership

**Car Sharing and Mobility Enhancement**

- Purchase of advanced vehicle technology types to be used for car sharing, vanpooling, ride-sharing and other mobility options
  - Advanced technologies may include but are not limited to:
    - Plug-in hybrid electric vehicles*
    - Battery electric vehicles*
    - Fuel cell electric vehicles*
    - Purchase, construction, and/or installation of infrastructure, equipment, or facilities to support advanced technology vehicles
    - Electric vehicle supply equipment (EVSE)
    - Electric bicycles*  
    - Education about the car scrap and replacement incentives program for new or used hybrid, plug-in hybrid, or zero-emission vehicle (ZEV) replacement
Decarbonized Energy and Energy Efficiency Strategy

- Direct Installation of Energy Efficiency and Solar Photovoltaics at Single-Family Homes
  - Basic EE retrofit package measures:
    - Low flow faucets
    - Low flow showerheads
    - LED lighting
    - LED night lights
    - Tier 2 power strips
    - Thermostatic shower valve and showerhead
    - Vacancy/motion sensor
    - Enhanced measures (climate zone, testing, auditing and installation restrictions):
      - Ceiling fans
      - Ceiling insulation/insulation upgrades
      - HVAC system replacement
      - Duct repair/replacement
      - Efficient fan controller
      - Electronically commutated blower motor
      - Floor insulation
      - Infiltration reduction measures
      - Refrigerant charge w/coil cleaning
      - Refrigerator replacement
      - Smart thermostat
      - Solar water heating
      - Solar PV
      - Wall insulation, stucco and wood
      - Water heater blanket
      - Water heater replacement
      - Whole house fan
      - Window replacement

- Financial Incentives for Energy Efficiency and Renewables at Multi-Family Homes
  - Energy efficiency and renewable measures:
    - High efficiency clothes washer
    - High efficiency clothes washer – common
    - High efficiency laundry dryer – in-unit
    - High efficiency laundry dryer – common
    - ENERGY STAR® dishwasher
    - ENERGY STAR® refrigerator
    - Vending machine controller
    - Floor insulation
    - Wall insulation
    - Title 24 compliant windows
    - Window shading
    - Air sealing
    - Unit lighting
- Common area lighting
- Exterior lighting
- Pool/spa heater
- Pool cover
- Variable speed pool pump
- In-unit FAU (with or without split A/C)
- Rooftop FAU (with or without A/C)
- Terminal A/C or HP
- Ductless heat pump
- Central hydronic boiler
- Central steam boiler/burner
- Hydronic/steam/chilled water pipe insulation
- Refrigerant charge verification
- Central cooling equipment
- Variable speed pumps and fans
- Attic insulation
- Steam/hydronic distribution upgrades (balancing, TRV, etc)
- Central HVAC control upgrade (WWSD, outdoor reset)
- Duct sealing/insulation
- Residential water heater
- Central water heater
- Recirculation pump temperature controls
- Recirculation pump demand controls
- DHW pipe insulation
- Low flow aerators and/or showerheads
- Solar PV system
- Solar thermal (central)
- Solar thermal (in-unit)

- Urban Heat Island Mitigation
  - Cool pavements
  - Cool roof

**Water Efficiency Strategy**

- Replacement of inefficient appliances with high-efficiency models
  - Commercial Dishwasher*
  - Residential Dishwasher*
  - Commercial Clothes Washer*
  - Residential Clothes Washer (Single- and Multi-Family)*
  - Commercial Ice Machine*
  - Commercial Steam Cooker*
  - Commercial Combination Oven*
  - Equipment that uses single-pass cooling including ice machines and air conditioning units

- Replacement of inefficient fixtures with high-efficiency models
  - Faucets*
  - Showerheads*
Holistic water efficiency upgrades
- Water audits for multifamily housing
- Sub-metering for multifamily housing
- Leak detection and repair at single family and multifamily housing
- Optimization, repair, and/or replacement of inefficient cooling towers
- Installation, retrofit, or replacement to achieve efficient irrigation in public and private green spaces such as single family and multifamily homes (drip irrigation, efficient sprinkler spray bodies, smart controllers, moisture sensors, etc.)
- Application of compost, and/or mulch to reduce the need for watering, and retain soil moisture
- Replacement of lawn with a water-wise landscape and/or edible gardens, and efficient irrigation system
- Installation of low impact development (LID) for storm water management
- Installation of rainwater and or storm water capture systems, including treatment and use for landscape irrigation, or toilet, and urinal flushing
- Installation of onsite graywater systems, including capture, treatment and reuse for landscape irrigation, or toilet and urinal flushing

Materials Management Strategy

- Organics Waste Reduction
  - Composting of organics Recycling Program
    - Construction, renovation or expansion of compost, anaerobic digestion, or preprocessing of organics (not as standalone project) compost or anaerobic digestion facilities and machinery that turn green or food materials into compost and/or energy products*
    - Purchase of associated equipment, machinery and site improvements
    - Residential or commercial compost or anaerobic digestion equipment or programs
    - Community-scale composting programs

- Recycling Program
  - Manufacturing value-added finished products using recycled fiber, plastic, and glass
    - Construction, renovation or expansion of recycled-content fiber, plastic, or glass facilities and machinery for the manufacture of value-added products*
    - Purchase of equipment, machinery and real estate improvements associated with the installation
    - Stand-alone recycling education programs
    - Residential or commercial recycling collection equipment or programs
    - Reuse and repair programs for non-traditional recyclables (appliances, electronics, etc.)
o Non-traditional recyclables
  ▪ Reuse and repair programs for non-traditional recyclables (appliances, electronics, etc.)
  ▪ Food Waste Prevention and Rescue Program
    o Food waste prevention via food rescue
      ▪ New or expanded food rescue projects that result in food being distributed to people, with residuals being sent to composting or digestion when available in project area*
      ▪ Stand-alone food waste prevention, rescue, and recycling education programs
    o Other
      ▪ Food waste prevention via source reduction*

**Urban Greening and Green Infrastructure**

  ▪ Planting of trees in sites that are strategically selected to shade buildings (i.e., planted within 60 feet of an air conditioned building)
    o Urban tree planting*
      ▪ Tree and plant establishment care
      ▪ Planting site preparation
    o Vegetation planting
    o Urban heat island mitigation by tree shading
  ▪ Planting of trees in sites that do not shade buildings
    o Enhancement and/or expansion of neighborhood park and community space (must include tree planting component)*
    o Planting trees in public lands and structures, which may include incorporation of riparian habitat for water capture and provide for other public and wildlife benefits*
    o Tree inventory, and/or urban forest mapping and analysis, and/or long term management plan (must include tree planting component)*
  ▪ Green infrastructure
    o Multi-objective storm water projects, including construction of permeable surfaces and collection basins and barriers through low impact development (LID) strategies
    o Innovative urban forest site improvement to create larger, more functional planting sites for trees, such as bio-swales, urban forestry education centers, edible landscaping and/or community gardens and orchards

**Health and Well-Being**

  ▪ Food Access
    o Urban agriculture, including front yards, back yards, rooftop gardens, roadside urban fringe agriculture, livestock grazing in open space, and indoor hydroponic or aquaculture facilities*
    o Community gardens*
    o School gardens*
- Community kitchen
- Food hubs to serve the project area population
- Agricultural and healthy food education opportunities for children and adults

- Park, Open Space, and Recreation Access
  - Increase access to parks and green space through capital improvements projects or programs
  - Playground or park exercise equipment
  - Small recreational facilities (picnic areas, bathrooms)