

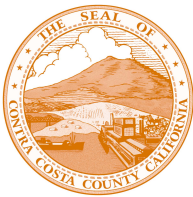
John Gioia (say "Joy-a")  
District One  
Chair, Board of Supervisors

# Contra Costa County

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June 8, 2023

The Honorable Pete Buttigieg  
Secretary of the United States  
Department of Transportation  
1200 New Jersey Avenue, SE  
Washington, DC 20590



**RE: Notice of Funding Opportunity (NOFO) Number 693JJ323NF00004, Charging and Fueling Infrastructure (CFI) Discretionary Grant Opportunity**

Dear Secretary Buttigieg:

The County of Contra Costa, California, is pleased to submit this proposal requesting \$15 million from the Federal Highway Administration's Charging and Fueling Infrastructure Discretionary Grant Program (CFI) for Phase I of the County's EV4All Project. The requested funds will support 80% of a total project cost of \$18,750,000, to be matched by 20% (\$3,750,000) to be committed by the County's private sector EV partner and subrecipient for the project, Electric Vehicle Charging Solutions (EVCS).

The requested funds will support the installation and deployment of 60 Level 2 chargers and 52 Direct Current Fast Chargers at 15 Contra Costa County Library sites located within 14 different cities, towns and census-designated places. A total of five percent of the budget, including the reinvestment of \$250,000 in anticipated charger site rental fees, will be earmarked for outreach, education and workforce development. These efforts will include outreach about EVs and available incentives and pre-apprenticeship programs targeted to low-income, disadvantaged and/or environmentally impacted communities.

The proposed project is strongly aligned with the CFI Program Vision as well as the Contra Costa Electric Vehicle Readiness Blueprint adopted in 2019. The Blueprint specifically identifies libraries as a prime location for public charging since libraries already serve as a community hub for activities and information. The majority of libraries selected for this application are located in Justice 40 communities that suffer economic and environmental inequities related to the historic oil company operations in portions of the county.

Contra Costa County appreciates the opportunity to apply for CFI funding to install charging in the portions of the County where zero emission vehicles can make the biggest difference in the lives of drivers and residents.

Sincerely

A handwritten signature in blue ink that reads "John Gioia".

John Gioia  
Chair, Board of Supervisors

Email: [John\\_Gioia@bos.cccounty.us](mailto:John_Gioia@bos.cccounty.us) • Website: [www.cocobos.org/gioia](http://www.cocobos.org/gioia)

EAST RICHMOND HEIGHTS ♦ EL CERRITO ♦ EL SOBRANTE ♦ KENSINGTON ♦ MONTALVIN MANOR  
NORTH RICHMOND ♦ PINOLE ♦ RICHMOND ♦ ROLLINGWOOD ♦ SAN PABLO ♦ TARA HILLS

**APPLICATION**  
for the

***Contra Costa County EV4All Project***

to the

**Community Charging and Fueling Program Grants Program**

**Under the Fiscal Year 2022 and 2023 U.S. Department of Transportation  
Federal Highway Administration's Charging and Fueling Infrastructure  
Discretionary Grant Opportunity**

**Notice of Funding Opportunity Number 693JJ323NF00004**



**June 8, 2023**

**Presented by**



**in partnership with**



TABLE OF CONTENTS.....	
<b>Introduction, Project Eligibility and CFI Program Alignment.....</b>	<b>1</b>
<b>Project Type, Eligibility and Alignment with CFI Community Program Vision .....</b>	<b>1</b>
<b>Section i: Project Narrative.....</b>	<b>4</b>
<b>Section i-I: Project Location, Risk Mitigation and Accessibility .....</b>	<b>4</b>
<b>Highways, AFC Corridors, Public Transit Challenges and Congestion.....</b>	<b>4</b>
<b>Proposed Charger Locations .....</b>	<b>5</b>
<b>Safety and Accessibility .....</b>	<b>7</b>
<b>Section i-II: Expanding Infrastructure and Filling Infrastructure Access Gaps .....</b>	<b>8</b>
<b>Multi-pronged, High-Impact Program Model to Achieve the CFI Program Vision .....</b>	<b>9</b>
<b>EV Charging Infrastructure Gaps in Contra Costa County .....</b>	<b>10</b>
<b>Section i-III: Use of Funds .....</b>	<b>13</b>
<b>Section i-IV: Additional Project Narrative Information.....</b>	<b>15</b>
<b>Section ii: Budget Information: Sources, Uses and Scalability.....</b>	<b>16</b>
<b>Requested CFI Grant Funds.....</b>	<b>16</b>
<b>Sources and Uses of All Project Funds .....</b>	<b>17</b>
<b>Project Scalability .....</b>	<b>17</b>
<b>Section iii: Project Merit Criteria .....</b>	<b>17</b>
<b>Criterion #1: Safety.....</b>	<b>17</b>
<b>Criterion #2: Climate Change, Resilience, and Sustainability .....</b>	<b>20</b>
<b>Climate Change Evidence .....</b>	<b>20</b>
<b>Reducing Greenhouse Gas Emissions .....</b>	<b>20</b>
<b>Climate Resilience, Public Health and Environmental Justice .....</b>	<b>21</b>
<b>Criterion #3: Equity, Community Engagement, and Justice<sup>40</sup>.....</b>	<b>22</b>
<b>Broad-based, Climate-focused Community Stakeholder Engagement.....</b>	<b>22</b>
<b>Equity Analysis.....</b>	<b>24</b>
<b>EVSE Workforce Needs .....</b>	<b>29</b>
<b>Workforce Development Activities .....</b>	<b>30</b>
<b>Building on Community-Library Relationships .....</b>	<b>31</b>
<b>Building on Place-Based Economic and Workforce Development Strategies.....</b>	<b>34</b>
<b>Criterion #5: CFI Program Vision .....</b>	<b>36</b>
<b>Alignment with U.S. DOT Statutory Priorities .....</b>	<b>36</b>
<b>Additional Community Program Considerations.....</b>	<b>37</b>

<b>Section iv: Project Readiness and Environmental Risk .....</b>	<b>38</b>
<b>Scope of Work / Statement of Work / Work Plan.....</b>	<b>38</b>
<b>Project Team Experience and Qualifications.....</b>	<b>42</b>
<b>Environmental Impacts .....</b>	<b>44</b>
<b>“Dig Once” Future-Proofing.....</b>	<b>45</b>
<b>EV4ALL APPENDICES .....</b>	<b>46</b>
<b>Appendix A – Equity Analysis Data.....</b>	<b>46</b>
<b>Appendix B – Charger Site and Amenities Information.....</b>	<b>46</b>
<b>Appendix C – Charger Specifications .....</b>	<b>46</b>
<b>Appendix D – Letters of Commitment.....</b>	<b>46</b>
<b>Appendix E – Stakeholder Letters of Support .....</b>	<b>46</b>
<b>Appendix F – Project Team Resumes .....</b>	<b>46</b>
<b>Appendix G – Applicant Commitments &amp; Attestations (Compliance).....</b>	<b>46</b>
<b>Appendix H – Master Site Host Agreement .....</b>	<b>46</b>

## **Introduction, Project Eligibility and CFI Program Alignment**

The County of Contra Costa, California, is excited to submit this proposal requesting \$14,999,200 from the Federal Highway Administration’s Charging and Fueling Infrastructure Discretionary Grant Program (CFI Program). The requested funds will support 80% of a total project cost of \$18,749,000, matched by 20% (\$3,750,000) committed by the County’s EV partner and subrecipient for the project, Electric Vehicle Charging Solutions (EVCS).

The requested funds will support Phase One of the County’s EV4All Project (“the project”), including installation and deployment of 60 Level 2 chargers and 52 Direct Current Fast Chargers at 15 equitably distributed Contra Costa County Library sites located within 14 different cities, towns and census-designated places. Five percent (5%) of the requested award will support vital outreach and education activities to expand EV awareness and adoption in the county, including awareness of EV purchasing incentives and EV workforce development pathways, especially among low-income, disadvantaged and/or environmentally over-harmed communities.

In Phase Two of the County’s EV4All Project – not included in this proposal due to budget constraints – the County will install EV chargers including DC Fast Chargers at the County’s other public library sites. In this proposal, the quantified costs, outputs, sites, chargers, impacts and populations served by “the project,” “the EV4All Project” and “the County’s EV4All Project” refer only to the 15-site Phase One of the County’s EV4All Project.

## **Project Type, Eligibility and Alignment with CFI Community Program Vision**

**Contra Costa County’s CFI Community Program proposal** is fully aligned with the CFI Program’s objectives and eligibility requirements. The County, a unit of local government, is an eligible applicant; is the sole applicant; and is not a party to any other applications to this program.

**Alignment with the CFI Community Program Vision.** The project’s purpose is to expand publicly-accessible EV charging infrastructure (24/7) and fill gaps in public access to EV charging in targeted communities that are currently EV-underserved. (“charging infrastructure,” “chargers” and “EVSE” (Electrical Vehicle Servicing Equipment) are used inter-changeably in this proposal.)

The project will install and deploy new Level 2 and DC fast chargers in places that currently have few Level 2 chargers and near-zero DC fast chargers. The charger specifications are provided in Appendix C. All chargers will be located at well-known, centrally-located, well-lit, safe, reliable and accessible County library sites proximate to multiple nearby amenities and destinations. Nearly 3/4 of the sites (73%) are within 1-2 miles of an Alternative Fuel Corridor (AFC) and over half (53%) are within 1 mile of an AFC (the other 4 sites are 2.7-8.1 miles from AFCs).

**While this is a Community Program proposal, not a Corridor Program proposal, the majority of proposed EVSE sites (8/15) are within 1-mile of the county’s three main AFCs – State Route 4, US I-680 and US I-80 – and fill notable EVSE gaps in 24/7 public access along all three.** The significant gaps in publicly-accessible EVSE along these corridors are well-documented in this proposal. These highly-traveled corridors, linking workers to major employment centers in San Francisco, Alameda County and Silicon Valley, are critical arteries for a county population in which 4 in 10 workers travel out of the county for work. The site attributes listed above (well-lit, safe, reliable) make these sites attractive to commuters seeking convenient, AFC-proximate charging for the same reasons they are attractive to the broader community. Long

travel times due to congestion provide an extra-powerful incentive for low- and moderate-income workers to adopt EVs and use new AFC-proximate chargers to save money on fueling costs.

**Of the 15 census tracts with proposed new EVSE, seven are low-income, three are disadvantaged, six are Justice40-qualified, and many suffer from high rates of multiple health risks and hazards attributable to their proximity to large GHG emitters.** The residents of these census tracts are mostly concentrated in the northern and western areas of the county, located along the three AFCs listed above and between those AFCs and the county’s industrialized waterfronts. **These 15 tracts currently have a total of four existing publicly-accessible DC fast chargers, while the low-income and/or disadvantaged census tracts have a total of one.**

**The project will help advance, and be advanced by, larger strategic efforts in the County to reduce greenhouse gas emissions, mitigate climate impacts, improve climate resilience and advance environmental justice.** The County – in long-term collaboration with many partners and stakeholders – is especially focused on ensuring that the most vulnerable workers in the county’s energy transition are assisted and supported rather than dislocated.

**With respect to ALL of these aligned strategic efforts, the significance of the county’s large oil refining sector cannot be over-emphasized.** It is over 23 times more proportionately important to the county’s economic base than it is to the nation’s; it accounts for about 3 in 10 jobs in the waterfront industrial areas most impacted by pollution and climate change; and it is steadily shedding some of the county’s highest-paying jobs. It is, and must be, at the center of the county’s transition to a clean-energy economy, while expanding EV adoption to reduce transportation-related emissions is an equally imperative and mutually-supporting strategic path.

**Within the oil refining industry itself, the economic transition to good-paying jobs in a clean-energy economy is already underway in Contra Costa County.** In 2020, two refineries (the Phillips 66 refinery in Rodeo and the Marathon refinery in Martinez) announced that they were switching from crude oil production to making biofuels. The County’s supervisors also joined scores of local officials statewide to sign the “Diesel Free by ‘33” pledge, which commits to a goal of reducing diesel emissions to zero in California by 2033.<sup>1</sup> Expert observers regard these actions and others as signals of a pending wave of oil refinery decommissioning in the State.<sup>2</sup>

**Given the likely wave of crude refinery decommissioning now underway, Contra Costa County is ideally positioned to develop a blueprint for responsible energy transition from which other communities in the state and nation can learn and benefit.** Fortunately, county stakeholders have pertinent prior experience; in 2016, environmental and labor groups reached a comprehensive agreement for a just transition for workers and the community affected by the closure of the Diablo Canyon Nuclear Plant (in the county’s southern portion).<sup>3</sup>

In September 2020, the County’s supervisors signed a resolution **declaring a climate emergency in the County**, identifying the need to “anticipate and plan for an economy that is less dependent on fossil fuels” and “plan for a ‘Just Transition’ away from a fossil-fuel dependent economy.”<sup>4</sup>

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<sup>1</sup> <https://www.nrdc.org/bio/ann-alexander/biofuel-conversions-chance-model-just-transition>

<sup>2</sup> <https://www.nrdc.org/bio/ann-alexander/biofuel-conversions-chance-model-just-transition>

<sup>3</sup> <https://www.pge.com/includes/docs/pdfs/safety/dcpp/JointProposal.pdf>; <https://www.nrdc.org/bio/peter-miller/diablo-canyon-accord-approved-california-legislature>

<sup>4</sup> <https://www.contracosta.ca.gov/DocumentCenter/View/68157/Declaration-of-Climate-Emergency>

**The County is also strongly-positioned to serve as a model for integrating expanded EV adoption into broader energy transition strategies and actions.** With an EV Readiness Blueprint completed in 2019 – leading to high-impact projects like the EV4All Project – the County is well-prepared to further its EV expansion activities as one part of a multi-pronged approach to the daunting energy transition it faces. **At one of the most challenging times in the county’s history, the requested ~\$15M award would provide a huge boost to the County’s strategic energy transition efforts at a time of both great need and great promise.**

**The prominent role of the County Library System and 15 of its branch locations will have a major role in generating project benefits.** These publicly-owned and publicly-managed facilities epitomize the meaning of community-based: they are active centers of community learning and support, situated in the heart of each community, with proximity to many services provided by the libraries themselves as well as multiple nearby retail, recreational and service amenities that EV charging customers can conveniently access during charging.

**The benefits of locating EVSE at libraries were highlighted in the Contra Costa Electric Vehicle Readiness Blueprint completed by the Contra Costa Transportation Authority in 2019.<sup>5</sup>** The libraries – with staff and volunteers highly-committed to advancing the county’s equitable energy transition – are ideal locations for EVSE to spotlight and facilitate EV adoption through the libraries’ many community-based events and relationships. A newly-acquired EV bookmobile will provide a powerful EV outreach platform. The library-based EVSE will expedite electrification of the fleet of medium-duty trucks used to circulate books across branches, yielding large GHG reductions and fuel cost savings given the long travel distances required.

The project’s outreach and education component – incorporating workforce development outreach as well as direct training – will play a vital role in **building pipelines of much-needed EV and EVSE workers while also creating new opportunities for workers dislocated by the county’s energy transition.** The library branches themselves will provide the foundation for community outreach, with trusted community-based organizations partnering in the project to expand engagement further into the project’s targeted low-income and disadvantaged communities.

Workforce development outreach will dovetail with County efforts already underway to directly spur EV workforce training within County government. The County is in close contact with the Contra Costa County Community College District Chancellor and key Directors around **pursuing a partnership to build a workforce pipeline and curriculum-driven on-the-job training internship program within the County Public Works Department.** Public Works is developing a strategic plan to become a central maintenance hub for publicly-owned EVs county-wide, which will provide a robust platform for applied, hands-on EV technician training.

**With respect to income- and wealth-building, the project’s workforce development benefits will build on the financial impacts of EVs themselves.** With state EV purchasing incentives put in play by program outreach to help low- and moderate-income people learn about and access them, EVs will become affordably-acquired assets, in turn allowing owners to realize significant savings on fueling and maintenance costs vs. gas-powered cars. The EVs will then provide more affordable access to work locations, thereby providing owners more net earned income and greater capacity to spend on quality-of-life improvements, invest in education and/or save to build wealth.

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<sup>5</sup> <https://ccta.net/projects/contra-costa-electric-vehicle-ev-readiness-blueprint/>

## Section i: Project Narrative

### Section i-I: Project Location, Risk Mitigation and Accessibility

The project location is Contra Costa County, one of nine counties in the San Francisco Bay Region and three counties in the East Bay sub-region. The County's 1.66 million population in 2020 was 33% higher than San Francisco County, making Contra Costa the region's third-most populous county (behind Santa Clara and Alameda). Contra Costa is one of California's original 27 counties, incorporated in 1850.



The county's extensive northern and western waterfronts are a central focus of this proposal and of the County's clean energy transition. These areas are home to heavy industry, including the 2<sup>nd</sup>-largest oil refining center on the west coast. The residents of low-income communities in these areas are on the front lines of climate change, absorbing inequitable impacts of extreme GHG and particulate pollution. These disadvantaged and over-harmed communities are a primary focus of the plan for new EVSE presented in this proposal.

#### ***Highways, AFC Corridors, Public Transit Challenges and Congestion***

Travel conditions in the county are greatly influenced by its proximity to major population and employment centers. Commuting patterns are especially affected by travel to and from employment centers to the west and south (San Francisco, Oakland, Silicon Valley); residential areas to the north (Solano and Napa Counties); and areas to the east in California's central valley.

The County's roadways of most significance to this proposal – shown in Figure 1 – are California State Route 4 (SR4) and U.S. Interstates 80 and 680 (I-80 and I-680). SR4 is the major east-west corridor through the county's northern portion, connecting to the region's two main north-south corridors in the western portion: I-80 and I-680. Most of the county's job centers are located along or near I-680, the county's main north-south corridor, which also serves as a primary commuting route for county residents who work in Silicon Valley to the southwest.

All three of these roadways are part of the Alternative Fuel Corridor network: I-80 and I-680 are corridor-ready and SR4 is corridor-pending. Both provide connectivity to other corridor-ready roadways in and near the county, including I-580 and I-880.<sup>6</sup> Although this is a Community Program Proposal, not a Corridor Program Proposal, a majority of the proposed new EVSE locations (8 of 15) are located within a mile of an AFC.

A 2017 study found Contra Costa County to have three of the Bay Area's ten most congested corridors: #2, I-80 westbound in the morning from Hercules to the Bay Bridge; #5, SR4 eastbound in the afternoon between Martinez and Concord; and #10, I-680 northbound in the afternoon from Danville to Walnut Creek.<sup>7</sup> The I-80 corridor, connecting commuters to employment centers in San Francisco, Oakland, and Silicon Valley, has long been one of the region's most congested.

<sup>6</sup> [https://www.fhwa.dot.gov/environment/alternative\\_fuel\\_corridors/maps/](https://www.fhwa.dot.gov/environment/alternative_fuel_corridors/maps/)

<sup>7</sup> [https://mtc.ca.gov/sites/default/files/top\\_10\\_congestion\\_locations-2017.pdf](https://mtc.ca.gov/sites/default/files/top_10_congestion_locations-2017.pdf)



**Figure 1: Contra Costa County Highway Map**



Due to congestion issues, commuters living in Contra Costa County spend significantly more time getting to work than residents of any other Bay Area county, with nearly one in five commuters traveling over one hour each way for work.<sup>8</sup> An estimated 4 in 10 of the county's workers commute to another Bay Area county for work.<sup>9</sup> Given these conditions, expanded EV adoption in the county is more critical than it would otherwise be for reducing the carbon impact of vehicles and lowering the fuel costs of travel by car, especially for low- and moderate-income commuters.

**Patterns of Industry, Health Disparities and Environmental Injustice.** The socioeconomic patterns across the county's sub-regions are strongly correlated with employment and industry patterns. The three county sub-regions with the highest rates of low-income residents and people of color – East, West and North Central – are anchored by their largest cities along the county's western and northern waterfront, where the county's heaviest GHG emitters including oil refineries are located. These communities are located along the major corridors described above and between those corridors and the waterfront.

### ***Proposed Charger Locations***

The County's equity analysis, detailed under Project Merit Criterion #3, examined demographic data in comparison to data on existing charger locations in the county. That analysis clearly demonstrates the inequitable distribution of EVSE in Contra Costa County. The County used this analysis as the basis for prioritizing public library branches in low-income and disadvantaged communities for inclusion in this proposal.

<sup>8</sup> <https://www.vitalsigns.mtc.ca.gov/commute-time#:~:text=Contra%20Costa%20County%20residents%20lead%20the%20pack%20with,also%20home%20to%20sizeable%20shares%20of%20extreme%20commuters.>

<sup>9</sup> <https://www.vitalsigns.mtc.ca.gov/commute-patterns>

As shown in Table 1, among the 15 census tracts with proposed new EVSE, seven are low-income, three are disadvantaged and six are Justice40-qualified. These tracts have a total of four existing public DC fast chargers, while the residents of the low-income and/or disadvantaged census tracts have a total of one DC fast charger. Table 2 shows the proposed new EVSE at each of the locations – in total, 60 Level 2 chargers and 52 DC fast chargers. This investment would double the number of Level 2 chargers in these tracts and increase the number of DC fast chargers by over 12 times.

**Table 1: Existing EVSE in Census Tracts Targeted for New EVSE – EV4All Project**

Site Name	City	County Sub-Region	Low-income Tract	Dis-advantaged Tract	Justice40 Tract	Rural (under 50k pop)	Existing Chargers in Census Tract					
							DCFC	L2	Total Public Chargers		Total Public DCFC	
									#	# per 1k	#	# per 1k capita
CCC-Antioch Library	Antioch	East	Y	Y	Y		1	3	4	0.61	1	0.15
CCC-Brentwood Library	Brentwood	East	Y		Y				0	0	0	0.00
CCC-Clayton Library	Clayton	North Central				Y			0	0	0	0.00
CCC-Concord Library	Concord	North Central	Y				2	2	0.36	0	0.00	
CCC-Crockett Library	Crockett	West				Y			0	0	0	0.00
CCC-Dougherty Station Library	San Ramon	Central					18	18	2.26	0	0.00	
CCC-El Sobrante Library	El Sobrante	West			Y	Y			0	0	0	0.00
CCC-Hercules Library	Hercules	West				Y			0	0	0	0.00
CCC-Martinez Library	Martinez	North Central	Y		Y	Y	5	5	4.74	0	0.00	
CCC-Moraga Library	Moraga	Central				Y			0	0	0	0.00
CCC-Pinole Library	Pinole	West				Y			0	0	0	0.00
CCC-Pittsburg Library	Pittsburg	East	Y	Y	Y		4	4	0.75	0	0.00	
CCC-Pleasant Hill Library	Pleasant Hill	North Central				Y	3	6	1.43	3	0.48	
CCC-Prewett Library	Antioch	East	Y						0	0	0	0.00
CCC-San Pablo Library	San Pablo	West	Y	Y	Y	Y		21	21	2.89	0	0.00
<b>Total</b>			<b>7</b>	<b>3</b>	<b>6</b>	<b>9</b>	<b>4</b>	<b>59</b>	<b>63</b>	<b>0.68</b>	<b>4</b>	<b>0.04</b>

**Table 2: Proposed New EVSE at Contra Costa County Library Sites – EV4All Project**

Site Name	Site address	DAC	LIC	Justice40	Rural	# DCFC	kW	# of L2	kW
CCC-Antioch Library	501 W. 18th Street, Antioch CA 94509	Y	Y	Y		4	150	4	7
CCC-Brentwood Library	104 Oak Street, Brentwood CA 94513		Y	Y		4	150	4	7
CCC-Clayton Library	6125 Clayton Road, Clayton CA 94517				Y	4	150	4	7
CCC-Concord Library	2900 Salvio Street, Concord CA 94519		Y			4	150	4	7
CCC-Crockett Library	991 Loring Ave, Crockett CA 94525				Y	2	150	4	7
CCC-Dougherty Station Library	17017 Bollinger Cyn Road, San Ramon CA 94582					4	150	4	7
CCC-El Sobrante Library	4191 Appian Way, El Sobrante CA 94803			Y	Y	2	150	4	7
CCC-Hercules Library	109 Civic Drive, Hercules CA 94547				Y	4	150	4	7
CCC-Martinez Library	740 Court Street, Martinez CA 94553		Y	Y	Y	4	150	4	7
CCC-Moraga Library	1500 St. Mary's Road, Moraga CA 94556				Y	2	150	4	7
CCC-Pinole Library	2935 Pinole Valley Road, Pinole CA 94564				Y	2	150	4	7
CCC-Pittsburg Library	80 Power Avenue, Pittsburg CA 94565	Y	Y	Y		4	150	4	7
CCC-Pleasant Hill Library	2 Monticello Avenue, Pleasant Hill CA 94523				Y	4	150	4	7
CCC-Prewett Library	4703 Lone Tree Way, Antioch CA 94531		Y			4	150	4	7
CCC-San Pablo Library	13751 San Pablo Avenue, San Pablo CA 94806	Y	Y	Y	Y	4	150	4	7
<b>Total Count</b>		<b>3</b>	<b>7</b>	<b>6</b>	<b>9</b>	<b>52</b>		<b>60</b>	
<b>% of Total Sites (15)</b>		<b>20%</b>	<b>47%</b>	<b>40%</b>	<b>60%</b>				

It should be noted that the County and EVCS are still performing due diligence with respect to some of these sites. For example, the team is assessing the findings of several different flood plain analyses to determine the most appropriate course of action at the Clayton library branch. The Crockett library branch presents unique challenges because the County-owned facility is located on private land; the team is exploring a number of potential scenarios to address property owner concerns, including installing EVSE on County-owned property adjacent to the library.

## *Safety and Accessibility*

The County’s project design for new EVSE at the selected sites incorporates several important safety considerations, including assessing safety risks that could potentially be introduced during site construction and risks for EVSE users. Stations will be designed to mitigate human error during charging and to integrate traffic safety devices and emergency safety shutdowns in a manner that fully complies with local AHJs. Reflecting adherence to the U.S. DOT’s National Roadway Safety Strategy’s Safe System Approach (SSA)<sup>10</sup>, Table 3 summarizes ways in which the construction and operation of EVSE will directly or indirectly contribute to SSA Objectives:

**Table 3: EV4All Project Contributions to DOT’s Safe System Approach (SSA)**

<p><b>“Safer Speeds” Objective:</b> While not directly contributing to a reduction in fatal crashes at the charging sites (since charging occurs while parked), the operation of electric vehicles has been anecdotally noted to reduce highway speed. EV range is extended significantly when the vehicle is not operated at excessive speed. EV operators receive instant feedback in the form of added range when safer driving speeds are used. In addition, the Safer Speeds objective incorporates outreach and education about speeding; EV4All project outreach will provide information on the benefits of lower, safe speeds to maximize EV range, which should in turn increase safety.</p>
<p><b>“Safer Roads” Objective:</b> While EVSE does not entail proven safety countermeasures such as medians, bicycle lanes or rumble strips, the use of pavement markings and signage to ensure the stations are easily visible with good ingress and egress contributes to overall safer roadways.</p>
<p><b>“Safer Vehicles” Objective:</b> The on-board advanced safety technology in EVs is state-of-the-art, including advanced collision warnings, lane change safety indicators, 360-degree cameras, etc. As the national charging station network continues to expand, consumers will become more comfortable with the idea that they can make the EV commitment (plenty of locations to charge) and the advanced technology fleet will grow, resulting in a safer fleet. Also, as the number of EVSE locations grows, the potential for EVs to become stranded with no battery charge on the roadside decreases. Ensuring all new stations are registered with alternative fuel databases and mapping systems will also contribute to reducing the number of times EVs are stranded on the roadside and therefore vulnerable to accidents potentially leading to roadway death.</p>

To maximize site safety and mitigate onsite station risks, the proposed project will fully comply with all applicable Americans with Disabilities Act (ADA) of 1990 requirements. This is accomplished by full compliance with the California Building Standards Code (CBC) (Title 24), which ensures “buildings, structures, and related facilities are accessible to, and functional for, every member of the public, so as to provide equal opportunity to access public accommodations.” California’s accessibility regulations predate Federal ADA by 8 years. The state’s current CBC was developed “to provide a single code that would meet all of the most stringent requirements of the original California Building Standards Code, as well as the 1991 Federal Fair Housing Amendments Act and the Americans with Disabilities Act Accessibility Guidelines<sup>11</sup>.

<sup>10</sup> <https://www.transportation.gov/NRSS>

<sup>11</sup> <https://www.dgs.ca.gov/DSA/Resources/Page-Content/Resources-List-Folder/Access-Compliance-Reference-Materials?search=disabled%20access%20to%20EV%20charging>

California Building Standards Code Title 24, Part 2, Chapter 11B details the accessibility regulations for EVSE that apply to the proposed project. The State’s Department of General Services provides clear guidance on accessibility requirements for EVSE.<sup>12</sup> Accordingly, the project team will design the first space as van-accessible and will follow guidelines for the minimum number of accessible spaces as the number of total charging spaces at a site increases. The project team has extensive experience complying with California ADA requirements for EVSE. The site host understands that one additional space will be required to meet ADA compliance. Other key design requirements for the project include those provided in Table 4.

**Table 4: ADA Compliance Specifications – EV4All Project**

Site configuration will meet accessible charging requirements including: level ground w/ a slope of less than 1:48; vertical clearance of at least 98”, located along accessible route to the facility
Charging cables will be kept off the ground and the cable receptacle will not be more than 48 inches above the surface of the surrounding ground area.
Per Federal ADA guidelines, the amount of pulling lifting strength required will be less than five-pound force (charger handle will not require undue strength to pull, lift, or operate). Other operable parts will require less than five-pound force (with exception for EV connectors)
Van-accessible EV spaces will be 12’ x 18’ with a 5-foot access aisle (on passenger side) to allow parking flexibility relative to the charge port location on the vehicle.
Standard-accessible spaces will be 9’ x 18’ w/ 5-foot access aisle on the passenger or driver side.
Charging cables will not block the accessible route (may require cord storage).
Clear floor space will be provided at the EV chargers.
The project will meet applicable reach range requirements for operable parts.
Point-of-sale devices will comply with CBC 11B-812.10.3
The project will provide surface markings, as required.
Signage will conform to the California Manual of Uniform Traffic Control Devices (MUTCD) <sup>13</sup> .

## **Section i-II: Expanding Infrastructure and Filling Infrastructure Access Gaps**

The proposed project will 1) expand community-based EV charging infrastructure; and 2) fill gaps in access to publicly-accessible EV chargers in Contra Costa County. Based on the equity analysis underlying the process of site selection for this proposal, the project will expand EV infrastructure and fill infrastructure access gaps in a purposefully equitable manner. Further, the expanded EV access will specifically benefit communities that are most vulnerable to, and impacted by, the environmental harm that expanded EV adoption is meant to counteract and mitigate.

In carrying out the EV4All Project described in this proposal, Contra Costa County will comply

<sup>12</sup> [https://scag.ca.gov/sites/main/files/file-attachments/tt031020\\_californiaevcsaccessibilityregulations.pdf?1605821849](https://scag.ca.gov/sites/main/files/file-attachments/tt031020_californiaevcsaccessibilityregulations.pdf?1605821849)

<sup>13</sup> <https://dot.ca.gov/programs/safety-programs/camutcd>

fully with all applicable sections of the National Electric Vehicle Infrastructure Standards and Requirements (23 CFP Part 680). Appendix G provides additional compliance attestations.

### ***Multi-pronged, High-Impact Program Model to Achieve the CFI Program Vision***

**New Charging Infrastructure in EV-underserved Disadvantaged Communities.** The central project element is the installation of new EVSE including DC fast chargers in communities that currently have major EVSE gaps. As demonstrated by the equity analysis under Project Merit Criteria #3, the County’s EV4All project will establish EVSE in communities that have very little EVSE and nearly zero DC fast chargers. The proposed 60 Level 2 chargers and 52 DC fast chargers – placed at well-known, well-lit, trusted, reliable, safe and accessible public library locations – will help fill EVSE gaps and encourage greater EV adoption in these communities.

**The Expanding and Diversifying EV Marketplace.** EV growth and EVSE growth are mutually-supportive in achieving equitable EV market growth. While the County’s EV4All project ensures much-needed EVSE in underserved and disadvantaged communities, the project will also have expanded impact in relation to broader market growth. Consumers in the targeted communities will increasingly see the new EVSE in their own neighborhoods as only one part of steadily-expanding charger networks, thereby further encouraging EV adoption in EV-underserved places.

Nationally, major automakers are rolling out more EV offerings including types most favored by Americans such as SUV’s and pick-up trucks. With announced carmaker plans, there could be as many as 134 EV models available by 2024.<sup>14</sup> One result of this growth is an emerging used EV market. Because used EVs are substantially less expensive than new EVs, this trend will help bring EV adoption within reach for more Contra Costa residents.<sup>15</sup> Further supporting equitable EV expansion, the range of EVs is steadily increasing. The median EV range of 234 miles in 2021 was 104% higher than in 2018.<sup>16</sup> Increasing EV range combined with more affordable EV purchasing options and expanded EVSE will have the combined effect of strengthening the value proposition of EV adoption among low-and-moderate consumers.

**Robust State EV Consumer Incentives.** Unfortunately, the factors above are not enough to fill EV access gaps and ensure equitable EV access because the cost of EVs remains out of reach for most low- and moderate-income individuals. California’s suite of EV purchasing incentives will therefore play a critical role in expanding equitable EV access in Contra Costa County. In California, an LMI buyer of a new BEV could stack multiple incentives to reduce its price by as much as \$14,000 in 2022. Increases in these incentives approved in November 2022 could be a game-changer in advancing the state’s commitment to equitable EV access.<sup>17</sup>

**Outreach and Education About EV Facts, Benefits and Incentives.** The EV4All Project includes a multi-pronged outreach and education program (described under Project Merit Criteria #3 and #4) to increase awareness of EV benefits, help residents of targeted communities navigate and access EV purchase incentives, deliver practical workforce training information, and provide

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<sup>14</sup> <https://www.visualcapitalist.com/the-number-of-ev-models-will-double-by-2024/>

<sup>15</sup> <https://energycenter.org/thought-leadership/blog/california-increases-incentives-low-moderate-income-ev-shoppers>

<sup>16</sup> <https://www.energy.gov/eere/vehicles/articles/fotw-1220-january-10-2022-model-year-2021-electric-vehicle-longest-range>

<sup>17</sup> <https://energycenter.org/thought-leadership/blog/california-increases-incentives-low-moderate-income-ev-shoppers>

tangible training entry points into the EV-related workforce. Importantly, the County will carry out all of these aligned activities in collaboration with trusted messengers in each community, including personnel at each library branch and at community-based organizations with strong ties to racially diverse, low-income, disadvantaged, underserved and over-impacted communities.

**Ensuring Accurate EV information Reaches LMI community members that can most benefit from it.** An average EV owner can expect to save \$9,000 in fuel costs and \$4,600 in maintenance costs over a 200,000-mile EV lifespan.<sup>18</sup> However, misunderstandings about these savings are widespread enough to represent a major knowledge barrier standing between EV adoption and the low-and-moderate-income (LMI) people who could most financially benefit from it. A recent survey by Stanford University found that less than half of consumers believe that EVs cost less to fuel than gas-powered cars, and only 13% believe they cost less to maintain.<sup>19</sup> The outreach and education component of the EV4All Project will help ensure that fully-accurate information about EV affordability benefits reaches LMI community members of the targeted communities.

**Multiple County-led, Climate-Focused Activities and Investments to Complement the EV4All Project in Advancing a Just Energy Transition.** As described in the remainder of this proposal, the County's strategic, stakeholder-based approach to addressing climate change and mitigation is a key element of success for the EV4All Project. It ensures that project investment from Federal and other sources will have expanded, leveraged impact on both equitable EV market expansion and evidence-driven strategies for greenhouse gas reduction.

### ***EV Charging Infrastructure Gaps in Contra Costa County***

Figure 2 shows the locations of all existing EV chargers in and near the county (blue dots) along with the proposed new charging locations (red dots).<sup>20</sup>

**A northeastern cluster of chargers** hugs the east-west State Route 4 corridor (SR4), parallel to the northern waterfront, in the county's East sub-region (see Antioch and Brentwood on the map). The low concentration of chargers here, compared to generally more affluent and less environmentally impacted areas in the southern part of the county (San Ramon), **represents a gap in the county's existing EV charging infrastructure.**

**A southwestern cluster of chargers** hugs the western coast between Oakland and Richmond, but the notable lack of existing chargers along the I-80 corridor heading north from Richmond toward Sonoma, Solano and Napa Counties **illustrates a major gap in the distribution of existing chargers in the county and Bay Area** given the heavy use of this critical corridor and the string of cities located along it (south to north from Richmond: San Pablo, El Sobrante, Pinole, Hercules and Crockett, all of which have a library branch at which new EVSE is proposed).

**A north central cluster of chargers** hugs the north-south I-680 corridor and its intersection with SR4 (from south to north: Walnut Creek, Clayton, Concord and Martinez). Some of these cities have an apparent concentration of chargers, but the vast majority are Level 2 charges, and some

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<sup>18</sup> <https://advocacy.consumerreports.org/wp-content/uploads/2020/10/EV-TCO-Overall-Fact-Sheet-FINAL-3.pdf>

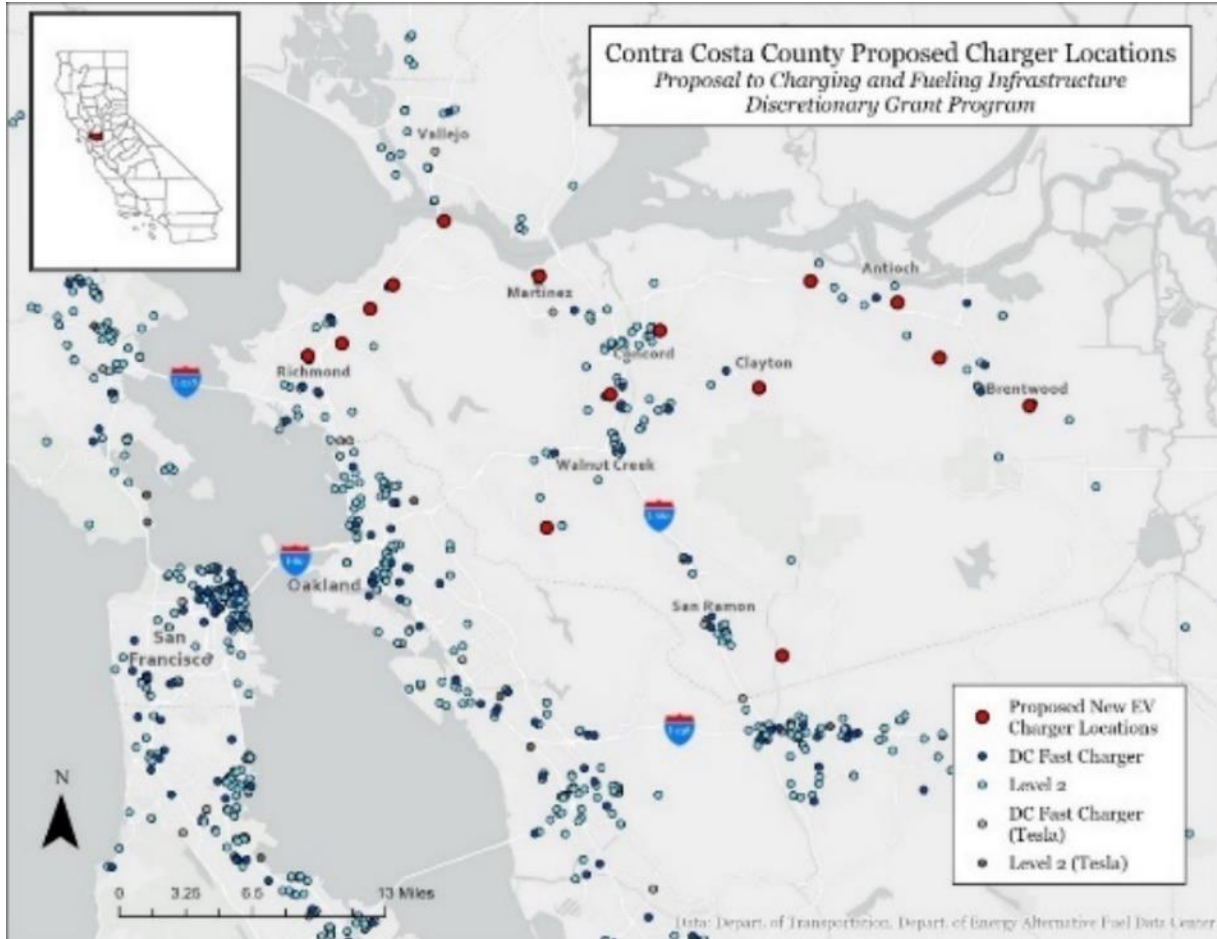
<sup>19</sup> <https://energycenter.org/thought-leadership/blog/ev-owners-didnt-expect-save-so-much-operations-and-maintenance>

<sup>20</sup> <https://afdc.energy.gov/stations/>

cities have very few chargers (including the County seat, Martinez). This map shows that **there are charger gaps in this part of the county as well.**

**A southern cluster of chargers** – around San Ramon and to its south – appears to be very highly concentrated, again hugging a major corridor, I-680. **Further analysis of this area identified gaps, particularly DC fast charging gaps, in this area and south of Walnut Creek, in Moraga.**

**Figure 2: Existing EV Chargers with Proposed EV Chargers – EV4All Project**



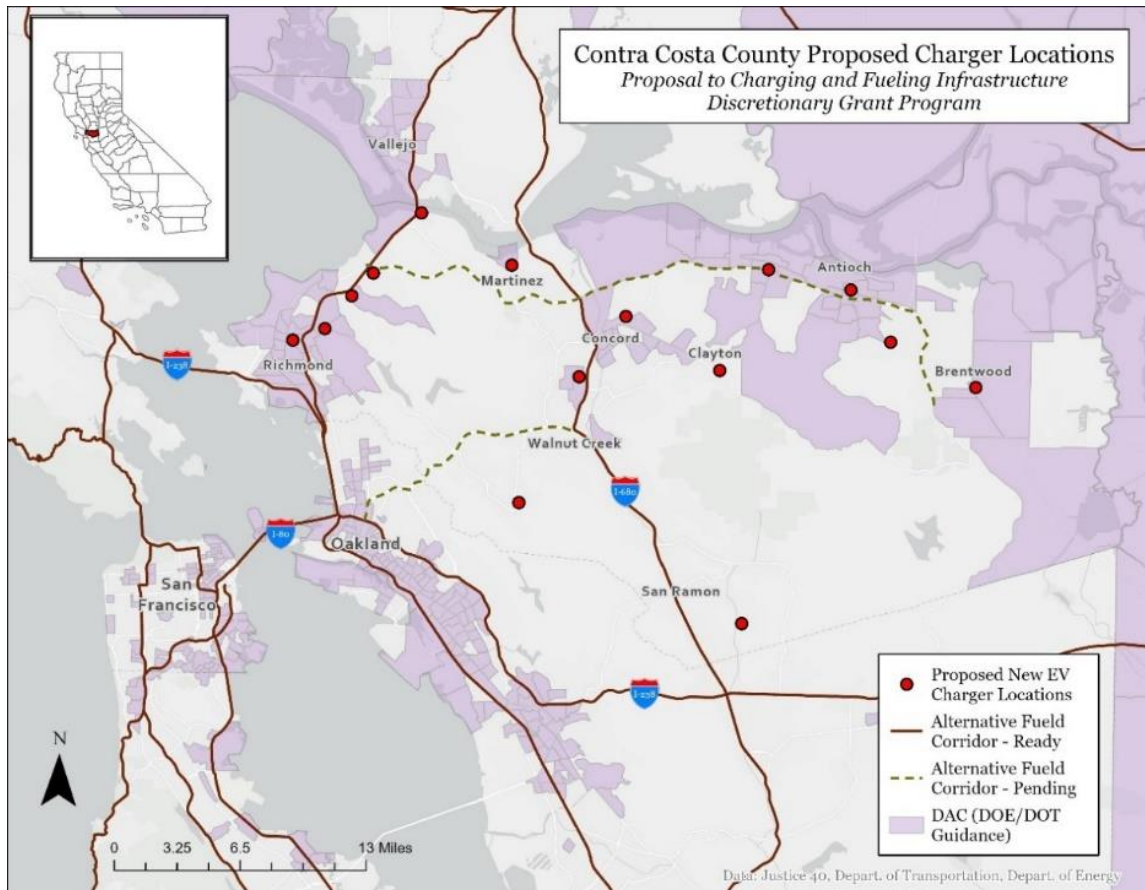
The County identified library locations to include in the EV4All Project by combining this sub-regional assessment of EV charging gaps with the equity analysis of existing charger sites discussed under Project Merit Criterion #3. This resulted in the 15 proposed EVSE locations (red dots) shown in Figure 3 (on DOT's Disadvantaged Communities Map<sup>21</sup>).

As previously shown in Table 1, the 15 census tracts in which the new chargers are proposed include seven classified as low-income, three as disadvantaged and six as Justice40-qualified. In these 15 census tracts, there are only 63 total public chargers and only 4 DC fast chargers. Among the 15 census tracts, eight have zero public chargers, including two low-income tracts. The gaps

<sup>21</sup> <https://cecgis-caenergy.opendata.arcgis.com/datasets/CAEnergy::disadvantaged-communities-designated-by-justice40/explore>

in DC fast charging access are extreme, with 13 of the 15 tracts having zero DC fast chargers, including six low-income and two disadvantaged tracts.

**Figure 3: Proposed EV Chargers and DOT Disadvantaged Census Tracts – EV4All Project**



**Expanding EV Infrastructure.** As detailed above, the project will install and deploy new EV charging infrastructure at 15 public library locations in 14 different communities in Contra Costa County. None of these sites currently have EV chargers. The new chargers – installed at well-known, well-lit, safe and reliable centers of community activity – will increase the availability of EV charging infrastructure by expanding its scale and visibility in these communities. The new DC fast charging stations will be particularly vital in providing quick and convenient charging options in communities that currently have zero or close-to-zero existing DC fast chargers.

**Filling Gaps in Access.** By definition, expanding charging infrastructure and especially DC fast charging access in communities that currently lack EVSE will have a gap-filling benefit: it provides more supply of something that is necessary in order to encourage wider EV adoption and propel the transition to a clean transportation economy. Moreover, these new chargers will fill equity gaps in EV charging access by serving the county’s most disadvantaged and vulnerable communities with infrastructure they currently lack, thereby countering the disproportionately higher concentration of EV charging infrastructure in higher-income places.

**Expanding Infrastructure Near Amenities, Services and Destinations.** All 15 proposed EVSE locations are proximate to many nearby amenities, services and destinations, allowing consumers



to conveniently access these nearby locations during charging. Table 5 (on the next page) provides a sampling of amenities and destinations nearby the 15 library sites included in the EV4All Project. These nearby amenities are documented with maps indicating amenities provided in Appendix B.

**Section i-III: Use of Funds**

The EV4All project includes design and construction of EVSE at 15 County library branches – including a total of 60 Level 2 and 52 DC fast chargers plus outlets for e-scooters and e-bikes to support multi-modal micro-mobility. Table 6 (further below) provides a breakdown of the uses of funds, followed by explanations of these uses and how they align with the expenses shown in the SF-424C form. The SF-424C Budget Narrative provides a detailed explanation of each SF-424C budget category.

As documented in Appendix D, the County’s subrecipient, EVCS, is committed to provide 100% of the match share for this project.

**Table 6: Uses and Sources of Funds, by Major Category**

Funding Source	Planning & Dev. and other Admin	Right-of - Way	Design & Installation	Equipment	O&M	Outreach, Education, Workplace Development (OEW)	Total	(%)
CFI Funds (Federal Request)	\$300,000	\$0	\$5,350,000	\$8,849,000	\$0	\$500,000	\$14,999,000	80%
Other Federal Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0%
Non-Federal Funds	\$0	\$0	\$0	\$0	\$3,750,000	***	\$3,750,000	20%
Total	\$300,000	\$0	\$5,350,000	\$8,949,000	\$3,750,000	\$500,000	\$18,749,000	100%
***Reflects \$250,000 rent income anticipated during the 5-year operational period will be allocated to outreach, education and workforce development. It is not included here since the income will offset this spending.								

**Planning & Development and Other Administration (424C Item #1):** Contra Costa County grant administration and project management.

**Right-of-Way (424C Item #2):** Site access is secured as documented in Appendix D. (Fully executed 10-year Site Host Agreement).

**Design & Installation (424C Items #4 to 9):** Please refer to the SF-424C Budget Narrative for a detailed explanation of the project budget categories allocated to Design & Installation. These include architectural and engineering design, inspections, site work, and construction.

**Equipment (424C Item #10):** a total of 52 150kW DC fast chargers, 60 Level 2 EVSE and 15 electrical switchgear will be procured.

**Table 5: Amenities Near Libraries with Proposed New EVSE – EV4All Project**

Site Name and Address	Nearest Highway	Alternative Fuel Corridor (AFC)?	Dist to highway (miles)	Nearby Amenities and Destinations (w/ distance)
Antioch Library - 501 W. 18th Street, Antioch CA 94509	CA State Route 4	yes	0.8	Multiple schools across the street, Antioch Square Shopping Center (0.4 mi)
Brentwood Library - 104 Oak Street, Brentwood CA 94513	CA State Route 4	yes	2.7	Brentwood Community Center (112 ft), Brentwood Farmers' Market (0.2 mi)
Concord Library - 2900 Salvio Street, Concord CA 94519	CA State Route 242	no	1.3	Concord City Hall (315 ft), Baldwin Dog Park (0.2 mi), John Muir Health Concord Medical Center (0.6 mi)
Martinez Library - 740 Court Street, Martinez CA 94553	US I-680	yes	1.5	Martinez Courthouse (364 ft), Martinez Museum (482 ft), Alhambra Creek Plaza (0.2 mi)
Pittsburg Library - 80 Power Ave, Pittsburg, CA 94565	CA State Route 4	yes	0.2	Pittsburg Superior Court (0.1 mi), City of Pittsburg - Civic Center (0.3 mi), Pittsburg BART Station (0.3 mi)
Prewett Library - 4703 Lone Tree Way, Antioch CA 94531	CA State Route 4	yes	1.8	Antioch Water Park (0.1 mi), Deer Valley Plaza (0.7 mi), Williamson Ranch Plaza (0.9 mi),
San Pablo Library - 13751 San Pablo Avenue, San Pablo CA 94806	US I-80	yes	0.7	San Pablo Senior Center (0.1 mi), San Pablo City Hall (0.2 mi), Walgreens (0.2 mi)
Pleasant Hill Library - 2 Monticello Ave., Pleasant Hill CA 94523	US I-680	yes	0.7	Pleasant Oak Park (0.2 mi), Safeway (0.2 mi)
Hercules Library - 109 Civic Drive, Hercules CA 94547	CA State Route 4	yes	0.9	Home Depot (0.3 mi), Lucky Grocery (0.4 mi), Refugio Valley Park (0.5 mi)
Clayton Library - 6125 Clayton Road, Clayton CA 94517	CA State Route 4	yes	8.1	Clayton Town Hall (335 ft), The Grove Park (0.2 mi), Clayton Community Church (0.4 mi)
Dougherty Station Lib. - 17017 Bollinger Cyn Rd, San Ramon CA 94582	US I-680	yes	3.4	Windemere Ridge Trail (0.3 mi), Amador Rancho Comm. Center (1.0 mi), San Ramon Sports Park (1.1 mi)
Moraga Library - 1500 St. Mary's Road, Moraga CA 94556	CA State Route 242	no	4.9	Moraga Commons Park (0.4 mi), Moraga Shopping Center (0.5 mi), St. Mary's College of California (0.7 mi)
Pinole Library - 2935 Pinole Valley Road, Pinole CA 94564	US I-80	yes	0.4	Creekside Park (0.2 mi), Pinole Valley Community Church (0.2 mi), Pinole Valley Shopping Center (0.4 mi)
El Sobrante Library - 4191 Appian Way, El Sobrante CA 94803	US I-80	yes	0.8	Butterfly Hill Hiking (0.5 mi), Dam Road Plaza (0.5 mi), Princeton Plaza (1.0 mi)
Crockett Library - 991 Loring Ave, Crockett CA 94525	US I-80	yes	0.7	Crockett Community Center (0.3 mi), Toot's Tavern (0.3 mi), J&L Market (0.6 mi),

**Operations and Maintenance (O&M) (part of 424C Item #11):** EVCS is responsible for ensuring the operation and maintenance of all project equipment, including charger pedestals, information display kiosks, signage, etc. All costs associated with the maintenance and repair of the chargers during the term of the site host agreement are also covered. Match funding estimates are based on 5 years of operation at each site. This is a conservative estimate of the resources committed to the ongoing O&M costs during the full term of the site host agreement.

**Outreach, Education and Workforce Development (balance of 424C Item #11):** This category will focus on working with trusted community-based organizations to provide training to outreach workers so they can conduct targeted outreach in disadvantaged communities; and provide hands-on, individualized assistance to help consumers apply for EV purchasing incentives. Workforce development will include implementing EV related curriculum in middle and high school STEM programs and career path programs; offering pre-apprentice training that encourages young adults to enter the electrical trades; and working with community colleges.

### **Section i-IV: Additional Project Narrative Information**

The proposed project covers all four Community Program categories: 1) multi-modal hubs and share-use fleets and services; 2) urban/suburban area charging and fueling solutions; 3) rural area charging and fueling solutions; and 4) fleet vehicles that serve and operate in communities.

The Applicant will use NEVI-compliant 150kW DC fast chargers, Level 2 EVSE where applicable, and 120V outlets for micro-mobility. This diverse selection of EV chargers is critical in meeting the needs of long-distance EV drivers, rental car drivers, and rideshare drivers requiring a thirty-minute fast charge. The 150kW DC fast chargers can also be used by light- and medium-duty delivery drivers and potentially municipal and County utility EVs. The Level 2 EVSE are less expensive than DC fast chargers (\$.39 per kWh for L2 vs. \$.49 per kWh for DCFC), and are ideal for local EV drivers visiting their neighborhood library who can afford a longer dwell-time charge, for regional carshare programs, and for a variety of other battery powered vehicles (e.g. electric motorcycles.) Finally, the 120V outlets provide charging for electric scooters, wheelchairs, bicycles, and a suite of other types of micro-mobility EVs.

The project incorporates **innovative payment methods** as follows: The project’s proposed private subrecipient, EVCS, provides a suite of monthly subscription plans to enable cost-effective charging; the cost per kWh goes down as kWh usage goes up, which is ideal for rideshare and other high-mileage drivers, especially low- and moderate-income drivers and the high percentage of Contra Costa workers (42%) who drive to another county for work. A calculator on the EVCS website allows drivers to calculate their savings under various payment plans. EVCS payment methods also include: pay-as-you-go; payment via the EVCS and PlugShare apps; via a 1-800 phone number; and via use of government cards, rewards cards and mobile wallets. Table 7 provides a summary of innovation and advanced features in EVCS’s chargers.

**Table 7: Selected Attributes and Specifications of EVSE in the EV4All Project**

<p><b>Utility Demand Charges.</b> EVCS works with electric utilities to assist them in developing rate structures that minimize demand charges. Many electric utilities have also developed rates specific to EV charging. In addition, EVCS’s back office has the capability to monitor peak loads. EVCS also participates in utility demand reduction programs.</p>
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**Battery Storage.** EVCS is planning to use chargers with battery storage from Freewire as an economically effective way to mitigate demand charges and to enable grid services. Freewire 150kW chargers use only 27 kW, greatly reducing utility costs.

**EV Driver Queuing and Reservations.** The EVCS back office will have the capability to minimize EV driver queuing via reservations by the end of 2023. EVCS also works with PlugShare to monitor EV driver issues or complaints. Finally, EVCS closely monitors charging station utilization to prevent queuing problems.

**“Dig Once” Future-Proofing.** EVCS will include future proofing in all installations by adding extra conduits and upsizing switchgear to implement a “dig once” policy. Future-proofing allows EVCS to plan for additional charger port capacity, as utilization climbs.

**Renewables, Carbon-Neutral and Carbon-Negative EVSE.** EVCS does not propose to add renewable battery storage at this time. However, EVCS purchases Renewable Energy Credits to ensure that all electricity usage is carbon neutral – and has also formed a partnership with an anaerobic digester company to bring the first carbon-negative EVSE projects online later in 2023.

**Innovative Business Model.** EVCS pays sites hosts a rental fee or revenue share amount based on kWh throughput. While this is a cost, it is also an opportunity to keep site hosts engaged and incentivize them to increase charger utilization. EVCS also uses advertising, OEM sponsorships, and renewable energy credits to supplement revenue, as discussed below.

**Reducing Equipment Costs.** EVCS has a strategic agreement with two Made in America EV manufacturers to procure DC fast chargers and Level 2 EVSE at an economical price.

**Reducing Installation Costs.** EVCS’s existing relationships with installation contractors in California, Washington and Oregon allow for the negotiation of favorable installation costs.

**Reducing O&M Costs.** Through its deep experience operating DC fast charging and Level 2 EVSE stations, EVCS has tested many charger models and manufacturers. The key to reducing O&M costs is high equipment reliability and minimizing vandalism to sites. ABB and Tritium DC fast chargers have proven reliability compared to other manufacturers, while site design, lighting and traffic flow help minimize vandalism and maximize driver safety.

**Applicant and Site Host Collaboration.** EVCS, as the owner/operator of the EVSE, enters into a long-term (10 years) site host agreement with the site property owner. The site host agreement is a synergistic agreement that provides benefits for both parties. For example, EVCS pays for all O&M and electric utility costs and rent to the site host based on charger utilization. The site host also benefits from the draw the EV chargers provide. EV drivers benefit from local venues while charging. EVCS benefits from the site host’s area property upkeep and customer base.

## **Section ii: Budget Information: Sources, Uses and Scalability**

### **Requested CFI Grant Funds**

The total project cost is \$18,749,000 (80%), with private sector project partners providing \$3,750,000 in match funding (20%). The project costs are estimated based on the project team’s experience with similar projects completed throughout California, Oregon and Washington, where

nearly 200 sites and close to 1,000 DC fast chargers and Level 2 EVSE have been commissioned since 2018. No operating subsidies are in place, nor will they be sought, for this project.

## Sources and Uses of All Project Funds

The EV4All project will provide a total of 52 DC fast chargers and 60 Level 2 EVSE. Table 8 presents the SF-424C Cost Classifications and funding source. For a detailed basis of cost estimate for each classification, see the SF-424C Budget Narrative.

**Table 8: SF-424C Project Budget and Funding Sources**

SF-424C COST CLASSIFICATION	Federal Request	Non-Federal Cost Share	Total Allowable Costs
1 Administrative and legal expenses	\$300,000	\$0	\$300,000
2 Land, structures, rights-of-way, appraisals, etc.	\$0	\$0	\$0
3 Relocation expenses and payments	\$0	\$0	\$0
4 Architectural and engineering fees	\$400,000	\$0	\$400,000
5 Other architectural and engineering fees	\$150,000	\$0	\$150,000
6 Project inspection fees	\$0	\$0	\$0
7 Site work	\$750,000	\$0	\$750,000
8 Demolition and removal	\$0	\$0	\$0
9 Construction	\$4,050,000	\$0	\$4,050,000
10 Equipment	\$8,849,000	\$0	\$8,849,000
11 Miscellaneous	\$500,000	\$4,000,000	\$4,500,000
12 SUBTOTAL	\$14,999,000	\$0	\$18,999,000
13 Contingencies	\$0	\$0	\$0
14 SUBTOTAL	\$14,999,000	\$0	\$18,999,000
15 Project (program) income	\$0	\$250,000	\$250,000
16 TOTAL PROJECT COSTS ( <i>subtract #15 from #14</i> )	\$14,999,000	\$0	\$18,749,000
FEDERAL FUNDING			
17 Federal assistance requested, calculated as follows: (Consult Federal agency for Federal percentage share.) Federal share IS <b>80%</b>			<b>\$14,999,200</b>

**Note:** Non-federal cost share reflects \$3,750,000 from partner EVCS and \$250,000 projected income.

## Project Scalability

While the project’s community benefits are maximized by funding EV charging infrastructure at the full suite of 15 proposed County library branches. EV4All could be scaled back at a rate roughly proportional to ~\$1M per library, with a minimum of eight libraries. However, such scale-down would also degrade benefits to the community at-large.

## Section iii: Project Merit Criteria

### Criterion #1: Safety

The “Safety and Accessibility” discussion at the end of Section i-I demonstrates that the County and its EV subrecipient, EVCS, are highly-focused on ensuring the safety of the proposed EVSE

stations and their users. In addition, because the proposed public library sites must consistently meet high safety and accessibility standards in the facilities and services they provide to the general public, these sites already provide a strong foundation for on-site safety.

Specifically, the “Safety and Accessibility” section identifies significant risks that could result after project completion and potentially introduced by the project; explains how the project appropriately mitigates these risks; explains how the project will not negatively impact the overall safety of the traveling public; and explains how the project supports the goal of achieving zero roadway death, in alignment with the Safe Systems Approach within the National Roadway Safety Strategy. The prior section also discusses how site design will promote safety at the proposed EVSE locations. Finally, the prior section addresses site accessibility elements, specifically in reference to Federal ADA regulations. This discussion demonstrates that the safety benefits of the sites are accessible to individuals with disabilities, thereby providing safety benefits for all users and not negatively impacting safety for any users.

**Cybersecurity and Safety.** The County’s EV partner and subrecipient, Electric Vehicle Charging Solutions (EVCS), prioritizes cybersecurity to ensure the protection of data and maintain the integrity of their systems. When it comes to handling cyber threats, EVCS follows robust security practices for their Amazon Web Services (AWS) infrastructure and industry leading payment processing systems.

EVCS leverages AWS for their data storage, processing, and other infrastructure needs. AWS provides a secure cloud platform with numerous built-in security features. EVCS’ system approach is to provide reliable EV charging services to the traveling public in a way that does not place them at risk of personal data “hacking” and also ensures the EVCS network protects the traveling public from network failures or data breaches. EVCS follows best practices to enhance the security of their AWS environment, summarized in Table 9.

**Table 9: Best Practices to Enhance AWS Data Security Followed by EVCS**

<p><b>Network Security:</b> EVCS configures Virtual Private Clouds (VPCs) to create isolated network environments and uses network access control lists (ACLs) and security groups to control inbound and outbound traffic.</p>
<p><b>Data Encryption:</b> EVCS encrypts data at rest using AWS Key Management Service (KMS) and can also encrypt data in transit using SSL/TLS protocols.</p>
<p><b>Access Management:</b> EVCS implements strict access controls by assigning appropriate IAM (Identity and Access Management) roles to users, limiting their privileges to only what is necessary for their tasks.</p>
<p><b>Backup and Disaster Recovery:</b> EVCS employs regular backup procedures and disaster recovery plans to ensure business continuity and data resilience.</p>

EVCS utilizes Stripe, Payter, and Worldpay (widely trusted payment gateways) to handle credit card data securely and safely. These are all compliant with the Payment Card Industry Data Security Standard (PCI DSS). EVCS follows the processor's recommended security practices, summarized in Table 10.

**Table 10: Payment Processor-recommend Security Practices Followed by EVCS**

<p><b>Tokenization:</b> Instead of storing actual credit card data, EVCS stores payment information in the form of tokens generated by the processor. This ensures that sensitive card information is not stored within EVCS systems.</p>
<p><b>Secure Transmission:</b> EVCS employs SSL/TLS encryption to establish a secure connection between their servers and the processor's servers, ensuring that payment data are transmitted securely.</p>
<p><b>Regular Audits:</b> Stripe, Payter, and Worldpay undergo regular third-party audits to validate their security practices and compliance with industry standards.</p>
<p><b>Fraud Prevention:</b> Stripe, Payter, and Worldpay employ advanced fraud detection algorithms and machine learning techniques to identify and prevent fraudulent transactions.</p>
<p><b>PCI Compliance:</b> EVCS adheres to PCI DSS requirements when processing, transmitting, and storing credit card data, ensuring the highest level of security for customer payment information.</p>

In addition to the measures taken to secure the AWS infrastructure and handle credit card data, EVCS also focuses on keeping user data safe and secure. Table 11 summarizes additional steps taken by EVCS to protect user data.

**Table 11: Additional Data-Protection Measures to Ensure Safety**

<p><b>Access Control:</b> EVCS implements strict access controls and user authentication mechanisms to regulate access to user data. By assigning appropriate access privileges and implementing multi-factor authentication (MFA), EVCS ensures that only authorized personnel can access and manipulate user data.</p>
<p><b>Data Minimization:</b> EVCS follows the principle of data minimization, meaning that only necessary user data are collected and retained. By limiting the collection and storage of user data to essential information, the risk associated with potential data breaches or misuse is reduced.</p>
<p><b>Regular Security Audits:</b> EVCS conducts regular security audits to assess the effectiveness of their security measures and identify any vulnerabilities or potential threats. These audits help identify areas that require improvements and ensure that the security controls are up to date with the latest industry standards.</p>
<p><b>Employee Training and Awareness:</b> EVCS emphasizes employee training and awareness programs on cybersecurity best practices. By educating employees about data security, phishing attacks, social engineering, and other potential risks, EVCS promotes a culture of security-conscious individuals who can contribute to safeguarding user data.</p>
<p><b>Data Backup and Recovery:</b> EVCS maintains regular data backups and implements robust disaster recovery plans. This ensures that in the event of any data loss or system failure, user data can be quickly restored, minimizing the impact on users and maintaining the integrity of their information.</p>

## **Criterion #2: Climate Change, Resilience, and Sustainability**

The EV4All project **considers climate change, evidenced-based climate resilience and environmental justice in the planning stage and in project delivery**, in part, due to its grounding in the County’s Climate Action Plan (CAP) and associated strategic implementation actions. These actions, in combination, represent the County’s strategy for reducing greenhouse gas (GHG) emissions. Given evidence about the large GHG contribution of on-road transportation, expanding EV adoption is explicitly a climate-focused strategy.

### ***Climate Change Evidence***

The County’s CAP starts with an evidence-based statement: “scientific consensus holds that human activity is increasing atmospheric GHG concentrations...The overabundance of GHGs in the atmosphere has led to an unexpected warming of the earth and has already started impacting the earth’s climate system.” The CAP identifies the on-road transportation sector as the largest GHG source in the county’s unincorporated areas, contributing 47% of the county total (2015 estimates). (Because the County only has jurisdiction over its unincorporated areas, these GHG estimates do not include emissions from many of the largest GHG emitters in the county.)<sup>22</sup>

The County’s EV expansion goals and the EV4All project are direct results of the CAP’s evidence-based analysis. Importantly, the CAP drives multiple, mutually-supporting strategies to: 1) decrease energy use; 2) improve energy efficiency; 3) develop renewable energy; 4) reduce vehicle miles traveled; 5) increase multi-modal travel options; 6) expand green infrastructure; 7) reduce waste; and 8) improve the efficiency of government operations. This approach is a key ingredient of success for the EV4All Project because it drives all of these coordinated strategies, thereby increasing the County’s overall capacity to address its daunting climate challenges.

### ***Reducing Greenhouse Gas Emissions***

**The EV4All project will significantly reduce greenhouse gas emissions in the transportation sector.** To estimate the project’s impact on greenhouse gas (GHG) and criteria air pollutant emissions, the County utilized the AFLEET Charging and Fueling Infrastructure Emissions Tool from Argonne National Laboratory, which facilitates an estimate of the well-to-wheel emissions for implementation of EVSE and other zero-emission infrastructure<sup>23</sup>. This analysis appropriately accounts for the emissions to generate the underlying grid power; states such as California with cleaner grid power provide additional emission reduction benefits beyond tailpipe reductions.

Building on two decades of policies and programs that encourage energy efficiency, renewable energy and technology to lessen fossil fuel use, California’s Senate Bill 100 (SB100, 2018) set a 2045 goal of powering all retail electricity sold in the state, and state agency electricity needs, with renewable and zero-carbon resources. SB 100 also updated the State’s Renewables Portfolio Standard to meet two interim targets: 50% of the state’s electricity from renewables by 2026; and 60% by 2030.<sup>24</sup> Meeting the first interim goal would ensure that, by the time EV4All is implemented, emission reduction benefits will exceed those presented in this proposal. The GHG

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<sup>22</sup> <https://www.contracosta.ca.gov/DocumentCenter/View/2905/Municipal-Climate-Action-Plan-1208-Attachment-A?bidId=>

<sup>23</sup> <https://afleet.es.anl.gov/infrastructure-emissions/>

<sup>24</sup> <https://focus.senate.ca.gov/sb100/faqs>



estimates shown below are based on inputting California’s 2020 electric mix as a user-defined generation mix to AFLEET. This mix is 0.20% residual oil, 42.42% natural gas, 2.74% coal, 9.30% nuclear power, 2.45% biomass and 42.85% other (wind, solar, hydro, geothermal).<sup>25</sup>

The GHG reduction estimates are based on the mix of EVSE proposed at the 15 library sites identified for the EV4All Project: in total, 60 Level 2 chargers and 52 Direct Current fast chargers. To present a conservative estimate, the project team assigned initial station utilization in the AFLEET model as “low.” As the project’s outreach and education program begins having impact, the project partners fully expect to achieve “high” utilization, tripling the estimated benefits. The projected benefits presented in Table 12 will continue to grow as California’s statewide electric generation mix transitions fully to 100% clean energy sources and as the County and its project team work to increase site utilization.

**Table 12: GHG and Air Pollutant Emission Reductions for EV4All Project – Low Utilization Case Scenario**

AFV Fueling Infrastructure	GHGs (short tons)	CO (lb)	NOx (lb)	PM10 (lb)	PM2.5 (lb)	VOC (lb)	SOx (lb)	Fuel Dispensed (Unit)	Fuel
Level 2 EVSE	183.9	1,405.4	32.2	3.5	2.6	138.1	0.6	180,000	kWh
DCFC EVSE	690.6	5,278.2	120.8	13.2	9.7	518.7	2.3	676,000	kWh
<b>Fueling Infrastructure Total</b>	<b>874.5</b>	<b>6,683.6</b>	<b>152.9</b>	<b>16.7</b>	<b>12.3</b>	<b>656.9</b>	<b>2.9</b>	<b>856,000</b>	

***Climate Resilience, Public Health and Environmental Justice***

**The project addresses disproportionate negative impacts of climate change and pollution on disadvantaged communities as follows:**

The County’s Climate Action Plan uses evidence to focus on climate change impacts that are most relevant to Contra Costa County, particularly as they relate to public health. As discussed previously, the county’s economy and environment are greatly influenced by its many refineries, power plants and industrial uses. With four out of five oil refineries in the Bay Area, the county is the second-biggest oil refining center on the west coast and is home to some of California’s largest GHG emitters.<sup>26</sup>

As noted in the Bay Area 2010 Clean Air Plan, air quality and GHG emissions are closely related. Many of the activities that produce GHGs also produce criteria air pollutants (PM<sub>2.5</sub>). Ozone is an additional air quality challenge for the 9-county Bay Area region, which is designated as nonattainment area for both ozone and PM<sub>2.5</sub> (meaning the region does not meet state and federal standards). In addition, rising temperatures increase ground-level ozone and airborne health-damaging particles.<sup>27</sup>

<sup>25</sup> California Air Resources Board, “2022 Low Carbon Fuel Standard Annual Updates to Lookup Table Pathways”, Table 1-1.

<sup>26</sup> <https://www.contracosta.ca.gov/DocumentCenter/View/39791/Contra-Costa-County-Climate-Action-Plan?bidId=>

<sup>27</sup> <https://www.contracosta.ca.gov/DocumentCenter/View/39791/Contra-Costa-County-Climate-Action-Plan?bidId=>

While climate change impacts the health of all county residents, it impacts some groups more than others – such as low-income residents, the elderly, children and those already suffering from poor health. Due to longstanding inequities in health risks and resource distribution, these vulnerable groups also have the fewest resources to adapt to a changing climate.<sup>28</sup>

Consistent with these demographic patterns in health impacts, the county contains 32 census tracts that the State of California considers disadvantaged using its CalEnviroScreen criteria<sup>29</sup> (these census tracts are virtually identical to those identified as disadvantaged in the DOT’s Disadvantaged Census Tracts map). Many of these census tracts are clustered near the county’s largest oil refineries, power plants and related industrial uses along the county’s northern and western waterfronts. Because these communities bear the greatest burden of GHG emissions combined with climate change in the county, they are a chief focus of the county’s Climate Action Plan. The CAP includes indicators that examine the public health benefits of GHG mitigation strategies and spells out healthy community strategies to support climate resilience. As shown under Project Merit Criterion #3, issues of climate change, environmental harm, disadvantage and equity converge to make these areas the chief focus of environmental justice strategies in the county.

**The project incorporates evidence-based climate resilience measures or features into project design** in two ways. First, as discussed above, the County is focusing heavily on climate resilience by addressing the health impacts of climate change on communities most impacted by emissions. The EV4All project targets the proposed new EVSE, in part, to these communities, based on the project’s underlying equity analysis.

Second, consistent with the Federal Flood Risk Mitigation Standard as updated by E.O. 13690, the project team consulted FEMA flood plain mapping resources as part of due diligence in preparing this proposal. This analysis revealed potential flooding concerns at one of the identified sites (the Clayton Library). However, because the site was selected based on the County’s equity analysis, the project team will continue to work in further consultation with County engineers and three flood plain analyses that have been completed for the County to identify risk mitigation strategies, should they be required.

The project **avoids adverse environmental impacts to air or water quality, wetlands, and endangered species** due to the environmental review processes discussed in Section iv.

### **Criterion #3: Equity, Community Engagement, and Justice<sup>40</sup>**

#### ***Broad-based, Climate-focused Community Stakeholder Engagement***

**While grounded in evidence, the County’s climate-focused activities are also grounded in broad and sustained stakeholder engagement.** This intensive and sustained level of engagement reflects the centrality of climate action, energy transition and environmental justice issues in the county. Broad stakeholder engagement is essential in order to address these complicated and challenging issues in concert with the county residents who are most impacted by them.

For example, the County’s Climate Action Plan process got formally underway in 2011, building on prior engagement in climate resilience-focused efforts such as the Contra Costa County Climate Protection Report in 2005. The 2011-2015 process relied on a comprehensive public

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<sup>28</sup> <https://www.contracosta.ca.gov/DocumentCenter/View/39791/Contra-Costa-County-Climate-Action-Plan?bidId=>

<sup>29</sup> <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40>

participation strategy to engage residents, business owners and other stakeholders in identifying and refining goals, programs, activities, and projects to reduce emissions. The process included two rounds of County-sponsored community workshops in Rodeo, Oakley, Richmond and Concord – all of which are cities heavily-impacted by GHGs from large nearby emitters.<sup>30</sup> Following adoption of the CAP in 2015, the County established further engagement initiatives to carry out specific CAP strategies, including completing an EV Readiness Blueprint in 2019.

As summarized in Table 13, **Contra Costa County (CCC) is presently implementing, updating or developing seven inter-connected planning and engagement initiatives that will drive multiple investments in EV expansion, GHG reduction, energy transition, climate resilience and environmental justice.** As a result, the EV4All project is very well-positioned to achieve greater impact than it could achieve as a stand-alone project because all of these aligned efforts will expand project impact.

**Table 13: CCC Inclusive, Stakeholder-Based, Climate-Focused Planning & Engagement**

<p><b>EV Readiness Blueprint.</b> Developed in 2018, this plan led to \$3.4M from the CA Energy Commission for implementing community-based strategies focusing on community outreach, EVSE funding/incentives, workforce training, regional advocacy/engagement, County fleet electrification, and establishment of a Countywide Transportation Electrification (TE) Coordination Working Group. The TE group initially developed the EV4All Project.</p>
<p><b>Distributed Energy Resource (DER) Plan.</b> Developed in 2018, this plan seeks to optimize the County’s energy mix to achieve the cleanest and most demand-responsive mix possible. The California Energy Commission defines DER as grid-connected distributed renewable energy systems, energy efficiency, energy storage, electric vehicles and demand response. The County’s three primary DER categories are PV systems, energy efficiency and electric vehicle charging.</p>
<p><b>Climate Action Plan Update.</b> The 2015 CAP, currently being updated, developed GHG emissions estimates and reduction targets along with coordinated actions to reduce GHGs via strategies to: 1) decrease energy use; 2) improve energy efficiency; 3) develop renewable energy; 4) reduce vehicle miles traveled; 5) increase multi-modal travel options; 6) expand green infrastructure; 7) reduce waste; and 8) improve the efficiency of government operations.</p>
<p><b>County General Plan Update (Envision Contra Costa 2040).</b> Reflecting the centrality of climate action to the County’s overall strategic direction, the CAP and the County’s General Plan are currently being updated on parallel and connected tracks. The General Plan will provide the long-term resiliency framework, goals and policies; the CAP will provide strategic implementation programs to reduce emissions (in line w/ the State’s 2030 and 2050 targets).</p>
<p><b>Just Transition Economic and Workforce Development Plan.</b> This strategic planning process, getting underway in 2023 with financial support from the U.S. Department of Housing and Urban Development (HUD), will result in a roadmap for workforce training and land use changes to attract and accommodate businesses in the industry clusters identified in the Northern Waterfront Economic Development Initiative (NWEDI) and aligned efforts.</p>
<p><b>Northern Waterfront Economic Development Planning Initiative (NWEDI) – Strategic Action Plan.</b> Providing a foundation for the Just Transition plan, this place-based strategic plan</p>

<sup>30</sup> <https://www.contracosta.ca.gov/DocumentCenter/View/39791/Contra-Costa-County-Climate-Action-Plan?bidId=>

was completed in 2019 to establish strategies for the county’s 55- mile-long northern waterfront, including 7 communities with 8 of the 15 EV charging locations proposed in the EV4All Project: The strategies focus on economic transition from an economy based on heavy industry to one based on advanced manufacturing, innovation and new technologies.

**Northern Waterfront Economic Development Planning Initiative – Community and Human Capital Development Strategy.** Completed in 2018 and providing a foundation for the NWEDI Strategic Plan, this planning effort helped identify target growth industries for the northern waterfront (such as advanced transportation and clean technology), The plan focuses on three strategic areas: small business incubation and support; workforce training and education; and strategic regional partnerships addressing employment barrier removal.

The County’s stakeholder-based planning and engagement initiatives will continue being inclusive of low-income, racially diverse, disadvantaged and environmentally-impacted populations, as they have been to date. The EV4All Project’s outreach and education component will share this inclusive approach, with a strong emphasis on expanding EV adoption and building pipelines of trainees and workers into good-paying EV-related jobs and careers. This component of EV4All is discussed under Project Merit Criterion #4 because of its strategic emphasis on the workforce development and wealth-building benefits of EV expansion. The outreach program will engage trusted community-based organizations to ensure participation of low-income and disadvantaged community members – and it will build ties to the County’s Just Transition and northern waterfront planning and engagement efforts described above.

### *Equity Analysis*

**Contra Costa County conducted an equity analysis to ensure that the EV4All project creates proportional impacts and removes transportation-related disparities to all populations in the project area.** First, the County identified the locations of all existing EV chargers and their disproportionate geographic distribution in relation to data on race and income by community. The County subsequently performed additional analysis to inform the prioritization of library sites to include in this proposal. Appendix A provides the census tract-level data used for this analysis.

Like the Bay Area as a whole, the county’s population is racially and ethnically diverse. White residents comprise 57% of the population, but over 1/4 of white residents are also Hispanic, making non-Hispanic whites less than half of the population (41%), followed by Hispanic (26.8%), Asian-American (19.3%), African-American (9.5%) and 2+ races (5.8%).<sup>31</sup> The distribution of population by race and income varies widely across the county.

**Existing Inequities and Disparities in EV Charging Access.** Table 14 describes the existing distribution of EVSE in the county by comparing the number and types of chargers in the 32 counties designated Disadvantaged Communities (DACs) by the State of California’s CalEnviroScreen 4.0<sup>32</sup> to the number and types of chargers in non-disadvantaged communities (non-DACs). The rate of publicly-accessible chargers in non-DACs is 64% higher than in DACs:

<sup>31</sup> <https://www.census.gov/quickfacts/contracostacountycalifornia>

<sup>32</sup> these are virtually identical to the DACs identified in DOT’s Disadvantaged Communities Map).

0.64 chargers per 1,000 residents in non-DACs vs. .39 per 1,000 residents in DACs. The rate of DC fast chargers is extremely low in both DACs and non-DACs: 0.05 chargers per 1,000 residents.

**Table 14: Existing EVSE by Disadvantaged and non-Disadvantaged Census Tracts**

DAC Status	Existing Chargers (public = publicly-accessible)									
	Tracts in Category	DCFC	L2	DCFC*	L2*	Total	Total Public	Total Non-Public	Public Chargers per 1k population	Public DCFC Chargers per 1k population
DAC's	32	9	66	35	0	110	75	35	0.39	0.05
Non-DAC's	175	50	561	160	10	781	611	170	0.64	0.05
	207	59	627	195	10	891	686	205	0.60	0.05
*Tesla = non-public										

Table 15 shows that, among the county's 32 disadvantaged tracts (DACs), 22 (69%) have zero publicly-accessible EVSE charging locations and 30 (94%) have zero publicly-accessible DC fast chargers.

**Table 15: Disadvantaged Census Tracts by Presence of EVSE**

Category	DACs in Category	% of DACs in Category	with at least one public charger	with at least one public DCFC
With at least one publicly-accessible charging location	10	31%	65	19
With at least one publicly-accessible DCFC charging location	2	6%	19	19
With zero publicly-accessible charging locations	22	69%	0	0
With zero publicly-accessible DCFC charging locations	30	94%	46	0

Table 16 shows the racial and poverty composition of DACs vs. non-DACs. The DACs have a markedly higher percentage of people of color compared to non-DACs: 55% vs. 23% Hispanic and 15% vs. 7% African-American, while the white population rate in DACs is less than 1/3 that in non-DACs: 15% vs. 48%. The poverty rate is more than twice as high in DACs vs. non-DACs: 41% vs. 17%.

**Table 16: Disadvantaged and non-Disadvantaged Census Tracts by Race**

DAC Status	Poverty Rate (%)	Population by Race (%)						
		Hispanic	White	African-American	Native American	Asian American	Pacific Islander	Multiple Races
DAC	41%	55%	15%	15%	0.40%	10%	0%	4%
non-DAC	17%	23%	48%	7%	0.15%	17%	0%	5%

Table 17 summarizes the underlying disproportionalities between DAC and non-DAC tracts as well as the disproportionate distribution of EVSE among these communities. While DAC tracts contain 17% of the county’s total population, they contain 33% and 25%, respectively, of its poor and non-white populations. However, the percentage of all publicly-accessible chargers and DC fast chargers is below the DAC share of total population: 11% and 15%, respectively.

**Table 17: Disproportionalities of EVSE Access by Race and Income**

	% of Pop	% of Poor Pop	% of non-white pop	% of public chargers	% of DCFC chargers	% of L2 chargers
<b>DAC</b>	17%	33%	25%	11%	15%	11%
<b>non-DAC</b>	83%	67%	75%	89%	85%	89%
<b>Total</b>	100%	100%	100%	100%	100%	100%

Figure 4 illustrates the inequitable impact of the oil refineries, power plants and other large-scale GHG emitters in the county’s northern and western waterfront communities. The red and orange areas in the map on the right are census tracts that have a score of 91%-100% (red) and 81%-90% (orange) in the CalEnviroScreen overall score, indicating extremely high levels of combined socioeconomic, environmental and health distress. These red and orange areas have substantial overlap with the disadvantaged areas shown in purple in the map on the left (DOT’s Disadvantaged Communities Map).

**Figure 4: Disadvantaged Census Tracts and Locations of Proposed New EVSE**

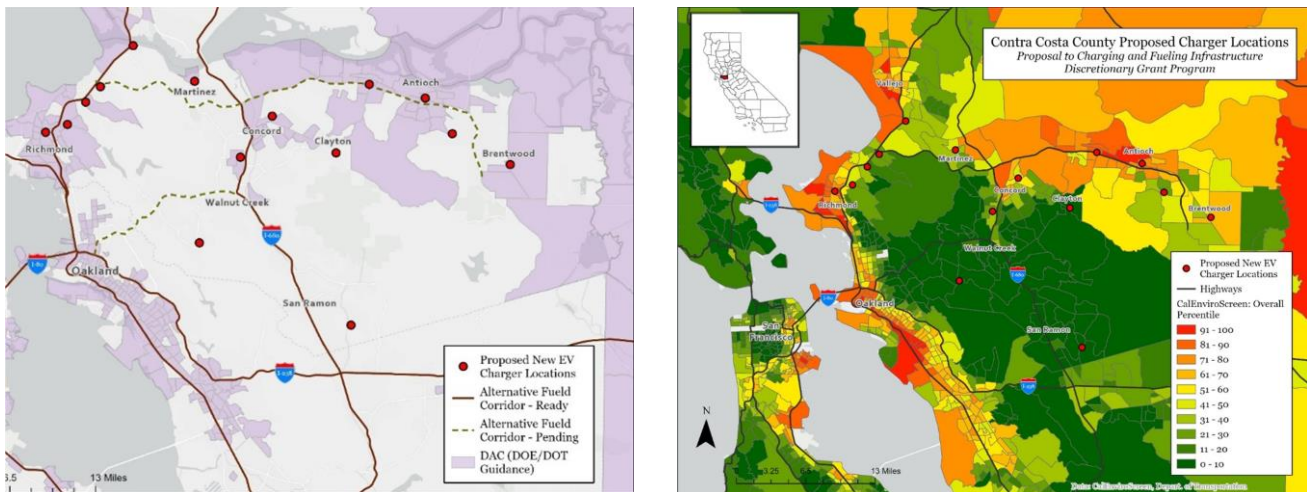


Figure 4 reinforces the equity-focused nature of the charger site selection process presented in this proposal, showing strong alignment between the proposed locations (red dots) and geographic patterns of disadvantage, climate change impacts, health impacts and environmental injustice.

The project will **increase affordable transportation options** in several ways discussed in Section i-II of this proposal. To summarize: increased EV charging access at well-known, safe, well-lit and accessible public library sites – in combination with several other factors – will increase EV adoption among low- and moderate-income (LMI) consumers. The other key factors – outreach

and education about EV benefits and EV incentives, a wider range of EV purchasing alternatives including used EVs, overall EV market growth, and supportive state policy – will have the combined effect of increasing access to EVs as an affordable transportation option for many LMI consumers. Further affordability will result from lower lifetime fuel and maintenance costs.

The project will **remove transportation-related disparities to all populations in the project area, increase equitable access to project benefits, and create proportional impacts to all populations in the project area** by targeting the proposed new EVSE in low-income and disadvantaged census tracts that currently have very few Level 2 chargers and zero or close-to-zero DC fast chargers. These disparities and disproportionalities are described above in detail.

As a direct result of the County’s equity analysis, the project will **address equity and environmental justice, particularly for communities that have experienced decades of underinvestment and are most impacted by climate change, pollution, and environmental hazards**. Over half (8 out of 15) EVSE locations prioritized for this proposal are located in northern waterfront communities most impacted by poor air quality and proximity to some of the county’s largest GHG emitters.

As shown in Table 2 in Section i-I – again, as a direct result of the County’s equity analysis – the EV4All project **targets at least 40 percent of benefits towards low-income communities, disadvantaged communities, communities underserved by affordable transportation, or overburdened communities**. Among the 15 census tracts targeted for new EVSE, 6 meet Justice40 guidelines (40%), seven are low-income (47%), 3 are disadvantaged (20%), and virtually all are EV charging deserts.

The project will **include meaningful public involvement and engagement, inclusive of disadvantaged populations, throughout the project life-cycle**, in a manner consistent with the County’s deep community engagement track record discussed above. The community outreach and education component of the project, including workforce development, is discussed under Project Merit Criterion #4.

The project **improves safety** in numerous ways as described in Section i-I and under Project Merit Criterion #1.

The project will help **connect Americans to good-paying jobs** in several ways. Convenient charger access near main corridors of travel to work will help people access job opportunities more efficiently and help incentivize them to purchase EVs – in turn allowing them to save on operation and maintenance costs, increase net earnings, increase wealth and obtain assets (including EVs). The activities discussed under Project Merit Criterion #4 will further impact the creation of good-paying jobs and community member access to EV industry-related workforce training.

The project  **fights climate change** in several ways discussed above. The County’s EV Readiness Blueprint and the EV4All Project are implementation actions stemming directly from the County’s Climate Action Plan. As shown in the calculations provided under Project Merit Criteria #2, the project is expected to reduce GHGs substantially based on a conservative, low-utilization estimate. Further, the County’s purposeful focus on energy transition is a climate change-fighting approach evidenced by the County’s permitting of two oil refineries to process biofuels, its declaration of a climate emergency and its launch of a Just Transition Economic Development Plan. By centering the climate crisis in Contra Costa County in all of these ways, and other ways outlined in this

proposal, the EV4All Project is directly in line with the declaration in Executive Order 14008, Tackling the Climate Crisis at Home and Abroad, that “we must listen to science and meet the moment” for action against the worldwide climate crisis.<sup>33</sup>

The project **improves access to resources and quality of life** by locating the proposed new EVSE at community-based libraries that are centrally-located in each of the targeted communities and proximate to numerous amenities, services and destinations; these amenities and destinations are documented in Table 4 in Section i-II and in Appendix B. These amenities allow users of the EVSE to more conveniently access these amenities while also conveniently charging their EV. Second, the EVSE allows for more convenient access to resources and quality of life because it will help encourage people to adopt EVs, thereby giving them access to EV benefits including lower operating and maintenance costs and more net income to support their quality of life.

The project **enables all people within the multimodal transportation networks to reach their desired destination safely, affordably, and with a comparable level of efficiency and ease** by increasing the accessibility of EVSE and thereby encouraging EVs as a transportation option of choice, particularly among low- and moderate-income people for whom the affordability of EV purchase (with incentives) will be extremely important in making transportation more affordable and increasing their wealth. These affordability benefits will help people otherwise excluded from EV adoption access a transportation option with a level of efficiency and ease comparable to that available to higher-income people.

The project **incorporates and supports integrated land use, economic development and transportation planning to improve the movement of people and goods and local fiscal health** as a result of the inter-connected planning and engagement efforts described above. In particular, the place-based planning efforts in the northern and western waterfront areas, and the County’s General Plan, directly address and facilitate the integration of land use, economic development and transportation planning. Regarding fiscal health, the County’s emphasis on energy transition planning in these areas will help it mitigate the erosion of employment and tax base that has befallen other parts of the nation undergoing energy transition (in Central Appalachia, with coal economy decline, for example).<sup>34</sup>

These place-based planning and engagement efforts will also help **facilitate greater public and private investments and strategies in land-use productivity**. Such investment will be required in order to effectively transition away from over-reliance on refineries and power plants. As EVs and EVSE expand in the county, these trends will further push the county’s transition to new land uses associated with this emerging sector of economic activity. In addition, because clarity attracts investment while uncertainty discourages it, bringing investment in greater land productivity to the scale required for transformative impact will only be possible with the kind of transparent, community-based and inclusive planning and development efforts which the County is leading.

The range of EVSE payment options offered by the Project’s EVSE subrecipient, EVCS, will help **ensure that low- and zero-emission transportation options are accessible to diverse**

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<sup>33</sup> <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>

<sup>34</sup> <https://www.theguardian.com/us-news/2020/may/29/coal-miners-coronavirus-job-losses;>  
<https://energynews.us/2020/08/11/reckoning-in-coal-country-how-lax-fiscal-policy-has-left-states-flat-footed-as-mining-declines/>



**populations, including the unbanked and underbanked.** Cost savings associated with paying less per kWh as kWh utilization goes up will be particularly beneficial to low-and-moderate income workers burdened by long commute times – and broadly among the 42% of workers in the county who commute to another county for work. EVCS does not require a credit score in setting up customer accounts, thereby avoiding the often-discriminatory effects of using credit scores to screen applicants who may be unbanked, underbanked and without a means to build credit. The many community-based organizations engaged in the project’s outreach and education program will help people in diverse population sub-groups access incentives for EV purchasing and thereby gain access to an affordable transportation option otherwise out of their reach.

The EV4All Project **addresses the unique challenges of the county’s more rural places** by installing chargers in places where customer density may not be sufficient to attract investment by private EVSE companies. The majority of cities and towns with proposed EVSE (9 of 14) qualify as rural under the CFI NOFO, with populations under 50,000. Due to lower customer density in such areas, typically leading to lower charger density, it is important for the chargers installed in such places to have multiple capabilities and potential uses. As discussed in Section i-IV, the EVSE to be installed under the EV4All Project addresses these multi-use needs.

The project does not directly impact any designated Tribal lands. However, Contra Costa County was originally home to native people who have descendants still living in the county and other counties. The County acknowledges the presence of Native Americans in the County as it acknowledges their current and former lands, regardless of which county now contains those lands. By collaborating with community-based organizations in community outreach as discussed under Project Merit Criterion #4, the County will ensure that organizations with strong ties to the county’s Native American communities are included in program outreach.

#### **Criterion #4: Workforce Development, Job Quality, and Wealth Creation**

The EV4All Project will have direct impacts on workforce development, job quality and wealth creation as well as leveraged collective impact with partners in these critical program impact areas.

#### ***EVSE Workforce Needs***

The ambitious California and Federal goals for EVSE will create new job opportunities for electricians, CAD designers, engineers, salespeople and other positions. California’s statewide light-duty EV goals and associated EVSE infrastructure are expected to generate demand for an estimated 38,200-62,400 job-years from 2021 to 2031 in California.<sup>35</sup>

Meeting state and national goals for EVSE installation will require rapidly training many more certified electricians who meet training requirements including the Electric Vehicle Infrastructure Training Program (EVITP) certification. The current total of more than 700,000 electricians in the U.S. is expected to grow about 7% over the next decade. The shift to renewable energy and the required electrical system upgrades will drive that growth. In addition, an aging workforce highlights the need for training simply to replace workers that are steadily leaving the workforce; an estimated 30% of union electricians are between 50 and 70 years old and close to retirement.<sup>36</sup>

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<sup>35</sup> <https://caletc.com/assets/files/Workforce-ProjectionstoSupportBatteryElectricVehicleChargingInfrastructureInstallation-Final202106082.pdf>

<sup>36</sup> <https://www.wsj.com/articles/america-is-trying-to-electrify-there-arent-enough-electricians-426d05b>

California is taking several actions to help increase the number of qualified electricians (there were 29,619 in CA as of January 2022, with only 2,300 EVITP-certified). EVITP training and testing are now available online and the State is contracting with California Community Colleges to increase access to testing. Recognizing the role apprenticeship plays in creating good-paying jobs, the state has an ambitious goal of 500,000 apprentices by 2029.

The high demand for appropriately-certified EVSE workers who are short in supply contributes to high wages and good-paying jobs in the EVSE industry. For illustration, prevailing wages for several different electrician occupations in Contra Costa County range from \$72 to \$101 per hour.<sup>37</sup> These jobs are typically unionized; non-union wages typically fall below these levels.

### ***Workforce Development Activities***

The project will **promote local inclusive economic development and entrepreneurship** in several ways intended to meet the strong and unmet demand for skilled and certified EVSE workers.

The County's EV partner and subrecipient for the EV4All project – Electric Vehicle Charging Solutions (EVCS) – follows EVITP requirements to ensure well-trained electricians are working on EVSE installations. EVITP certification meets the Federal requirement for a well-trained workforce. The EVITP Curriculum was developed (via collaboration among industry, education and training partners) in response to California Assembly Bill 841, which requires EVSE to be installed by a contractor with an appropriate license classification and that at least 25% of all electricians working on a crew must be EVITP-certified.<sup>38</sup> EVCS has a demonstrated track record of EVITP compliance and will meet all applicable requirements. In addition, EVCS' workforce development program seeks to recruit high school students into pre-apprenticeship programs that lead them toward EVITP certification. Finally, through its existing workforce development partnership with Green Paradigm Consulting, EVCS will also work with Contra Costa County **to use local material and labor sources from DBE, MBE and WBE firms** wherever feasible.

In addition, in order to help **build pathways from EV4All's targeted communities to good-paying jobs in EV and related industries**, the project's outreach and education component will include a robust workforce training component. Recognizing the critical role of inclusive and community-based approaches, this program will include direct and sustained engagement of community-based organizations that are trusted messengers and valued service-providers, particularly for low-income and disadvantaged community members.

**Progress in Low-income Community Outreach to Date.** The outreach and education portion of EV4All builds upon strong progress made to date by Contra Costa County specifically focusing on EV outreach in low-income communities. In February 2021, the California Energy Commission awarded the Contra Costa Transportation Authority (CCTA) \$3.46M to implement community-based strategies identified in the County's Electric Vehicle Readiness Blueprint (CCTA and partners provided \$842,684 in local match funding).

The funding supports **CCTA's Charge Up Contra Costa program to advance electric personal mobility and provide educational programs in low-income communities.** The

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<sup>37</sup> <https://www.dir.ca.gov/OPRL/2023-1/PWD/index.htm>

<sup>38</sup> [https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill\\_id=201920200AB841](https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201920200AB841)

program's strategies include: rebates for EVSE; electric vehicle carsharing; e-bike rebates; courses for electric vehicle maintenance and repair; installation and maintenance of EVSE; and workforce development. The program aims to reduce GHG's by over 54,000 tons and thereby reduce environmental health impacts on respiratory conditions (such as emphysema, asthma, COPD and bronchitis). The Charge Up Contra Costa program will run only through March 2024, at which time the County hopes EV4All's outreach and education program will be in place, made possible by the CFI Program funding requested in this proposal.

Building on the progress made by Charge Up Contra Costa, the first step in EV4All's outreach and education program will be to **identify trusted community-based organizations (CBOs) and create subcontracts for outreach support in multiple languages and locations** (anticipated: five outreach partners each supported with \$30,000 in project funds). With the County, these organizations will build consensus around the outreach, education and workforce development needs of the targeted communities. At least five outreach workers (one per CBO) will be trained to participate in community events to increase familiarity with EVs, EV charging and EV incentive programs. Access to EVs from local dealers will be arranged for selected events.

Building upon initial outreach, the project team will **work with five local public school districts and the community colleges within the county to utilize an existing curriculum (including introductory videos) on EV careers**. This project element will dovetail with work already underway by the County to directly spur EV workforce development training and worker pipelines within County government. The County is in close contact with the Contra Costa County Community College District Chancellor and key Directors and is **pursuing a partnership to build a workforce pipeline and curriculum-driven on-the-job training internship program within the County Public Works Department**. Public works is developing a strategic plan to become a central maintenance hub for publicly-owned EVs county-wide, which would provide a powerful hands-on training platform.

Additionally, **the team will collaborate with local entities such as Workforce Development Boards, unions and workforce-focused CBOs to develop a pre-apprentice program for potential electrical workers**. The program will target high school seniors and community college students, with a goal of training 20 prospective electrical workers per year (40 over the two-year EV4All project period; 100 total over 5 years). The program aims for at least 20% of trainees to enter electrician apprenticeship programs and thereby enter pathways into good-paying jobs in the EV industry. Finally, the project team will partner with a local community college to offer a 50-hour EV technician curriculum and utilize industry partnerships to place graduates of the program into non-electrician jobs as EV charging technicians or network troubleshooters.

Through all of these means, the project **will promote investments in high-quality workforce development programs with supportive services to help train, place, and retain people in good-paying jobs**.

### ***Building on Community-Library Relationships***

The outreach and education program will build upon one of EV4All's defining aspects: its focus on well-established and well-known public libraries with long-standing ties to a wide range of community-based partners. The County Library is deeply committed to advancing the region's equitable and just energy transition. Each branch has a designated Green Government Champion

responsible for identifying and advocating for sustainability investments at each library location. The Library Director is also committed to electrifying the fleet of medium-duty trucks used for book redistribution across the county; DC fast chargers are required for this to be feasible. The new DC fast chargers at library sites will therefore provide a necessary first step in facilitating electrification of the library’s fleet, in turn reducing emissions and realizing significant fuel costs savings for the libraries.

The County Library’s existing relationships with a wide range of CBOs focused on serving low-income and disadvantaged communities will provide a strong foundation for building and launching EV4All’s outreach and education program. As discussed above, the first step in the outreach process will be convening CBOs to further-define outreach needs and goals; and identifying CBOs to play contractual outreach roles under the project. Table 18 provides information about some (but not all) of the County Library’s CBO partners that will be engaged about the project; the five designated outreach CBOs (which could include groups not shown in Table 18) will be identified early in the process based on CBO interest and based on a goal of ensuring strong fits between each CBO and each geographic area that needs to be served.

**Table 18: Selected Community-Based Partners of Contra Costa Public Library**

<p><b>Bay Point All-N-One, Inc</b> is a non-profit that helps people who can’t meet their most basic needs when they need help the most, providing food, clothing and low or no-cost services such as financial education, religious, medical, mental health, and youth counseling.</p>
<p><b>The Contra Costa Family Justice Center</b> is a one-stop center for victims of domestic violence, sexual assault, child abuse, elder abuse and human trafficking, meeting the needs of children, youth and families impacted by interpersonal violence.</p>
<p><b>First 5 Contra Costa</b> helps young children start school healthy and ready to learn – providing programs and advocacy focused on children during their first five years to ensure that children grow up healthy, ready for school, and supported in safe, nurturing families and communities.</p>
<p><b>The Food Bank of Contra Costa and Solano</b> provides emergency and supplemental food for community members who are unable to make ends meet, serving 1 in 5 residents in Contra Costa and Solano Counties each month.</p>
<p><b>The Housing Authority of Contra Costa County</b> provides rental subsidies and manages and develops affordable housing for low-income families, seniors, and persons with disabilities in Contra Costa County. The Housing Authority provides high-quality affordable housing solutions and promotes self-sufficiency for low-income people of Contra Costa County.</p>
<p><b>La Clinica Centers</b> have been providing health care services to the communities of the East Bay since 1971, driven by a conviction that every person deserves access to high-quality, culturally appropriate health care, regardless of their ability to pay.</p>
<p><b>Monument Crisis Center</b> is a community-based non-profit family resource center for Central and East Contra Costa County, offering nutritious food, quality resources and referrals to low-income individuals and families in order to help them become stable and secure.</p>
<p><b>Monument Impact</b> is a community-based nonprofit dedicated to building workforce skills, resources and power within immigrant, refugee and low-income communities, focusing on the Monument Corridor, one of the most densely populated communities in the Bay Area.</p>

**Reentry Success Center** provides free, connected and effective services to justice-impacted men, women and their families, helping them plan critical next steps after contact with police and the courts.

**Rubicon Programs** seeks to transform East Bay communities by equipping low-income people to break the cycle of poverty through programs including training and career services to help low-people build income and financial services to help people build financial assets.

**Village Community Resource Center** improves quality of life for children and families in East Contra Costa County; it promotes equity through education, wellness, leadership and organizing; and provides an after-school academy, health services and training.

**The roles of library staff and volunteers** will include but not be limited to coordinating library events, disseminating online information and conducting outreach about EV benefits and EV purchasing incentives for low- and moderate-income individuals and households.

**EV Bookmobile for Outreach.** The Library’s Early Literacy Outreach Coordinator serves low-income, disadvantaged and underserved communities. These services are now delivered in a recently-acquired EV bookmobile, which will provide EV4All with a very compelling EV outreach platform. The new EVSE at the libraries will provide the charging capacity required for the bookmobile to increase its hours of operation and thereby conduct more outreach. The Library’s adult literacy program will also provide a platform for disseminating EV information.

**Example Sustainability-Focused Library Events and Activities.** The County Library and each of its branches will continue delivering outreach and education programming similar to its recent and planned events of this type. For example, the County Library held an EV 101 workshop with over 200 attendees in 2022, as well as a “Ride and Drive Clean” campaign. Library events during Sustainability Week in October 2022 included: It’s Never Too Late to Become a Climate Activist; Delicious Healthy Foods that Save Our Planet; Environmental Restoration in the Walnut Creek Watershed; Plastics, Recycling and You; Virtual Green Home Tour; How to Electrify Your Home; and Climate Change-makers: Youth Activists Working for a Better World.

Upcoming library events include Home Upgrade Workshops (in English and Spanish) provided by the Bay Area Regional Energy Network (BayREN). Climate Career Chats are held quarterly; the next one (June 2023) will feature two panelists from the renewable energy sector (StopWaste and MCE Clean Energy). The upcoming event, “How to Finance Your Clean Energy Upgrade,” will feature County staff to explain the County’s new Sustainability Resources webpage and go into depth about incentive programs for county residents and businesses related to zero-emission transportation, energy efficiency, all-electric buildings, solar panels, battery storage and water efficiency. Within its “Library of Things,” the County Library also offers energy efficiency toolkits that patrons can check out, including electrical use meters and thermometers to assess home energy efficiency (as of 6/6/2023, 11 of 31 kits were checked out).

**Number and Types of Outreach and Education Events.** EV4All will develop, deliver and/or support outreach and education events in three broad categories.

First, the County Library and its branches will continue offering the types of events described above, with many partners. These will not necessarily be sponsored by, or directly associated with, EV4All; nonetheless, they will complement and support shared sustainability values and goals.

Second, building on this foundation, EV4All will hold at least two events at each of the 15 library locations – for a total of at least 30 events. One event will be held at each branch to serve as a project kick-off – informing each local community about the EVSE to be installed, explaining the project schedule, providing information about EV benefits and incentives, highlighting the project’s workforce development resources, answering questions, and soliciting input about specific education and training desired by community members. A second convening will be held at each branch, after the EVSE is installed, to serve as a grand opening – explaining the EVSE, demonstrating its use, and again providing EV benefit, incentive and workforce training information to attendees. The project team expects to have local car dealerships featuring EV vehicles at these grand opening events; and will invite multiple local media outlets.

Third, the five organizations engaged in contractual outreach roles, each of which will have at least one worker trained for EV outreach by the project team, will develop their own outreach plans including community-based meetings that will be attended in order to provide EV benefits, incentives and workforce development information. At a bare minimum of two events per outreach organization per month (10 total per month), the project team projects at least 240 outreach and education events over the 24-month project period.

### ***Building on Place-Based Economic and Workforce Development Strategies***

As emphasized throughout this proposal, EV expansion is not a stand-alone goal in Contra Costa County; it is one of several strategically critical paths the County must follow to achieve County-adopted goals for GHG reduction and energy management. As a result, EV4All’s outreach, education and workforce program will not be a stand-alone program. It will build upon years of deep and broad stakeholder engagement focusing on the county’s energy transition, with a focus on **EV and EVSE as promising sectors in which to create new good-paying jobs to replace the good-paying jobs being lost in the county’s fossil fuel-based businesses.**

**While the decline of fossil fuels is good for the environment, it is not necessarily good for all workers, especially those dislocated from companies adjusting to the energy transition.** The industrial areas along the northern and western waterfronts are the primary focus of the County’s place-based planning to facilitate the energy transition away from over-reliance on fossil fuels. A 2018 plan for the northern waterfront provides three compelling data points about the oil refining sector that illustrate the daunting nature of this energy transition. First, it was the largest manufacturing sector, by far, in the northern waterfront area, accounting for about 3 of every 10 jobs (29%; 1,880 out of 6,437 jobs). Second, it had an astonishingly-high location quotient (23.53), meaning the industry is over 23 times more prominent in the county than in the nation as a whole. Third, it was projected to lose over one third of its workforce between 2018 and 2028.

**The economic transition to good-paying jobs in a clean energy economy is already underway in Contra Costa, even within the oil refining industry itself.** In 2020, two refineries—the Phillips 66 refinery in Rodeo and the Marathon refinery in Martinez—announced that they were ceasing crude oil production and switching over to making biofuels. Sixty organizations objected to the County’s permitting of these plans, in part, due to the smaller workforce required for biofuels and the need to support and re-train the dislocated workers. At the same time, the letter from these organizations recognized that the County is on the right track, having enacted (in September 2020) a resolution declaring a climate emergency in the County and identifying, among other things, the need for the County to “anticipate and plan for an economy that is less

dependent on fossil fuels,” and “plan for a ‘Just Transition’ away from a fossil-fuel dependent economy.”<sup>39</sup>

The County’s supervisors also joined scores of local officials statewide to sign the “Diesel Free by ‘33” pledge, which commits to a goal of reducing diesel emissions to zero by 2033.<sup>40</sup> Due to this and other policy actions, **California is at the very beginning of a likely wave of crude refinery decommissioning. Contra Costa County, where that wave is beginning, is ideally positioned to develop a blueprint for responsible transition from which other communities can benefit and learn.** Fortunately, county stakeholders have pertinent prior experience in developing plans and agreements to ensure that both environmental and labor concerns are addressed as the County’s energy mix changes. In 2016, environmental and labor groups reached a comprehensive agreement, approved by the state legislature, for a just transition for workers and the community affected by the closure of the Diablo Canyon Nuclear Plant, located in the southern portion of the county.<sup>41</sup>

The project **achieves wealth creation, consistent with the Department of Transportation’s Equity Action Plan**, through several means. The project **achieves wealth creation in an inclusive manner** through its connections to the many community-based economic development efforts described in this proposal. Key challenges identified in the DOT Equity Action Plan – such as uneven resource distribution and limited networks among minority-led and disadvantaged businesses – are addressed by the purposefully inclusive nature of these efforts. Because impacted communities where place-based planning is mostly focused have a higher rate of non-white people, these efforts also maximize the inclusion of people of color in the process. Future planning and engagement efforts will engage, as they have to date, agencies with a heavy focus on assisting minority-led, women-led and disadvantaged small businesses and entrepreneurs access local, state and Federal contracting opportunities, such as the Contractors Resource Center, the Renaissance Entrepreneurship Center, and the Contra Costa Small Business Development Center (which includes a Federal Procurement Technical Assistance Center).

**The income and wealth impacts of EVs themselves deserve attention in any robust EV-related strategy for economic and workforce development.** Fuel and maintenance cost savings compound the positive financial impact of bundled EV purchasing incentives for low- and moderate-income (LMI) individuals and households. In turn, operating and maintenance cost savings help LMI EV owners keep more of what they earn (increasing net income), thereby increasing their ability to meet basic needs, spend money to improve their quality of life, invest in education and training, or save (increasing assets). Were EV adoption to become more widespread in LMI communities, the multiplied spending and/or saving impacts in such communities would be magnified considerably. In addition, increased affordability of travel puts a wider array of job opportunities in play for LMI workers. Finally, EVs are assets, and EV purchasing incentives will bring asset ownership within reach for many LMI individuals. LMI people who need a vehicle to

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<sup>39</sup> <https://www.contracosta.ca.gov/DocumentCenter/View/68157/Declaration-of-Climate-Emergency>

<sup>40</sup> <https://dieselfree33.baaqmd.gov/signatories>

<sup>41</sup> <https://www.pge.com/includes/docs/pdfs/safety/dcpp/JointProposal.pdf>; <https://www.nrdc.org/bio/peter-miller/diablo-canyon-accord-approved-california-legislature>

get to a job will also have ways to buy an EV with incentives rather than getting trapped by payday or title loans, which are often the only options in unbanked or underbanked communities.

## **Criterion #5: CFI Program Vision**

The data and analysis provided in Sections i-I, i-II and iii of this proposal clearly demonstrate that the EV4All Project equitably expands the deployment of public EV charging infrastructure in publicly accessible locations for use by the community. The introduction to Section i-II spells out a detailed, multi-prong strategy for achieving the CFI Program Vision. The remainder of the proposal explains in detail how that strategy will be carried out in strong alignment with all five Project Merit Criteria.

Letters of support for the EV4All Project are provided in Appendix E. The letters of support represent a strong mix of community-based entities including local municipalities along with transportation agencies at the county, regional and state levels. The local entities are 511 Contra Costa, the City of Hercules, the City of Pinole, the City of Pittsburg, the City of San Pablo and the Town of Danville. The transportation agencies – all of which have been involved in Contra Costa County’s EV-focused planning and engagement activities to date – are the Contra Costa Transportation Authority, the East Bay Clean Cities Coalition, the San Francisco Bay Area Rapid Transit District (BART) and the California Department of Transportation (Caltrans).

## **Alignment with U.S. DOT Statutory Priorities**

The EV4All Project is aligned with U.S. DOT statutory priorities as follows:

**Expanding EV charging infrastructure in rural areas.** As discussed in Sections i-I and i-II, the majority of communities (9 out of 15) in which new EVSE is proposed qualify as rural under the CFI Program, with city or town populations under 50,000. Further, the proposed EVSE itself has attributes that address common needs in areas with lower population densities (and typically lower charger density). The proposed chargers can serve multiple vehicle types, a common need in rural areas where single facilities need to serve multiple purposes, as discussed in section i-IV.

**Expanding access to EV charging infrastructure within low- and moderate-income neighborhoods.** As discussed in Sections i-I and i-II, seven out of the 15 census tracts in which new EVSE is proposed are classified as low-income by the State of California, and three are classified as disadvantaged. Moreover, as detailed under Project Merit Criterion #3, the County’s equity analysis of the distribution of EVSE in the county clearly demonstrates inequitable EVSE distribution. To address this disproportionate pattern, the County prioritized the low-income and disadvantaged census tracts with County Library branches for inclusion in the set of 15 library locations included in the EV4All Project.

**Expanding EV charging infrastructure within communities with a low ratio of private parking spaces to households or a high ratio of multiunit dwellings to single family homes.** Serving people and families in multi-family dwellings is among the core purposes of the EV4All Project because such individuals typically face the greatest barriers to charging at home. Moreover, because inability to charge at home with long dwell-times places a premium on the ability to access fast charging away from home, it is critical to provide DC Fast Charging in communities with people living in multi-family units. Single-family dwelling units predominate in virtually all of



Contra Costa County; accordingly, very few census tracts have over 50% multi-family units (Table 19). Among the tracts with proposed new EVSE, two have multi-unit housing rates over 50%.

**Table 19: Multi-Family Housing Units and Existing EVSE Gaps**

Library Branch	DCFast Count	Lv2 Count	Population	low income	dis-advan-taged	Total Housing Units	# in 1-unit structures	# in multi-unit structures	1 unit %	multi-unit %
Antioch	1	3	7,408	Y	Y	2,480	1,451	1,029	59%	41%
Brentwood			7,248	Y	Y	1,533	1,253	273	82%	18%
Clayton			1,055		Y	2,492	710	1,562	28%	63%
Concord		2	5,330	Y		2,964	2,823	141	95%	5%
Crockett			3,803			3,275	3,048	227	93%	7%
El Sobrante			4,299			1,985	1,985	-	100%	0%
Hercules			4,386			1,594	1,142	452	72%	28%
Martinez		5	7,557	Y		2,897	2,186	711	75%	25%
Moraga			7,653			2,339	2,128	196	91%	8%
Pinole			4,472			486	134	352	28%	72%
Pittsburg		4	3,546	Y		1,915	1,846	69	96%	4%
Pleasant Hill	3	6	6,257			2,280	2,019	248	89%	11%
Prewett			2,243	Y		2,264	1,689	575	75%	25%
San Pablo		21	7,178	Y		1,258	1,258	-	100%	0%
San Ramon		18	4,595			2,701	1,441	1,260	53%	47%

Despite the ratios at the census tract level, the project provides much-needed EV charging infrastructure, particularly DC fast chargers, to areas with a large number of multi-family units and virtually no existing DC fast chargers. As Table 19 shows, the 15 tracts in which new EVSE is proposed have a total of only four DC fast chargers, while 13 of 15 tracts have zero DC fast chargers. With over 7,000 multi-family units in these tracts, this equates to a huge shortfall of convenient fast chargers for residents of multi-family units in these communities. The proposed EVSE is intended to help fill this gap; the 52 proposed new fast chargers would increase the number of existing fast chargers in these communities by over 12-fold.

### **Additional Community Program Considerations**

The project **may contribute to geographic diversity among eligible entities**, depending on the range of applications submitted. The project itself contains a variety of attributes including urban and rural communities, while **Contra Costa County represents a somewhat unique case of concerted EV expansion strategies combined with other energy transition strategies in a county where fossil-fuel-based industry has an extremely prominent role**. For this reason, the EV4All project has a compelling proposition for Federal investment.

As detailed extensively in this proposal, **the project meets current or anticipated market demands for charging or fueling infrastructure, including faster charging speeds with high-powered capabilities necessary to minimize the time to charge or refuel current and anticipated vehicles**. The proposed 52 new DC fast chargers are intended specifically to meet the currently unmet market demand for convenient fast charging in convenient locations – in communities that have close-to-zero such infrastructure presently.

## Section iv: Project Readiness and Environmental Risk

### Scope of Work / Statement of Work / Work Plan

The proposed Work Plan is based on the project team's extensive experience designing and installing EVSE across the western U.S. The Work Plan is designed to ensure timely completion of all required project elements, including comprehensive data collection and project reporting.

**The work plan will be executed under five major task areas**, each with specific sub-tasks, as summarized below. A project schedule is also provided below, following the task descriptions, showing the timing of tasks leading to on-time project completion.

**Task 1. Administration and Project Management.** As grantee, Contra Costa County will serve as the EV4All Project Manager and will be responsible for all grantee administration duties. A Kick-off meeting will be held as soon as possible to discuss the work plan, task performance details, schedule, and the approach for issue/problem resolution.

<p><b>Task 1.1 Kick-off Meeting.</b> The project team will meet with FHWA and CalTrans to discuss the work plan, task performance details, schedule, and approach to issue/problem resolution.</p>
<p><b>Task 1.2 Monthly Project Update Meetings.</b> Monthly team meetings will be held via teleconference to discuss progress. The meetings will follow a defined agenda that will cover project status update, difficulties encountered, upcoming deliverables, pending disbursement requests, and expected progress during the next month.</p>
<p><b>Task 1.3 Quarterly Progress Reporting.</b> Quarterly Progress Reports will be submitted that include data collection conducted under Task 5 (as delineated by 23 CFR 680.112).</p>
<p><b>Task 1.4 Annual Reporting.</b> Annual Reports will be submitted that include the following information (as delineated by 23 CFR 680.112): Maintenance and repair cost per charging station for the previous year; charger utilization; outreach, education, and workforce development.</p>
<p><b>Task 1.5 Final Report.</b> At the completion of the project, the County will submit a final report to FHWA that documents key project outcomes and an overview of the data collection effort.</p>
<p><b>Task 1.6 Project Closeout.</b> Final invoicing, reporting and other closeout activities will be conducted under Task 1.6.</p>

**Task 2: Outreach, Education and Workforce Development.** Under Task 2, the County will work with EVCS and its subcontractor Green Paradigm Consulting to develop and implement a number of different programs. Key objectives of the OEW effort include: Build awareness of the specific EVSE stations; Build awareness of EV benefits to the local community; Share incentive information to increase access to EVs in low-income and disadvantaged communities; Incorporate EV curriculum in local schools and create a pre-apprenticeship training program to interest young people and non-certified electrical workers in becoming state certified electricians.

<p><b>Task 2.1: Identify Outreach Support.</b> Identify trusted community organizations and create subcontracts for outreach support in multiple languages and locations. (anticipated: 5 outreach partnerships at \$30,000 each).</p>
<p><b>Task 2.2: Needs Assessment.</b> Build local consensus around the outreach and workforce development needs of the communities, creating one or more multi-organization networks in the county area to implement proposed programs.</p>

<p><b>Task 2.3: Training.</b> Train at least 5 outreach workers (one per community partner) to participate in community events to increase familiarity with EVs, EV charging and incentive programs. Arrange access to EVs for these events through dealerships or volunteer EV drivers.</p>
<p><b>Task 2.4: EV Blueprint Engagement.</b> Support and enhance community engagement already underway in support of implementing the County’s EV Readiness Blueprint. Obtain input on desirable future charging locations using a mapping or design charette process.</p>
<p><b>Task 2.5: Curriculum Development.</b> Work with at least 5 local public school districts and community colleges within the County to utilize the existing curriculum (including introductory videos) on EV careers.</p>
<p><b>Task 2.6: Implement pre-apprenticeship program.</b> Collaborate with local public and private workforce development groups such as Workforce Development Boards, unions and organizations develop a pre-apprenticeship program for potential electrical workers. The program will target high school seniors and community college students with the goal of training 100 potential electrical workers over the five-year period and achieving enrollment of at least 20% of those entering electrician apprenticeship programs.</p>
<p><b>Task 2.7: Implement Technician Training Curriculum.</b> Partner with a local community college to offer the 50-hour EV technician curriculum developed under a previous grant. Utilize industry partnerships to place graduates of the program into non-electrician jobs as EV charging technicians or network troubleshooters.</p>

**Task 3: Transportation Planning and National Environmental Policy Act (NEPA) Determinations.** Task 3 will ensure the project is the statewide transportation improvement program (STIP), and since the County is within an air quality non-attainment area, it will also be included in the conforming metropolitan transportation plan.

<p><b>Task 3.1: Finalize Individual Site Host Agreements.</b> The fully executed site host agreement between Contra Costa County and EVCS is provided in Appendix H. Under this task, individual site host agreements with each city that owns a participating library property will be negotiated upon notice of award.</p>
<p><b>Task 3.2: Transportation Planning.</b> Upon Notice of Award, the County will notify CalTrans and the Contra Costa Transportation Authority (CCTA) to ensure the project is included in the State Transportation Improvement Plan (STIP) and the Countywide Transportation Plan (CTP), respectively, to ensure consistency with all applicable transportation planning documents.</p>
<p><b>Task 3.3: NEPA Review and Final Determination.</b> Upon Notice of Award, the County will initiate the process for meeting all CEQA and NEPA requirements for the 15 sites.</p>

**Task 4 Design, Construct and Commission 15 Charging Stations.** Fifteen new DCFC sites will be designed, constructed, and commissioned to support the local community via the Library Network. Each site will undergo the same set of subtasks. Each site will also be equipped with Level 2 EVSE and a 110V plug for electric bicycles and scooters.

<p><b>Task 4.1: Engineering Design, Utilities Design, and AHJ Permitting.</b> Under Task 4.1, The EVCS engineering contractor will conduct a site walk and develop an engineering design for each site. The engineering team will coordinate with the local utility and request they develop an interconnection design. EVCS will submit the site design to Authorities Having Jurisdiction (AHJ) to obtain a permit to construct. The project team will work with the AHJ to finalize</p>
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permit approvals. Note: If the utility determines that the site needs additional electrical capacity, EVCS will submit a Rule 29 application for an upgrade. This process includes additional steps for utility design, inspections and interconnections.

**Task 4.2: Equipment Procurement.** Charger, switchgear, panels and other equipment will be managed under Task 4.3; some components, e.g. switchgear and panels, have long lead times.

**Task 4.3: Site Construction.** Upon approval of all permitting and final CEQA/NEPA determinations, the sites will be constructed in a phased approach. EVCS will work with the local electric utility to coordinate grid interconnection and implement the electric utility work plan. EVCS electrical contractors will coordinate with the AHJ to conduct civil work construction and the utility to conduct trenching and other construction for grid interconnection.

**Task 4.4: Charging Site Commissioning.** Final commissioning for each of the 15 sites will be managed under Task 4.4 and documented in the final report. Commissioning includes connecting the charging site to the EVCS network, documenting all equipment with serial numbers and photographs and training site hosts on operation.

**Task 5. Operations & Maintenance, Marketing and Data Collection.** Data collection will be conducted in accordance with the requirements of CFR 680.112. This will entail collection of the following data.

**Task 5.1: Operations and Maintenance.** EVCS is responsible for the safe operation and maintenance of all charging sites, as well as customer accounts with all electric utilities that provide power to its stations. EVCS is also responsible for ensuring the maintenance of all ancillary equipment such as charger pedestals, information display kiosks or signage associated with the charging station.

**Task 5.2: Data collection and reporting.** EVCS' portal will provide all the data points required by the NOFO including: Charging station identifier that associates with collected data any third-party data sharing; Charging port identifier; Charging session start time, end time, and any error codes associated with an unsuccessful charging session by port; Energy (kWh) dispensed to EVs per charging session by port; Peak session power (kW) by port; Payment method associated with each charging session; Charging station port uptime, as calculated per FHWA guidance for each of the previous 3 months Duration (minutes) of each outage; Annual Reports shall also include: Maintenance and repair cost per charging station for the previous year; outreach and education. See screen shots below of sample data generated by the EVCS portal.

**In addition, as the CFI program requires, the County shall ensure that the following data fields are made available, free of charge, to third-party software developers:** Unique charging station name or identifier; Address (street address, city, State, and zip code) of each charging station; Geographic coordinates in decimal degrees of exact charging station location; Charging station operator name; Charging network provider name; Charging station status (operational, under construction, planned, or decommissioned); Charging station access information (charging station access type (public or limited to commercial vehicles; Charging station access days/times (hours of operation for the charging station)); Charging port information (Number of charging ports; Unique port identifier; Connector types available by port; Charging level by port (DCFC, AC Level 2, etc.); Power delivery rating in kilowatts by port; Accessibility by vehicle with trailer (pull-through stall) by port (yes/no); Real-time status

by port in terms defined by Open Charge Point Interface 2.2.1; Pricing and payment information (Pricing structure; Real-time price to charge at each charging port, in terms defined by Open Charge Point Interface 2.2.1; Payment methods accepted at charging station).

Figure 5 provides the overall construction schedule for the commissioning of the 15 proposed sites. Figure 6 breaks down the construction schedule to the site level. Note that the term of the federal grant agreement will extend 5 years beyond this timeline in order to implement the operational commitment.

**Figure 5: Overall Project Schedule for the EV4All Project**

Project Title:	Contra Costa County EV4All (15 sites)																								
Months from NTP:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
<b>Task Description</b>																									
1.0 Administration & Project Management	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
2.0 Outreach, Education & Workforce Development	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
3.1 Finalize individual site host agreements (each library)	█	█																							
3.2 Project Listing within State and Regional Plans	█	█																							
3.3 NEPA Review -- Program and Site	█	█	█	█																					
4.1 Engineering Design, Utilities Design, and AHJ Permitting	█	█	█	█	█	█	█	█																	
4.2 Equipment Procurement	█	█	█	█	█	█	█	█	█																
4.3 & 4.4 Site #1									█	█															
4.3 & 4.4 Site #2										█	█														
4.3 & 4.4 Site #3											█	█													
4.3 & 4.4 Site #4												█	█												
4.3 & 4.4 Site #5													█	█											
4.3 & 4.4 Site #6														█	█										
4.3 & 4.4 Site #7															█	█									
4.3 & 4.4 Site #8																█	█								
4.3 & 4.4 Site #9																	█	█							
4.3 & 4.4 Site #10																		█	█						
4.3 & 4.4 Site #11																			█	█					
4.3 & 4.4 Site #12																				█	█				
4.3 & 4.4 Site #13																					█	█			
4.3 & 4.4 Site #14																						█	█		
4.3 & 4.4 Site #15																							█	█	
5. Operations & Maintenance, Marketing and Data Collection (continues through end of project term (2026)																									
1.6 Project Closeout (reporting, final invoicing, etc.)																									

**Figure 6: Individual Site Project Schedule**

Project Title:	Contra Costa County EV4All (Site Construction Schedule for each of 15 sites)							
Weeks from NTP:	1	2	3	4	5	6	7	8
<b>Task Description</b>								
Site-Level Project Management	█	█	█	█	█	█	█	█
Dig Alert	█	█						
Install Conduit, Trenching and Backfill		█	█	█				
Set Switchgear		█	█	█				
Install New Chargers			█	█	█			
Install Posts and Signage					█	█		
Restore Property					█	█		
Remove all Equipment & Materials						█	█	
Final Inspection							█	█
Commission Site								█

## **Project Team Experience and Qualifications**

### **The Contra Costa County Team**

Brendan Havenar-Daughton, Energy Manager in the County's Department of Public Works, will lead the project as a core implementation activity under the County's Distributed Energy Resource Plan and Climate Action Plan, which both emphasize investments in EVSE, County fleet electrification and expanding EV adoption in the county in order to reduce emissions of greenhouse gases and harmful airborne particulates while also achieving strategic energy management program goals.

Brendan is an energy management professional with over a decade of experience designing, implementing and managing Distributed Energy Resource projects and programs. His work experience ranges from the small consulting firm to the large Investor-Owned Utility, and from the complex public school district to the bureaucratic local government. Brendan is especially skilled at effectively navigating through the public sector to produce tangible results. With a diplomatic and focused approach to problem-solving, Brendan has built foundational structures that support high quality work products and innovation, and is proud knowing that the work he has championed at one organization will continue once he moves on to the next challenge. Brendan finds that his best work is teamwork and believes that excellent planning and communication lead to high performance outcomes.

Brendan will be supported by Brian Balbas, Public Works Director, who will provide guidance and high-level oversight of the project design and implementation; and Joe Yee, Public Works Deputy Director of Transportation, who will serve as the project executive sponsor, providing detailed oversight and review of all design plans and direct consulting services as needed.

Alison McKee, County Librarian (Director of Library Administration), will serve as the project's key County stakeholder, ensuring that the project design and implementation aligns with Library Services' programming and operations. Alison will support critical communication with key City stakeholders when needed.

As County Librarian since 2020, Alison is responsible for the operation of the Contra Costa County Library, including 26 branches and online/virtual services, serving a population of more than 1 million people with a \$40 million budget. Previously, as Deputy County Librarian from 2015 to 2020, Alison oversaw the functions of 12 of 26 libraries, including in depth participation in planning new and expanded facilities as needed, providing leadership in the assessment of library and community needs and interests, and building and maintaining relationships with cities, schools and community-based organizations to effectively plan resources.

### **The Subrecipient Team: Electric Vehicle Charging Solutions (EVCS)**

The County partnered with Electric Vehicle Charging Solutions (EVCS) to develop this proposal; and EVCS will install the proposed chargers if a grant is awarded.

EVCS is a privately held, rapidly growing business that focuses on offering Level 2 and DC fast charging to its government, fleet and business customers. EVCS provides a complete turn-key solution for installing, operating and maintaining over 700 Level 2 and DC fast chargers throughout California, Oregon and Washington. EVCS is part of a vertically integrated group of

companies under common ownership: Sister company Green Commuter operates one of the first all-electric vehicle vanpool and car sharing programs in the U.S. and subsidiary Clean Fuel Connection, Inc. is a licensed electrical contractor (C-10 license 770564) that has been installing charging stations for the past 24 years.

One of the most innovative aspects of EVCS' business model is the purchase of carbon credits to offset the use of grid electricity for installed chargers so that all electricity is from zero-emission sources and all charging is carbon neutral. Within the next year, EVCS expects its partnerships with anaerobic digester developers at dairy farms in California to enable EVCS to provide electricity from renewable sources, making their EV chargers not only carbon-neutral but carbon-negative.

**Gustavo Occhiuzzo, Chief Executive Officer.** Mr. Occhiuzzo developed his extensive management skills and strategic planning knowledge primarily in the service industry. As an entrepreneur with 29 years of experience as the head of multiple companies, he is the Founder and CEO of EVCS and Green Commuter, the latter being the first fully all-electric, zero-emission commuter service in the U.S. As CEO, Gustavo created the vision for the vertical integration of the three companies specializing in zero emission carpools and vanpools, infrastructure project development and financing and charging installation.

**Alex Naasz, Head of Construction.** Alex Naasz recently joined the EVCS team bringing a wealth of experience in charging equipment and installation. Mr. Naasz previously worked at Volta, a pioneer in the EV charging space, where he was North American Director of Engineering and Construction. Prior to Volta, Alex worked at several telecommunications and wireless technology companies. Alex has LEED AP Certification and is a licensed C-10 electrical contractor. Alexander has worked in the EVSE space for the last 5 years as Director of Engineering and Construction Operations for Volta Charging, where he oversaw all North American Operations. Alex, a co-inventor on a design patent, puts his heart and soul into every company he is a part of and we believe that his skills as a leader will transcend EVCS as he oversees the design and installation of EV chargers across the entire EVCS network.

**Charlie Botsford.** Mr. Botsford is a chemical engineer (MSChE) with extensive program management, proposal management, and technical expertise in air quality, alternative energy technologies, and electric vehicle charging infrastructure. Mr. Botsford is a licensed professional engineer (California) and a Certified Permit Professional with SCAQMD.

**Enid Joffe.** Enid Joffe has nearly 30 years of experience in the transportation electrification field, initially as an employee of Southern California Edison and Edison International, and subsequently as the co-founder of Clean Fuel Connection, an EV charging infrastructure installation company. During her twenty years as President of Clean Fuel Connection, Ms. Joffe was responsible for the design and installation of thousands of charging stations and built Clean Fuel Connection into a recognized leader in the emerging charging industry. In December 2019, Ms. Joffe sold Clean Fuel Connection to EVCS. She remains involved with the company as the Director of Business Development and C-10 license holder.

Resumes for the County and EVCS team members are provided in Appendix F.

## **Environmental Impacts**

### **Environmental Project Benefits (Air Quality)**

**Project Emission Reductions.** As required by FHWA, the County assessed the estimated emission reductions from commissioning of the proposed EV4All charging infrastructure using the Alternative Fuel Life-Cycle Environmental and Economic Transportation (AFLEET) CFI Emissions tool developed by Argonne National Laboratory. This estimate was based on the commissioning of 52 DCFC chargers and 60 Level 2 EVSE and assumes AFLEET’s “Low Utilization” case for annual fuel consumption (kWh/yr) of each charger type; this assumption is considered to be conservative since the project team will work together on outreach and education programs to increase the EV4All charger utilization.

The life cycle emissions of an electric vehicle depend on the source of the electricity used to charge it. A User-Defined Electric Generation Mix that reflects California’s current mix of electricity feedstocks was input to AFLEET to improve the accuracy of the results. California has been working toward a clean energy future for more than two decades and state policy includes the following renewable source targets:

- 50 percent of California’s electricity is from renewable sources by 2026
- 60 percent of California’s electricity is from renewable sources by 2030
- 100 percent of California’s electricity is from renewable sources by 2045

According to AFLEET, the lifecycle benefits of the EV4All project, at today’s mix of renewable feedstocks (~45%) is significant. Nearly 875 tons per year of GHGs will be reduced, in addition to the annual reductions of criteria air pollutants summarized in the Project Merit Criterion #2 section.

**Additional Benefits.** In addition to reduced air pollution, EVs have a number of environmental benefits compared to conventional vehicle technology. These include the following:

- EVs contain no fossil fuel-based lubricity products requiring disposal as hazardous waste.
- EVs utilize regenerative braking systems that can reduce or, with the use of “one-pedal driving” technology, completely eliminate standard braking, resulting in significant reduction of particulate matter from use of the brakes.
- Vehicle maintenance costs are reduced as there are no ongoing oil changes, transmission maintenance and repair and other maintenance costs associated with conventional vehicles.
- The adverse environmental impacts of extracting fossil fuel (i.e., oil spills and pipeline leaks) will be reduced as global reliance on fossil fuel is replaced by reliance on renewable energy sources for EVs.

**Federal and State Environmental Reviews.** As discussed in the Scope of Work and Project Readiness section, the County will comply with applicable Federal laws, rules, and regulations including the National Environmental Policy Act (NEPA). While the project scope (to build EVSE) is not generally expected to result in significant environmental impacts, and may even qualify for one or more categorical exclusions, the County understands that NEPA compliance is required and has scheduled significant time to undergo NEPA review and determination. This review will consider project impacts to natural, community, and cultural resources.



**Background.** EV charging infrastructure will be subject to the Federal National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) requirements for California projects. For both NEPA and CEQA, EV charging infrastructure is generally deemed “Categorically Exempt.” However, Federal Highway Administration (FHWA) has previously instituted a process for USDOT-funded projects that requires a NEPA-like analysis. For this analysis, all environmental issues are considered and managed via checklist on a site-by-site basis after first considering the overall project (e.g., suite of charging sites) on a programmatic basis. In California, it is possible that several CFI grants will be awarded, in which case, all CFI grants would need to be examined as a “Program.” This is standard NEPA/CEQA philosophy in that a single site, or even a single project should not be considered in a vacuum.

**Programmatic Timeline.** Upon award, FHWA and the State DOT (Caltrans) shall be contacted immediately to determine the: (1) programmatic and (2) site-specific analysis methodology that will be required for CFI projects. In previous FHWA-involved projects, the State DOT has worked with State regional NEPA offices for coordination purposes relative to programmatic issues. This has required approximately two months. However, nothing prevents the State DOT and FHWA determining the process prior to award so that time is not lost after contract award. This process can also involve Tribal collaboration, if applicable.

**Site-Specific Timeline.** It is anticipated that the State DOT shall require awardees to complete the FHWA analysis, including approval by FHWA, prior to start of construction work. The site-specific analysis can require one to three months to prepare, with FHWA review and approval requiring another one-two months. After FHWA approval, a 30-day notice period may apply.

**The Analysis.** While EV charging infrastructure is commonly determined to be Categorically Exempt, FHWA has previously required analysis of archaeological and cultural resource issues, especially in sensitive areas. In the State of Washington, for example, Executive Order 21-02 (EO 21-02) requires an invitation to Tribal concerns for oversight, even for previously developed sites (e.g., parking lots). A similar process also pertains to FHWA projects in Oregon, and most likely California. This is a partial listing of the FHWA issues checklist: Right-of-way, Land Use, Socioeconomics, Environmental Justice, CWA Section 404/Wetlands/Waters, ESA/T&E Species, NHPA Section 106 (Cultural Resources), Visual Resources, Section 4(f), consideration of park and recreational lands, wildlife, waterfowl refuges, and historic sites, Section 6(f)(3), amended Land & Water Fund Act, Air Quality, Noise, Hazardous Materials, Tribal Considerations, Public Outreach, Environmental Commitments

### **“Dig Once” Future-Proofing**

As previously discussed in Table 6 in Section i-IV, the County’s EV partner and subrecipient, EVCS, will include future proofing in all installations by adding extra conduits and upsizing switchgear to implement a “dig once” policy. Future-proofing allows EVCS and Contra Costa County to plan for additional charger port capacity as utilization climbs.

## **EV4ALL APPENDICES**

**The following supplemental appendices were uploaded as Attachments via the grants.gov portal.**

**Appendix A – Equity Analysis Data**

**Appendix B – Charger Site and Amenities Information**

**Appendix C – Charger Specifications**

**Appendix D – Letters of Commitment**

**Appendix E – Stakeholder Letters of Support**

**Appendix F – Project Team Resumes**

**Appendix G – Applicant Commitments & Attestations (Compliance)**

**Appendix H – Master Site Host Agreement**