Project Title: Boosting Charging by 30% for San Francisco Residents - Workspace Number: WS01388995 Detailed Budget 1 of 4: Lead Agency Budget

COST CLASSIFICATION	а. Т	otal Cost	b.	Costs Not Allowable for Participation c. Tota	al Allowable Costs (Columns a-b)
1. Administrative and legal expenses	\$	1,353,472	\$	- \$	1,353,472
2. Land, structures, rights-of-way, appraisals, etc.	\$	3,465,000	\$	- \$	3,465,000
3. Relocation expenses and payments	\$	-	\$	- \$	-
4. Architectural and engineering fees	\$	489,173	\$	- \$	489,173
5. Other architectural and engineering fees	\$	-	\$	- \$	-
6. Project inspection fees	\$	-	\$	- \$	-
7. Site work	\$	6,249,000	\$	- \$	6,249,000
8. Demolition and removal	\$	-	\$	- \$	-
9. Construction	\$	647,000	\$	- \$	647,000
10. Equipment	\$	3,208,024	\$	- \$	3,208,024
11. Miscellaneous	\$	2,294,426	\$	- \$	2,294,426
12. SUBTOTAL (sum of lines 1-11)	\$	17,706,095	\$	- \$	17,706,095
12. Contingencies	\$	1,040,000	\$	- \$	1,040,000
14. SUBTOTAL	\$	18,746,095	\$	- \$	18,746,095
15. Project (program) income	\$	-	\$	- \$	-
16.TOTAL PROJECT COSTS (subtract #15 from #14)	\$	18,746,095	\$	- \$	18,746,095
17. Federal assistance requested, calculate as follows:					
(Consult Federal agency for Federal percentage share.)					
Enter the resulting Federal share.					80.0%
Enter eligible costs from line 16c Multiply X%				\$	14,996,876

Docusign Envelope ID: 528E55E5-BCEA-46E7-95B5-D1C8F910844F Project Title: Boosting Charging by 30% for San Francisco Residents - Workspace Number: WS01388995

Detailed Budget 2 of 4: Lead Agency Budget

	Total Proje	ect Costs	CFI Fundi	ng Request	Matching Cost Share		
	Value	Share of Total	Value	Share of Total	Value	Share of Total	
Project Planning & Development	\$1,712,645	9.1%	\$974,814	6.5%	\$737,831	19.7%	
Right-of-way (ROW)/Acquisition	\$3,465,000	18.5%	\$1,900,237	12.7%	\$1,564,763	41.7%	
Charging Hardware/Equipment	\$3,208,024	17.1%	\$2,431,399	16.2%	\$776,625	20.7%	
Site Work and Installation	\$6,896,000	36.8%	\$6,896,000	46.0%	\$0	0.0%	
Operations and Maintenance	\$1,664,035	8.9%	\$994,035	6.6%	\$670,000	17.9%	
Ongoing Engagement and Education	\$630,391	3.4%	\$630,391	4.2%	\$0	0.0%	
Program Evaluation/Equity Assessment	\$130,000	0.7%	\$130,000	0.9%	\$0	0.0%	
Contingencies	\$1,040,000	5.5%	\$1,040,000	6.9%	\$0	0.0%	
Total	\$18,746,095	100.0%	\$14,996,876	100.0%	\$3,749,219	100.0%	
% of Total			80.0%		20.0%		

Project Title: Boosting Charging by 30% for San Francisco Residents - Workspace Number: WS01388995 Detailed Budget 3 of 4: Lead Agency Budget

_	SF	E/City & Regional			EVgo			Connected Kerb			CBOs			Total	
	Total	Federal Request	Match	Total	Federal Request	Match	Total	Federal Request	Match	Total	Federal Request	Match	Total	Federal Request	Match
1. Administrative and legal expenses	\$844,814	\$844,814	\$0	\$75,000	\$0	\$75,000	\$173,658	\$0	\$173,658	\$260,000	\$260,000	\$0	\$1,353,472	\$1,104,814	\$248,658
2. Land, structures, rights-of-way, appraisals, etc.	\$0	\$0	\$0	\$540,000	\$0	\$540,000	\$2,925,000	\$1,900,237	\$1,024,763	\$0	\$0	\$0	\$3,465,000	\$1,900,237	\$1,564,763
3. Relocation expenses and payments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4. Architectural and engineering fees	\$0	\$0	\$0	\$49,200	\$0	\$49,200	\$439,973	\$0	\$439,973	\$0	\$0	\$0	\$489,173	\$0	\$489,173
5. Other architectural and engineering fees	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6. Project inspection fees	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7. Site work	\$0	\$0	\$0	\$5,000,000	\$5,000,000	\$0	\$1,249,000	\$1,249,000	\$0	\$0	\$0	\$0	\$6,249,000	\$6,249,000	\$0
8. Demolition and removal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9. Construction	\$0	\$0	\$0	\$647,000	\$647,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$647,000	\$647,000	\$0
10. Equipment	\$0	\$0	\$0	\$2,096,000	\$1,319,375	\$776,625	\$1,112,024	\$1,112,024	\$0	\$0	\$0	\$0	\$3,208,024	\$2,431,399	\$776,625
11. Miscellaneous	\$130,391	\$130,391	\$0	\$670,000	\$0	\$670,000	\$994,035	\$994,035	\$0	\$500,000	\$500,000	\$0	\$2,294,426	\$1,624,426	\$670,000
12. SUBTOTAL (sum of lines 1-11)	\$975,205	\$975,205	\$0	\$9,077,200	\$6,966,375	\$2,110,825	\$6,893,690	\$5,255,296	\$1,638,394	\$760,000	\$760,000	\$0	\$17,706,095	\$13,956,876	\$3,749,219
12. Contingencies	\$0	\$0	\$0	\$500,000	\$500,000	\$0	\$540,000	\$540,000	\$0	\$0	\$0	\$0	\$1,040,000	\$1,040,000	\$0
14. SUBTOTAL	\$975,205	\$975,205	\$0	\$9,577,200	\$7,466,375	\$2,110,825	\$7,433,690	\$5,795,296	\$1,638,394	\$760,000	\$760,000	\$0	\$18,746,095	\$14,996,876	\$3,749,219
15. Project (program) income	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
16.TOTAL PROJECT COSTS (subtract #15 from #14)	\$975,205	\$975,205	\$0	\$9,577,200	\$7,466,375	\$2,110,825	\$7,433,690	\$5,795,296	\$1,638,394	\$760,000	\$760,000	\$0	\$18,746,095	\$14,996,876	\$3,749,219
Matching Cost Share						22.0%			22.0%						20.0%

Docusign Envelope ID: 528E55E5-BCEA-46E7-95B5-D1C8F910844F Project Title: Boosting Charging by 30% for San Francisco Residents - Workspace Number: WS01388995 Detailed Budget 4 of 4: Lead Agency Budget

	% c	of Time Sp	ent														
SFE Classification		2025	2026	2027	2028	2029	2030	2031									
99	922	50%	50%	25%	25%	0%	0%	0%									
50	638	20%	20%	10%	5%	0%	0%	0%									
50	640	60%	60%	50%	10%	5%	5%	5%									
50	642	30%	30%	25%	10%	2%	2%	2%									
50	644	25%	25%	15%	5%	5%	2%	2%									
1	592 Hou	urs Spent															
SFE Classification		2025	2026	2027	2028	2029	2030	2031 FY27	7 Salary Rate Y	ear 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Subtotal
99	922	796	796	398	398	0	0	0\$	29.90	\$23,798	\$23,798	\$11,899	\$11,899	\$0	\$0	\$0	\$71,3
50	638	318	318	159	80	0	0	0\$	52.42	\$16,690	\$16,690	\$8,345	\$4,172	\$0	\$0	\$0	\$45 <i>,</i> 8
50	640	955	955	796	159	80	80	80 \$	63.71	\$60,858	\$60,858	\$50,715	\$10,143	\$5,072	\$5,072	\$5,072	\$197,7
50	642	478	478	398	159	32	32	32 \$	74.14	\$35 <i>,</i> 408	\$35,408	\$29 <i>,</i> 506	\$11,803	\$2,361	\$2,361	\$2,361	\$119,2
50	644	398	398	239	80	80	32	32 \$	84.60	\$33,671	\$33,671	\$20,203	\$6,734	\$6,734	\$2,694	\$2,694	\$106,4
								Sub	total	\$170,425	\$170,425	\$120,668	\$44,751	\$14,166	\$10,126	\$10,126	\$540,6
SFE Classification		2025	2026	2027	2028	2029	2030	2031 FY27	7 Fringe Rate Y	ear 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Subtotal
99	922								57%	\$13 <i>,</i> 573	\$13,573	\$6 <i>,</i> 786	\$6,786	\$0	\$0	\$0	\$40,7
50	638								42%	\$7 <i>,</i> 038	\$7,038	\$3,519	\$1,759	\$0	\$0	\$0	\$19,3
50	640								39%	\$23 <i>,</i> 592	\$23,592	\$19,660	\$3,932	\$1,966	\$1,966	\$1,966	\$76,6
50	642								36%	\$12,769	\$12,769	\$10,641	\$4,256	\$851	\$851	\$851	\$42,9
50	644								34%	\$11,577	\$11,577	\$6,946	\$2,315	\$2,315	\$926	\$926	\$36,5
								Subt	total	\$68,548	\$68,548	\$47,552	\$19,049	\$5,133	\$3,743	\$3,743	\$216,3
Indirect									10%								\$88,2
Consultant/CBO	Contrac	ts															
Upfront, In-langua	age Pub	lic Engage	ement for (Curbside Si	tes (Plannir	ıg)											\$260,0
Program Evaluation	on/Equi	ty Assessr	nent - Con	sultant Cor	ntract												\$130,0
Ongoing In-langua	age Eng	agement a	& Educatio	n													\$500,0
								Subt	total								\$978,2
								Gran	nd Total								\$1,735.2

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Summary Introduction

The San Francisco Environment Department (SFE), on behalf of the City & County of San Francisco (the City), is proposing to boost its publicly accessible electric vehicle (EV) charging infrastructure by 30% citywide. The "Boosting Charging by 30% for San Francisco Residents" project will provide up to 270 Level 2 (L2) and 30 DC Fast Charging (DCFC) ports in publicly accessible garages and lots and at curbside locations in and adjacent to Justice40 communities. The neighborhoods selected for this charging infrastructure serve primarily Justice40 communities with multi-family housing and limited access to off-street parking.

SFE, in collaboration with the San Francisco Metropolitan Transportation Agency (SFMTA), San Francisco Public Utilities Commission (SFPUC), and competitively selected vendors EVgo and Connected Kerb (CK) will dramatically expand the City's current number of total charging ports to 1,275. The addition of 300 charging ports will not only provide more charging to residents citywide but will expand charging options and locations for residents in Justice40, and other communities, currently underserved by charging infrastructure. The City's approach supports the Charging & Fueling Infrastructure (CFI) program's goals to increase publicly accessible community charging, while also future proofing the city by "digging once" to prepare for multimodal charging in high utilization communities.

The goals of Boosting Charging by 30% for San Francisco Residents (the Project) are to:

- Build infrastructure to keep pace with surging EV adoption in San Francisco by installing up to 300 charging ports in City garages, City lots, and at curbside locations
- Improve and expand EV charging access for low- and moderate- income neighborhoods including Justice40 communities, as well as underserved or hard to reach communities that have struggled to secure private sector investment without government support
- Implement a "dig once" approach at all L2 locations to future-proof for e-mobility charging, prioritizing underserved communities and residents of multi-family housing
- Ensure charging infrastructure is integrated with existing transportation planning and corridors to support growing EV and e-micromobility use throughout the Bay Area
- Deploy pricing and payment models that are less costly and more convenient to use than higher-carbon fuels
- Reduce air pollution and greenhouse gas (GHG) emissions in and near Justice40 communities

In San Francisco, the transportation sector accounts for nearly 50% of GHG emissions. The City's bold goals are to shift 80% of trips to low-carbon modes and electrify 25% of all registered private vehicles by 2030. By 2040, the City aims to achieve net-zero GHG emissions by electrifying 100% of private vehicles. While the City is well on the way, it faces significant headwinds due to its extremely dense urban corridors, older buildings, hilly topography, and challenging utility dynamics (two competing electric utilities providing service). Residents in large multi-family housing often have no garages, and if they do, these shared garages rarely have the necessary onsite infrastructure to cost-effectively install charging. This separates San Francisco from less dense cities where garages and single-family home ownership are more prevalent, making it easier to charge at home. San Francisco is the second most-dense large city in the country, which forces more San Franciscans to rely on publicly accessible charging than almost any other city.

Currently, San Francisco's demand for public charging far outweighs availability, with over 30

registered EVs per charging port (as of July 2024). In 2023, 37% of vehicle sales in San Francisco were zero-emission and 2024 has seen this trend continue. This is one of the highest adoption rates in the country, which underscores the urgency of this project. This demand is exacerbated by San Francisco's congestion, which is due to its smaller geographic area, hilly topography, density, and high number of regional commuters (500,000-1.2 million in the region each day) and visitors.

This infrastructure that this project will create is vital to equitable progress. Charging access across the city is disproportionately lower in Black- and Hispanic-majority neighborhoods and areas with below-median household incomes. Nearly 70% of San Franciscans live in multi-family housing with no off-street parking. The existence of safe, affordable, convenient charging will motivate residents to capitalize on incentives and purchase EVs, particularly through California's <u>Clean</u> <u>Cars for All</u> program, which provides a range of incentives and support for low-income Californians to purchase EVs. Small businesses and independent owner-operator fleets that are interested in transitioning to EVs also rely on street parking or have limited capital to procure fleet charging solutions and will be significantly impacted by increased publicly accessible charging.

Today, there are currently 792 L2 and 183 DCFC publicly accessible charging ports within San Francisco, less than 1% of which are in City-owned public garages and lots. The team is proposing to increase the City's number of publicly accessible charging ports by 30% to 1,275. As one of the nation's most visible sustainable success stories, San Francisco must continue its seamless transition to EVs and share its efforts and learnings with other jurisdictions to hasten EV adoption throughout the region and nation. To date, the team has used existing feasibility studies, results of previously conducted community engagement efforts, vendor analysis tools, and cross-department collaborations to identify a total of 21 viable off-street (garage and lot) sites and 16 viable on-street (curbside) locations. The team has determined that up to 14 of these sites have a high readiness to install and deploy up to 240 L2 ports within the first 12 months of the Project. The remaining 30 L2 on-street and 30 DCFC ports will be deployed within the following 12-24 months of the grant period, as they may require additional community engagement, grid analysis, and/or significant construction.

Primary Project Tasks include:

- Project Planning and Development
 - Site Analysis and Prioritization, including site visits of priority City locations to understand on-site electrical equipment/trenching needs and available space/clearance and screening for location substation capacity availability
 - **Community Engagement,** including in-language outreach to ensure community collaboration on site selection (primarily on-street locations)
- Engineering and design
- Right-of-way (ROW)/Acquisition
- Charging Hardware/Equipment procurement
- Site Work & Installation, including make-ready equipment and minor grid upgrades
- Operations & Maintenance up to the first 5 years of operation
- **Ongoing Engagement and Education**, providing in-language engagement and education on EV technologies, benefits, and available incentives
- **Program Evaluation/Equity Assessment,** assessing the impact of the Project team's outreach, engagement, and education activities on project benefits and utilization

At this time, there is a high political and inter-departmental commitment to expand charging in the city, which means streamlined processing, existing cross-departmental communication streams, and shared priorities. Federal funding at this time will equitably catapult the city from 975 to 1,275 charging ports—increasing access by more than 30% and dramatically expanding charging infrastructure for Justice40 communities—putting the City on track to meet its 2030 goal of 1,760 charging ports. Federal funding at this time will significantly accelerate the City's curbside effort at a moment when there is widescale political and community momentum. Additionally, Federal funding enables the City to work with vendors EVgo and CK who will provide Operations & Maintenance costs as part of their cost match during the grant period, resulting in discounted pricing for users. Additional project benefits for Justice 40 communities specifically, include:

- Increased engagement in the decision-making process for on-street charging locations
- Increased, affordable access to EV charging, and subsequently the opportunity to utilize incentives like California's Clean Cars for All *while it is still available*
- Increased opportunities in charging infrastructure-related construction and skilled labor jobs
- Decreased noise and air pollution in Justice40 communities
- Incentivizing private investments in Justice40 and other communities that have been historically underserved by clean infrastructure, helping to drive EV demand in future years
- Supporting development of sites that require power upgrades, which may not otherwise be competitive enough for private investment when located in Justice40 census tracts

Complete Team Qualifications have been attached as Appendix 1 to this submission. Primary Project Team includes:

- San Francisco Environment (SFE) is the agency responsible for implementing the City's <u>Climate Action Plan (CAP)</u> which lays out bold goals to reach 100% electrification of private vehicles and net-zero GHG emissions by 2040. SFE has more than 20 years of experience creating and managing large-scale energy, clean transportation, and other emissions reductions programs. SFE hosts the San Francisco Clean Cities Coalition (SFCCC) that represents the City and a range of local and regional stakeholders, and regularly shares learnings and best practices about clean transportation projects to CCCs, as well as other cities throughout the nation. As the project lead, SFE will manage all elements of the Project, including site selection efforts, and will leverage its existing long-term relationships with community based organizations (CBOs) to ensure that community members are engaged in this project and that community needs are met.
- The San Francisco Municipal Transportation Agency (SFMTA) manages the city streets and builds, operates, regulates, and maintains a diverse system of public transit, paratransit, taxis, shared bicycles, and e-scooters/mopeds. The SFMTA supports the City's transit-first policy, manages EV charging in City-owned garages, and facilitates the Parking and Curb Management team responsible for determining site suitability and enforcing curb regulations for EV charging. **As a property owner/manager**, SFMTA will negotiate commercial lease agreements for SFMTA-managed sites with the charging partners and provide overall coordination of site access and continuity of operations during construction.

- The Port of San Francisco (the Port) manages 7.5 miles of waterfront that is home to popular destinations and attractions, historic districts, small businesses and robust maritime opportunities. The Port works to advance environmentally and financially sustainable maritime, recreational, and economic opportunities for the City, Bay Area, and California. As a property owner/manager, the Port will negotiate commercial lease agreements for Port-managed sites with the charging partners and provide overall coordination of site access and continuity of operations during construction.
- The San Francisco Public Utilities Commission (SFPUC) supplies more than 70% of the electricity used in the City, and powers some of the City's most important assets, including our general hospital, airport, fire stations, public schools, streetlights, redeveloped portions of the city, public transportation, and other private sector customers. As the utility provider for municipal facilities, SFPUC will provide electrical capacity analysis and technical assistance during project planning and development and ultimately serve power to the sites on City-owned real estate.
- Connected Kerb (CK), is an e-mobility platform company that provides EV charging solutions. CK has extensive experience installing EV charging infrastructure to make charging affordable and reliable, offering services including on-street residential charge stations and future-proof charging solutions for e-mobility devices. CK will install and manage the L2 charging infrastructure for this project.
- EVgo has more than 10 years of experience designing, developing, operating, and maintaining the country's largest charging network with more than 1,000 locations (3,000+ EV charging stalls) across 36 states, including an extensive network of charging ports throughout California and the Bay Area. EVgo will install and manage the DC fast charging infrastructure for this project.

I. Project Narrative

Boosting Charging by 30% for San Francisco Residents will serve all residents and visitors, with a focus on those communities that have historically been underserved by public charging infrastructure. The Project will deploy up to 270 L2 and 30 DCFC ports in Justice40 communities in both off-street garages/lots and at on-street locations within the first 3 years, followed by continued education and L2 low-income pricing programs through the first 5 years of operation. To date, the team has used existing feasibility studies, results of previously conducted community engagement efforts, vendor analysis tools, and cross-department collaborations to identify a total of 21 viable garage and lot sites and 16 viable on-street locations.

- **City Garages and Lots**: SFE has coordinated with several City agencies that own and manage publicly accessible parking facilities, including the SFMTA, San Francisco Recreation and Parks Department, City College, and the Port, to identify viable facilities to host public charging that have available parking spaces, power capacity headroom within existing utility contract demand, and alignment with Justice40 communities.
- **Curbside locations**: On-street, or curbside, charging has not yet been unlocked in San Francisco. In March 2024, the San Francisco Board of Supervisors adopted a <u>Resolution</u> urging the SFMTA and SFE to complete a <u>Curbside EV Charging Feasibility Study</u> and work with other City agencies to identify funding to launch a pilot program. The study, conducted in collaboration with Arup, was completed in July 2024 and a public-facing, preliminary framework for launching a curbside charging pilot will be finalized by

September 2024. The study concluded that the approach to install on-street EV service equipment is a promising means for addressing accessibility to charging for a growing number of EV owners and is technically feasible and scalable across San Francisco. In June 2024 the City launched a public process inviting EV service providers to propose demonstration sites and apply to showcase their technology and share data and learnings for the City's scaled program.

• **Community-identified sites**: In addition to City-owned garages and lots, 3 privately owned lots in Bayview-Hunters Point (Justice40 community) were identified by community members as priority DCFC sites and will be considered for charging infrastructure. In early 2024, SFE and community engagement partners En2Action and Strategies 360 conducted a two-week, in-language community survey of residents in Southeast San Francisco on EVs and charging sites. SFE also facilitated three community meetings in Bayview Hunters Point with EV 101, presenting the community with information on available EV purchase incentives, and provided an opportunity for community members to share locations where they thought EV charging would be useful. Out of these engagement activities, SFE and partners screened 20 priority sites, taking the top 3 to evaluate for potential deployment.

Through its competitive procurement process, SFE selected EVgo and CK to develop, install, and own/host the charging infrastructure and related mobility programs for this project. The two vendors exceeded the criteria set by the City for this project, are aligned with the City's Justice40/disadvantaged community and transit first policies and approaches, and have significant experience working in dense, urban environments. Both EVgo and CK participated in the development of this proposal, including using their data and tools alongside the City's existing studies and community engagement processes, to identify viable sites for charging infrastructure.

Description of Project Location

The Project will install up to 270 L2 ports in City-owned garages/lots and select on-street locations and 30 DCFC ports in City-owned garages/lots and/or, if feasible, privately-owned off-street sites in Bayview Hunters Point. Over 80% of sites (100% of the L2 sites) will be future-proofed for additional EV and emerging e-micromobility charging needs. Installations will be completed in phases to deploy up to 240 L2 ports across up to 13 off-street sites within the first 12 months while completing community engagement and granular analysis to deploy up to 30 DCFC and 30 on-street L2 ports in the following 12-24 months of the grant period.

Map 1 below show the City's current public charging makeup. Map 2 and Table 1 that follow, outline the locations of viable sites noting the highest allowable number of charging ports that can be installed at each site. Between 15-21 sites from this list of 37 will be selected for charger installation. All viable sites are either in or within a ¹/₂-mile of a Justice40 community.



MAP 1: Current publicly available charging (L2 and DCFC) with CEJST Census Tracts in purple outlined by 1/2-mile Justice40-serving zone



MAP 2: All viable L2 and DCFC sites under consideration, with CEJST Census Tracts in purple outlined by 1/2-mile Justice40-serving zone

L2 Charging at Off-Street, City-owned Garages and Lots (Table 1 below, lines 1-18)

The Project team reviewed 30 City garages/lots that serve Justice40 communities and identified 14 with sufficient contracted electrical capacity/headroom for at least four dual-port L2 (7 kW) charging ports per site using load management, with a total maximum of 409 ports. After adjusting to electrify no more than 20% of spaces at any one facility and reviewed by facility managers to adjust based on garage layout, the team could install up to 280 L2 ports across these proposed garages/lots. The team also assessed local distribution grid/substation capacity, existing DCFC stations, nearby destinations/amenities, and facility access/layout to select two Chinatown/Union Square garages and three northern waterfront lots for consideration of 8-16-stall DCFC charging plazas. Upon award, the team will select up to 13 garages/lots to deploy up to 240 L2 ports within the first 12 months, and up to two garages/lots to deploy up to 30 DCFC ports within the following 12-24 months of the grant period.

					Make-Ready for
#	Site Name	Address	Target No. Level 2	Target No. DCFC	Multimodal
1	Moscone Center Garage	255 3rd Street, San Francisco, Ca 94103	36		Y
2	Union Square Garage	333 Post Street San Francisco, CA 94108	34		Y
3	Portsmouth Square Garage	733 Kearny Street, San Francisco, CA 94108	30		Y
4	Civic Center Garage	355 McAllister Street San Francisco, CA 94102	28		Y
5	Performing Arts Garage	360 Grove St, San Francisco, CA 94102	22		Y
6	St. Mary's Square Garage	433 Kearny St, San Francisco, CA 94108	18		Y
7	Fifth & Mission Garage	833 Mission St, San Francisco, CA 94103	18		Y
8	Mission Bartlett Garage	3255 21st St, San Francisco, CA 94110	16		Y
9	ZSF General Hospital Garage	2500 24th St, San Francisco, Ca 94110	12		Y
10	Golden Gateway Garage	250 Clay St, San Francisco, CA 94111	10		Y
11	Pier 29 1/2 Shed (Parcel E)	1282 The Embarcadero, San Francisco, CA 94133	12		Y
12	Pier 45 - Shed C	Pier 45, San Francisco, CA 94133	6		Y
13	Taylor/Little Embarcadero	Pier 49, The Embarcadero, San Francisco, CA 94133	4		Y
14	Sutter Stockton Garage	444 Stockton Street, San Francisco, Ca 94108	34	10	Y
15	Seawall Lot 321/Big Triangle	1050 Front Street, San Francisco, CA 94111	12	16	Y
16	Vallejo Street Garage	766 Vallejo Street, San Francisco, CA 94133		10	N
17	Seawall Lot 314	2 Bay Street, San Francisco, CA 94133		10	N
18	Seawall Lot 324	50 Broadway, San Francisco, CA 94111		10	N
19	Ruth Williams Opera House	4705 3rd St, San Francisco, CA 94124		6	N
20	Bayview Hunter's Point YMCA	1601 Lane St, San Francisco, CA 94124 · 76 mi		6	N
21	Bayshore Business Center	1485 Bayshore Blvd, San Francisco, CA 94124		6	N
22	Curbside - Treasure Island	325 4th Street, San Francisco, CA 94130	6		Y
23	Curbside - Mission #1	2699/2601 19th Street, San Francisco, CA 94110	6		Y
24	Curbside - Mission #2	3500 19th St, San Francisco, CA 94110	6		Y
25	Curbside - Mission #3	3197 Kamille Ct, San Francisco, CA 94110	6		Y
26	Curbside - Mission #4	2001 Bryant St, San Francisco, CA 94110	6		Y
27	Curbside - Mission #6	2506/2548 Mission St, San Francisco, CA 94110	6		Y
28	Curbside - Mission #7	1475 15th Ave, San Francisco, CA 94122	6		Y
29	Curbside - Mission #8	22 Woodward St, San Francisco, CA 94103	6		Y
30	Curbside - Western Addition #1	1300/1378 McAllister St, San Francisco, CA 94115	6		Y
31	Curbside - Western Addition #2	1215 Scott St, San Francisco, CA 94115	6		Y
32	Curbside - Civic Center	399 McAllister St, San Francisco, CA 94102	6		Y
33	Curbside - Bayview	1491 Revere Ave, San Francisco, CA 94124	6		Y
34	Curbside - Richmond	2400/2498 Lake St, San Francisco, CA 94121	6		Y
35	Curbside - Sunset #1	2494 41st Avenue, San Fransisco, CA	6		Y
36	Curbside - Sunset #2	2333/2377 22nd Avenue, San Fransisco, CA	6		Y
37	Curbside - Pacific Heights	1994 Jackson St, San Francisco, CA 94109	6		Y
	Total Possible Charging Ports		288	7/	

TABLE 1: All viable L2 and DCFC sites under consideration, with target (maximum) number of ports per site

Private Off-Street Lots in Bayview Hunters Point (Table 1, lines 19-21)

The Project team reviewed 20 community-identified sites and selected 3 sites for further evaluation to deploy up to 8 DCFC ports. If site control, utility capacity, or other factors prevent installation at these sites, the team will advance a third City garage/lot for an 8-10 stall DCFC charging plaza.

Curbside Sites (Table 1, lines 22-37)

Using CK's ASAP mapping tool with data collected via the City's Curbside Charging Feasibility Study, the Project team screened over 300 on-street locations for alignment with Justice40 communities, projected EV demand, grid capacity, and on-street regulations to select locations for L2 charging that can serve 6-10 spaces. Of these sites, the team identified 16 locations as viable. Upon award, the team will complete site assessments, conduct in-depth community engagement, and develop preliminary designs for up to 5 on-street locations to deploy up to 30 L2 ports.

Connections to Existing Transportation Infrastructure

The Eastern, Central, and Southern parts of the city are key <u>regional</u> transit corridors. The Alternative Fuel Corridors I-80 and US-101 run north-to-south on the Eastern and Southern side of the city; Bay Area Rapid Transit (BART), serves the entire region; Caltrans, serves the region south of San Francisco; and the ferry system serves the East Bay and Marin County, north of San Francisco. Sites in the southeast sector of San Francisco are connected regionally by the Alternative Fuel Corridors I-280 and US-101 and will connect locally to MUNI's 3rd Street light rail. Sites in the western part of the city (Richmond/Sunset) are connected regionally by the Alternative Fuel Corridor SR-1 and will connect users to the MUNI's light rail on Juniper Serra Blvd or Judah St, as well as local bus routes. San Francisco's municipal light rail and bus system (MUNI) Serves the entire city, connecting the Eastern, Central, and Southern hubs to all parts of the City. All viable sites noted on the map connect to these existing corridors and hubs. Charging infrastructure along these routes will support the region, local commuters, and last-mile delivery. Additionally, future-proofing sites for emerging e-mobility will further connect mass transit hubs to residents living at the edges of the city.

Safety

Project planning and implementation is informed by Vision Zero SF, which is San Francisco's road safety policy to build safety and livability into the City's streets. Sites will be screened to see if they are on High Injury Networks-identified by the SF Public Health Department as the 12% of city streets where 70% of severe and fatal crashes occur. The City has prioritized safety on this network and the team will support the Project by reviewing and providing feedback on the team's safety mitigation plans, to ensure they support Vision Zero goals. Each partner has extensive experience with safety during installation, maintenance, and operations of their projects. Installation teams will abide by all federal, state, and local safety requirements. Since garage and lot installations are in existing parking facilities dedicated to vehicular use, there are no additional impacts on traffic flow, which supports overall use safety. All sites will be tested prior to opening to ensure that all equipment is functional and safe. Additional safety protocols are in place to ensure that all charging installations will be safe and rapidly attended to in the event of an emergency or a need for electrical maintenance. Both EVgo and CK have 24/7 customer service agents available during and after installation for the public to report safety concerns and resolve issues. Contact information will be prominently displayed on premises and included in public outreach materials. All new infrastructure will be UL certified where applicable and conform to

local and state regulations. In addition, all L2 units have advanced built-in safety monitoring features that combine with CK's back-office platform to further protect users against electrical shock and vandalism. The team will work with local utility providers Pacific, Gas & Electric (PG&E) and SFPUC on permit review and approvals for grid connection and associated meters for proposed locations. Once provider approvals are obtained for each site, the team will work with SF Public Works Department (SFPW), SF Department of Building Inspection (DBI), SF Fire Department (SFFD), and SFMTA on obtaining construction permits to deploy and hook-up the new infrastructure with the appropriate grid connection and meter. The team will also work with property owners and relevant regulators to evaluate and mitigate any climate-related risks by incorporating appropriate resilience measures.

ADA Requirements

Access to all sites will follow ADA requirements and all charging stalls will conform to local rules and regulations regarding ADA accessibility. In addition to working with City departments, the team will work with the San Francisco Mayor's Office on Disability, which oversees ADA for city projects. More details on ADA compliance is included in the Merit Criteria section.

Expanding Community-Based Infrastructure

The Project increases transportation options to a range of users. It will equitably expand access to convenient, affordable L2 and DCFC infrastructure for residents who lack access to at-home charging, commuters and visitors, as well as businesses and other entities seeking to electrify their fleets. All proposed site locations will fill gaps in access by placing charging infrastructure in walking distance for residents that live in, or within a ¹/₂-mile of, Justice40 census tracts. Communities served by the Project include:

- **Downtown/Civic Center/SOMA/Western Addition:** The proposed sites located south of Market Street serve residents who live in affordable housing developments and multi-family housing, with little to no off-street parking, as well as workers and commuters to key city institutions including City Hall, the U.S. Federal Office Building, US Court of Appeals, and UC Law San Francisco, parks and museums, and hotels.
- **Tenderloin/Union Square/Waterfront/Treasure Island:** The proposed sites located on the north side of Market Street support a range of residents and visitors to the city. The neighborhoods are dense with mixed-use residential multi-family housing and commercial, and affordable housing with little to no off-street parking. The population includes extremely low-income residents, as well as those living in affordable housing, students and visitors to the city. This part of the city, composed of many neighborhoods, accommodates significant daily regional, national, and international tourists visiting attractions, particularly along The Embarcadero waterfront. A former military base, Treasure Island is a Justice40 community located off the San Francisco peninsula. Treasure Island is undergoing significant revitalization and environmental mitigation to become an emerging neighborhood of the city.
- **Chinatown:** San Francisco's historic Chinatown District is a heavily populated, dense Justice40 community comprised of mixed-use residential and commercial multi-family housing with no off-street parking. Given Chinatown's cultural significance, it is both a destination, as well as a home, to tens of thousands of residents and visitors each day. The area is currently significantly underserved by charging infrastructure.

- **Mission District:** The proposed sites support neighborhood residents, including many lowincome, primarily Spanish-speaking residents, as well as drivers accessing neighborhood bars, restaurants, and historic destinations. The eastern side of the neighborhood is bordered by US 101 and the San Francisco Zuckerberg General Hospital campus.
- Southeast/Bayview Hunters Point: The proposed sites are in communities where there is currently no charging while Map 1 indicates 3 L2 charging sites in the neighborhood, recent outreach indicates that these sites are either not operational or not truly publicly accessible. The new proposed infrastructure will serve a range of users including residents of affordable and multi-family housing, students, commuters, and fleets traveling through the city on major regional transportation corridors, as well as to the 3rd Street mixed-use residential and commercial historic District where the City has recently invested significant revitalization funds.
- **Richmond/Sunset**: The proposed sites are communities where there is currently limited charging. The western part of the city has historically had fewer EV charging opportunities than other parts of the city, and it can take longer to get around using mass transit. Those benefitting from this infrastructure will be residents in affordable and multi-family housing, mixed-use residential and commercial, and students. The sites are flanked on two sides by water and one side by Golden Gate Park, and the neighborhood is bisected by two major through-city routes: Geary Street corridor and State Route 1.

Additional Project Narrative Information – Project Focus Areas

Because the Project focuses on sites within walking distance of current and future EV owner homes, will future-proof 80% of sites for emerging multimodal and EV expansion, and will serve both residents, as well as workers, commuters, and visitors, the Project will address several CFI focus areas including Neighborhood and Multi-Family Charging, Multi-Modal Hubs and Shared-Use Fleets and Services, and Multi-Purpose Workplace and Destination Charging.

Neighborhood and Multi-Family Charging

As described above, the neighborhoods where this project will install charging infrastructure are densely populated with a high number of mixed-use commercial and multi-family housing, especially Chinatown/Downtown, the Mission, Tenderloin, and others. There are also five viable/proposed project sites that will serve Treasure Island and Bayview Hunters Point, two carreliant neighborhoods on the outermost edges of the city with large existing affordable housing, as well as new affordable housing projects in development. CK's L2 strategy prioritizes locations where EVs can be parked for longer durations, such as areas within walking distance of multifamily housing, or where cars may be parked overnight. CK's systems are equipped with advanced charge management technology that optimizes charging schedules and power usage. This minimizes the site power requirements and can reduce the need for costly upgrades to the existing electrical infrastructure. For the on-street sites, CK recognizes the challenges associated with curbside access, reservation, reliability, and management of limited spaces, and has developed solutions including smart charging systems that allow for reservation and real-time availability checks, ensuring that users can rely on the availability of charging points when needed, as well as innovative pricing options to ensure customer affordability.

Multi-Modal Hubs and Shared-Use Fleets and Services

E-bikes and e-scooters are a prime option for mitigating the challenging hills of San Francisco.

While there are no official statistics on the number of battery-powered two- or three-wheeled emobility devices across San Francisco, estimates range in the thousands.¹ The SFPUC's <u>Electrify</u> <u>My Ride Pilot Program</u>, which offered low-income utility customers a \$1,000 rebate for the purchase of a new e-bike, distributed the highest number of coupons in central and southeast San Francisco, two Justice40 communities. Renters and multi-family housing residents in San Francisco have limited access to safe, secure storage and charging for e-micromobility. Results from an SF Environment and GRID Alternatives' <u>e-bike pilot program for last-mile delivery</u> have identified the need for secure, public e-bike parking/storage and charging infrastructure to mitigate workers' and property owners' concerns around earnings, fire safety, and theft. E-bike users often face the challenge of limited battery range, which restricts their ability to travel long distances or use their e-bikes for extended periods.

Given the demand for public e-micromobility storage and charging, this project aims to futureproof all L2 sites for use as future multimodal hubs. CK's modular and scalable charging solutions are designed with a "dig once" philosophy, ensuring that the installation of EV charging infrastructure can accommodate future multi-modal use. This not only includes e-micromobility docking stations, but also the potential electrification of bikeshare and carshare programs.

The presence of new L2 and DCFC stations across the city will also encourage EV use by transportation network company (TNC) drivers and small, independent truck owner-operator fleets that traverse the city and frequently park overnight on the street. Project sites in the city center and along the waterfront are particularly primed for TNC usage, while the sites in Southeast San Francisco near major highways/freeways (I-280 and US-101) are well-suited for commuters and residents living at the City's edges coming and going from downtown San Francisco.

Multi-Purpose Workplace and Destination Charging

Many of the City garages and lots under consideration in this proposal offer opportunities for destination charging for residents, commuters, and visitors at popular locations downtown, in the Mission, and along the waterfront. For example, the Project team is aiming to deploy up to 200 L2 ports across the SOMA/Downtown/Union Square neighborhoods, which serve not only nearby multi-family residents but commuters and visitors that park between 2-8 hours on average. 6-18-stall DCFC charging plazas slated for Port parking lots see significant short-term visitors and workers. L2 ports at the SFZ General Hospital Garage, will accommodate visitors and workers with average parking times between 2-8 hours.

Innovative Payment Approaches

The Project will provide a range of innovative payment options, particularly for low-income residents and ride-share drivers.

For L2 infrastructure, CK integrates contactless technology into payment systems, enabling users to pay for charging services with contactless cards, smartphones, and wearable devices. This user-friendly technology supports quick and secure transactions and does not require a traditional bank account, thus broadening access. CK also has technology available to integrate mobile wallets like

¹ <u>E-bike sales in the United States</u> surged 269% between 2019 and 2022, approaching \$1 billion, according to market research firm, Circana.

Apple Pay and Google Pay that can be preloaded with funds, and they offer a bank account-free option for payment, expanding usability across different user demographics. CK will also explore partnerships with SFMTA to bundle charging services with transit discounts and other benefits programs and explore developing a prepaid card system that could be purchased with cash at retail locations to enable payment for charging services without the need for a smartphone or internet access. Users who pay through CK's app will receive user discounts and loyalty and reward offers such as free charging, account credits, and partner offers. CK's pricing model applies a charge to the base electricity rate. In most cases, this provides drivers with the most cost-effective charging cycle during peak and off-peak times. Where possible, CK software will intelligently connect directly to the utility supplier and allow for true demand side response by adjusting the rate of charge in response to real-time energy pricing. If drivers use CK's agile streets rate, they will typically save a further 20-30% by maximizing utilization when energy prices are at their lowest during the charge cycle. Participation in this Federal grant enables CK to cover 5 years of operations and maintenance (O&M) costs, directing any revenues received during the grant period back into the Project to subsidize charging rates for low-income communities, and to assist with accelerating utilization.

For DCFC, EV drivers will be able to access EVgo charging without membership or network interaction. Real-time pricing information will be displayed on the built-in charger screen and on the EVgo app. EVgo offers a variety of payment and billing options to serve all drivers, including: 1) the EVgo app, 2) via credit card (tap or stripe) with an onsite reader, 3) payment over telephone via EVgo's Customer Care Center, 4) EVgo network RFID card, 5) interoperability/roaming via ChargePoint and EV Connect,² and 6) pay with PlugShare (Coming Soon).

EVgo's Autocharge+ is also an innovative technology. Available today for more than 50 EV models with CCS connectors and Telsas using a CCS adapter, Autocharge+ delivers a Plug and Charge-like experience with drivers able to simply plug in and start charging with no additional payment or authentication steps. Neither payment method nor membership will delay, curtail, or limit power flow to EVs. Unbanked and underbanked users can pay via phone with the EVgo Customer Care Center, or with pre-paid cards. EVgo offers multilingual support/instructions via our 24/7 customer service center. EVgo leverages secure communication standards and payment systems to ensure that only authorized users can access the charging services. All EVgo charging stations have real-time monitoring and metering capabilities that allow for accurate tracking of energy consumption, and this data is utilized for precise billing. EVgo's invoicing system is automated, helping to reduce billing errors and ensuring invoices are issued in a timely manner.

Electricity costs vary throughout the day based on demand and energy usage. To provide transparent and fair pricing, all EVgo customers in California pay for charging per Time of Use, (TOU) pricing instead of per minute. This means lower prices for charging during Early Bird Hours (12am-8am) and Off-Peak Hours (8am-4pm and 9pm-12am), and higher prices during On-Peak Hours (4pm-9pm). At select EVgo sites in San Francisco, the network categorizes rates by location as well as time of use. Location-based pricing sets three tiers of pricing—High, Medium, and Low. Tiers are based on the CalEnviroScreen, EV traffic and local installation, and ongoing property

 $^{^{2}}$ Interoperability/roaming allows drivers with a ChargePoint or EV Connect account to use that account and app at an EVgo station. This reduces the need for drivers to have multiple apps for different charging companies.

costs. CalEnviroScreen is a screening methodology that can be used to help identify California communities that are disproportionately burdened by multiple sources of pollution.

	Total Proje	ect Costs	CFI Fundii	ng Request	Matching Cost Share		
-	Value	lue Share of Total		Share of Total	Value	Share of Total	
Project Planning & Development	\$1,712,645	9.1%	\$974,814	6.5%	\$737,831	19.7%	
Right-of-way (ROW)/Acquisition	\$3,465,000	18.5%	\$1,900,237	12.7%	\$1,564,763	41.7%	
Charging Hardware/Equipment	\$3,208,024	17.1%	\$2,431,399	16.2%	\$776,625	20.7%	
Site Work and Installation	\$6,896,000	36.8%	\$6,896,000	46.0%	\$0	0.0%	
Operations and Maintenance	\$1,664,035	8.9%	\$994,035	6.6%	\$670,000	17.9%	
Ongoing Engagement and Education	\$630,391	3.4%	\$630,391	4.2%	\$0	0.0%	
Program Evaluation/Equity Assessment	\$130,000	0.7%	\$130,000	0.9%	\$0	0.0%	
Contingencies	\$1,040,000	5.5%	\$1,040,000	6.9%	\$0	0.0%	
Total	\$18,746,095	100.0%	\$14,996,876	100.0%	\$3,749,219	100.0%	
% of Total			80.0%		20.0%		

||. Budget Information: Grant Funds, Sources and Uses of All Project Funding

The total Project cost is \$18.8M. The Project team is requesting a grant of \$15M from CFI. The Project team's charging provider partners EVgo and CK have committed to a cost match minimum of 20% of total project costs, amounting to a total match share of \$3.8M. EVgo has committed \$2.1M (22% of their share of project costs) from O&M, and a portion of charging hardware/equipment, and CK has committed \$1.7M (22% of their share of project costs), from project management, legal, and a portion of real estate leases/ROW permits, O&M, and charging hardware/equipment. There is no other Federal funding for this project.

Project Planning & Development: \$1.7M: Includes \$975K CFI cost share for project administration/contracting and public engagement; \$738K EVgo and CK match for project management, administrative/legal, and engineering/design costs. Funds in this category will be used in the first 36 months.

SFE has allocated budget towards staff time to support development phase activities and project administration including convening and coordination of project partners; managing CBO, consultant, and charging partner contracts; program management, communication, and reporting, and other administrative activities. SFE's staff time, and EVgo and CK's match share, will be used for further site analysis and prioritization, including site visits of viable locations to understand on-site electrical equipment/trenching needs, available space/clearance, screening for location substation capacity availability, and final engineering and design costs. SFE has also allocated \$260K for sub-grants to CBOs as well as over \$100K in additional outreach team staff time to support upfront, in-language public engagement work around site selection and installation/deployment for the community-identified lot and on-street sites. Some of these funds will support translation, collateral development, and, as appropriate, stipends for participant engagement.

Right-of-way (ROW)/Acquisition: \$3.5M: Includes \$1.9M CFI cost share for a portion of L2 site lease or ROW operational permit payments; \$1.6M EVgo and CK match for DCFC and a

portion of L2 lease or ROW operational permit payments. This budget category includes costs for off-street lease payments and ongoing permit fees to operate on-street/in the ROW, for up to 270 off-street and up to 30 on-street parking spaces.

Charging Hardware/Equipment: \$3.2M: Includes \$2.4M CFI cost share for L2 and a portion of DCFC charging hardware and associated equipment; \$777K EVgo and CK match for DCFC and a portion of L2 lease or ROW operational permit payments. This budget category includes costs for the procurement of up to 300 L2 charging units, up to 30 DCFC charging units, and associated cables, feeder cabinets/pillars, pedestals and node boxes for lots/on-street locations, and modems/data switchgear for garages.

Site Work & Installation: \$6.9M: Includes \$6.9M CFI cost share for power connections equipment installation, and signage/striping; No non-Federal match. This budget category includes costs for make-ready equipment, site trenching/construction, and minor grid upgrades required to interconnect the charging stations, charging hardware/equipment installation, and new sign and striping costs.

Operations & Maintenance: \$1.7M: Includes \$994K CFI cost share for L2 O&M; \$670 EVgo match share for DCFC O&M. This funding category includes costs to manage/contract for operations and maintenance of the charging ports for the duration of the grant period (first 5 years of operation of both L2 and DCFC equipment).

Ongoing Engagement and Education: \$630K: Includes \$630K CFI cost share to contract with outreach consultants and CBOs to conduct ongoing outreach/engagement and education events; No non-Federal match. In addition to the upfront engagement for site selection and planning, the Project team will select one or more CBOs to support ongoing in-language outreach and education on the benefits of EVs, how to safely and affordably access charging infrastructure, and how to use the installed projects with local communities. The selected CBO(s) will conduct a range of ongoing engagement activities including events, tabling, and site launch parties. SFE has also allocated \$500K for sub-grants to CBOs as well as over \$100K in additional outreach team staff time to facilitate and/or participate in ongoing events.

Program Evaluation/Equity Assessment: \$130K: Includes \$130K CFI cost share to contract with an organization to assist program monitoring and evaluation, including an equity assessment; No non-Federal match. The team will select an organization to assist with program evaluation and an equity assessment, to understand the impact of outreach, engagement, and education activities on the Project. SFE has allocated \$130K to cover initial support to set up relevant data collection early in project planning and design, a mid-grant evaluation, and a final evaluation and report.

Contingencies: \$1.0M: Includes \$1M CFI cost share to cover potential additional costs including new transformers that may be needed for each site. Given project uncertainties, EVgo and CK have allocated contingency funds for potential unforeseen costs such as new transformer equipment that may be needed at L2 sites.

Project (program) income: EVgo and CK expect all charging ports will function optimally during the grant term (seven years of operation) and beyond. Gross revenues accrued during the grant

period (up to a 15% reasonable rate of return over project lifetime) will be used for expenses not covered by the grant such as project management, legal, real estate leases, permits, and O&M including electricity costs. EVgo does not expect to earn net revenues during the grant period. CK will direct any net revenues back into the Project to subsidize charging rates for low-income and Justice40 communities for the duration of the grant period.

A detailed budget is attached to this submission as Appendix II.

III. Project Merit Criteria

Safety

As noted above and in line with NRSS objectives, project planning and implementation is driven by <u>Vision Zero SF</u>. Each project partner has extensive experience with safety during installation, maintenance, and operations of their projects. Each site plan will include rigorous safety protocols and mitigation measures. Installation teams will abide by all federal, state, and local safety requirements.

In addition to community engagement, the Project team will work with the City to conduct outreach to site-adjacent residents, businesses, and other property owners to brief them on the site installation process and ensure that sites meet the needs and safety of the community. All team members will work with CBO on education and outreach (including in-language to ensure that residents of neighborhoods where English is the not the primary language are able to participate).

For the charging station implementation, the team will work with the two local utility providers for permit review and approvals for grid connection and associated meters for proposed locations. Once PG&E or SFPUC approvals are obtained for each site, the team will work with SF Public Works Department, SF Department of Building Inspection, SF Fire Department, and SF Municipal Transportation Agency on obtaining approvals and construction permits to electrify station locations with the necessary grid connection and associated meters.

Safety is built into every facet of the design, construction and operation of an EVgo electric vehicle charging station. When possible, all EVgo stations have adequate overhead lighting and 24/7 monitored security cameras onsite to ensure drivers feel safe while charging their vehicles. All EVgo sites are thoughtfully designed, integrating accessibility, ADA compliance, and ease of use for customers' safety and convenience. Before a subcontractor is approved to build EVgo charging stations they must provide a detailed review of any safety incidents and provide a construction safety plan, approved by EVgo's Senior Director of Project Engineering. Every EVgo site has a documented operational safety plan and documented safety procedures for critical emergencies, which include immediately disabling the charging equipment remotely and sending a technician on site as soon as possible. The most common site safety emergency is a vehicle strike, when a vehicle hits a charging station or electrical equipment or when vandalism has left exposed wiring. EVgo mitigates these rare occurrences with protective measures such as curbs and bollards.

CK will ensure that the L2 projects will not adversely affect the overall safety of the travelling public. Site design will incorporate safety-enhancing features, such as user-friendly interfaces, clear signage, and efficient layouts, all aimed at boosting the user experience while minimizing potential hazards. In line with the NRSS objectives, the projects completed by CK support the goal

of achieving zero roadway deaths via a safe systems approach. CK systems are thoughtfully designed to decrease the incidence of accidents and to minimize the impact when they do occur. CK advocates for safety through design, utilizing industry best practices and the latest technology to create a safe and user-friendly environment. All sites will be tested prior to opening to ensure that all equipment is functional and safe.

Climate Change, Resilience, and Sustainability

A decrease in environmental exposure and burdens is a long term benefit of electrification. By focusing efforts in Justice40 communities, the Project team will help to reduce GHG emissions that are localized in particularly burdened neighborhoods. Emissions reductions in the transportation sector are tracked and updated on <u>San Francisco's GHG Emissions Dashboard</u>, and are regularly reported in the biennial <u>San Francisco Emissions Inventory Report</u>.

The project directly supports San Francisco's <u>Climate Action Plan (CAP)</u> goals to shift 80% of trips to low-carbon modes and electrify 25% of all registered private vehicles by 2030. The project centers the CAP's equity goals of ensuring all communities in San Francisco has access to EVs and charging infrastructure. In the event of grid interruption, the Project team will look to mobile generation sources, and the team will work with PG&E and the SFPUC to assess options in the event of rolling blackouts or grid interruptions. Project site planners will consider the potential impacts of climate change on the infrastructure and equipment installed to ensure that they are protected from flooding.

Environmental Justice

This project ensures that drivers who live in, adjacent to, or within 1/2 mile of a Justice40 community have reliable, safe, affordable access to EV charging infrastructure. In addition to providing opportunities and transportation alternatives to community residents, the project will reduce air quality impacts from vehicles that travel within and/or through these communities.

The project recognizes the disproportionate negative impacts of climate change and pollution on disadvantaged communities and is committed to addressing these issues and promoting environmental justice. Project sites are all located in urban areas with existing infrastructure, therefore the project team does not anticipate adverse impacts on air and water quality, wetlands, and endangered species. Through thorough planning and site selection processes, the team has ensured that equipment/infrastructure is deployed in locations that minimize potential harm to sensitive ecosystems. Project members also adhere to all relevant environmental regulations and guidelines to ensure the protection of natural habitats and species. CK utilizes the DOT Navigator Climate Checklist to ensure all aspects of climate resilience are integrated. This includes a commitment to reduce greenhouse gas emissions in the transportation sector and to align with the National Climate Resilience Framework. By powering more than 400 million electric miles since 2018, EVgo drivers have reduced the U.S. carbon footprint by 180,000 metric tons. EVgo was the first EV charging network to be 100% powered by renewable energy.

Equity, Community Engagement and Justice 40

All viable sites under consideration for charging infrastructure as part of this grant are either in or within a ½-mile of a Justice40 community. In addition to engaging community members in the site selection process, the Project will provide in-language education on EV technologies, benefits, and available incentives like Clean Cars for All to help Justice40 and low-income community

members make informed decisions and purchase EVs.

To date, community members across the city have participated in transportation electrification planning at all levels. Development of the City's CAP was a far-reaching, inclusive community revision and amendment process. A broad swath of communities and leaders participated in the process, including faith-based communities, workforce development organizations, and environmental groups as well as communities within the American Indian Cultural District and from the Mayor's Office on Disability. As a result, the CAP's strategies, metrics, and goals were developed in collaboration with the community.

The Curbside EV Charging Feasibility Study conducted initial, high-level community engagement to inform recommendations in the study, as well as next steps needed for deeper community input at the proposed site level. The CBOs *EV Charging for All Coalition* and *Golden Gate Electric Vehicle Association* provided feedback for the curbside study, and in Spring 2024, SFE and SFMTA facilitated an online webinar attended by 30 community members to assess broad community desire and concerns for curbside. Comments from the webinar and an online feedback form highlighted several community points regarding curbside charging, including:

- A strong interest in adding e-bike charging around on-street EV charging sites, particularly given that some rental housing does not allow indoor charging
- Adding active transportation upgrades at the same time that charging ports go in (e.g., adding a new bike lane and designing charging infrastructure around them)
- Concerns around EV and charging affordability, the loss of standard parking, and impacts to other transportation infrastructure in the public ROW
- Excitement for a potential pilot and desire to provide additional input on design including siting and enforcement

Outreach for this Project will be focused on the neighborhoods with on-street and private community-identified lots in Bayview Hunters Point and will include connecting directly with community members who live within 1-2 blocks of the selected sites by hosting community meetings/listening sessions, promoting an open public comment/feedback period, surveys, tabling at neighborhood and community events, posted notices. This Project presents an opportunity for the City to engage residents, small businesses, and other interested parties directly on the siting, design, and operations of electrification projects in their neighborhood. Community outreach is essential to ensuring that community members who have been historically excluded from public engagement opportunities (such as seniors, youth, and low-income and disadvantaged communities) are strategically targeted for inclusion in the process.

SF Environment has a robust racial and social equity team that has created a range of tools to assess the potential negative impacts of any proposed policies or programs it is implementing. One of these tools, its Racial and Social Equity Tool (R-SEAT), was designed to assess the potential impact (both negative and positive) of proposed Climate Action Plan strategies and actions. This tool will be leveraged in this project to ensure there are no adverse consequences and that the project truly serves those intended. As noted in the Innovative Payment Section, L2 charging will provide incentives, discounts, and free charging to equity communities when possible.

Workforce Development, Job Quality, and Wealth Creation

This project will create new jobs with free and fair choice to join a union that span across different specialties, including engineering, electricians, general construction, charging station service technicians, site maintenance personnel and fleet operations. The team will work with the Mayor's Office of Economic and Workforce Development to ensure hiring policies and workplace cultures promote the entry and retention of underrepresented populations and will leverage the City's pre-apprenticeship and construction administration training program, CityBuild to support local workforce development. EVgo and CK will select subcontractors for each project through a competitive procurement process sent to a pre-qualified pool of subcontractors, which includes local, small, and disadvantaged businesses (LBE, SB, and DBE, respectively).

EVgo is committed to attracting and retaining a skilled, gualified and diverse workforce through inclusive hiring practices and ongoing training programs that support employees. Open positions are posted on traditional job boards (e.g., LinkedIn and Indeed), and job boards targeting broader diversity in applicants. Through Job Target, EVgo posts open positions to boards hosted by professional organizations such as the National Society of Black Engineers and the Society of Hispanic Professional Engineers. EVgo employees are also active in several professional organizations, allowing access to events and career fairs through the Los Angeles Cleantech Incubator (LACI) and Women in Renewables (WRISE). EVgo is developing a scholarship program for employees of its contractor partners to complete the Electric Vehicle Infrastructure Training Program (EVITP). EVITP certification is increasingly a requirement of state and federally funded EV infrastructure projects, including several state-level projects funded through the National Electric Vehicle Infrastructure (NEVI) Program and CFI. Although EVgo works with highly qualified contractor partners for all EV infrastructure work, many of our partners do not have enough EVITP-certified electricians on staff to fulfill the number of projects anticipated to result from future funding. The scholarship program will not only fulfill this requirement, but EVgo will ensure that at least 40% of scholarship awardees are from Justice40 communities. Both EVgo and CK will pay prevailing wage as directed by the City and County of San Francisco.

CFI Program Vision

As noted above in this proposal, this project will address the Neighborhood and Multi-family Charging and Multi-Model Hubs and Shared-Use Fleets and Services focus areas under the CFI Community Program. The project will expand charging infrastructure as well as prepare for emerging multi-modal charging demands through a "dig once" approach. San Francisco currently lacks sufficient public charging infrastructure to serve growing demand. This grant presents an important opportunity to quickly increase publicly accessible charging infrastructure, providing both L2 and DCFC sites to serve a variety of behaviors and charging needs, including overnight charging for residents, destination charging for visitors, and fast charging for ride-share drivers in between shifts, so that each audience feels comfortable switching to EVs.

IV. Project Readiness and Environmental Risk

To date, the team has used existing feasibility studies, results of previously conducted community engagement efforts, vendor analysis tools, and cross-department collaborations to identify a total of 21 viable garages and lot sites and 16 viable curbside locations to deploy 300 charging ports. Up to 14 of these sites have a high readiness to install and deploy L2 ports within the first 12 months of the project. On-street and DCFC sites requiring additional community engagement, grid

analysis, and/or significant construction will be deployed within following 12-24. Since charging infrastructure will be installed in locations that are part of the existing built environment, the team does not anticipate environmental impacts. Completed, ongoing and planned community engagement efforts described throughout this proposal will be built upon to deploy curbside EV.

This project leverages recent local legislation updating San Francisco's Planning Code to create a clear pathway to expedite the installation of new EV charging locations and create a more robust charging network for residents and visitors. The legislation revises land-use zoning to allow zoning sites with existing automotive uses such as gas stations or parking lots to convert to an EV charging location. Finally, the project is aligned with the State of California's trailblazing Advanced Clean Cars II that establishes a year-by-year roadmap to ensuring 100% of new cars and light trucks sold in California will be zero-emission vehicles by 2035, including plug-in hybrid EVs. The regulation codifies Governor Newsom's Executive Order to phase out gasoline powered cars. Finally, San Francisco's Mayor and its Board of Supervisors are enthusiastic and supportive of the City's EV initiatives and will participate in opportunities to promote these projects to community members.

Year 1 Year 2 Year 3 Year 4 Year 5 Year 6 Year 7 Year 8 Q1 Q2 Q3 1 Q2 Q3 (01 02 03 02 03 02 03 Q2 Q3 Planning & Feasibility Partner alignment and subrecepient grant agreements Technical feasibility/site assessments and surveys - Off-Street DCFC and On-Street Level 2 Public solicitation for engagement/education contractor(s) and local CBO(s) Conduct upfront community engagement on site selection - On-Street Level 2 Site Control Negotiate off-street site host/lease agreements and complete City approvals Legislate on-street EV charging parking spaces **Competitive Procurement** Acquisition of charging equipment Contracting with construction, installation, operations, and/or maintenance vendor(s) **Outreach, Engagement, & Education** Develop outreach, engagement, and education plan Outreach on project updates and education campaigns re: EV/e-mobility benefits and incentives Design, Engineering, & Permitting Concept to 100% design - Off-Street Level 2 Permitting - Off-Street Level 2 Concept to 100% design - Off-Street DCFC NEPA Assessment and clearance - Off-Street DCFC Utility service determination and final engineering - Off-Street DCFC Permitting - Off-Street DCFC Concept to 100% design - On-Street Level 2 Utility service determination and final engineering - On-Street Level 2 Permitting - On-Street Level 2 **Construction & Installation** Installation and commissioning - Off-Street Level 2 Electrical site work and utility interconnection - Off-Street DCFC Civil site work and installation - Off-Street DCFC Site energization and commissioning - Off-Street DCFC Electrical, civil site work, and utility interconnection/site energization - On-Street Level 2 Installation and commissioning - On-Street Level 2 Project Operations Develop M&E plan for projects/equipment performance Project operations & maintenance Site monitoring and data collection/reporting Program Evaluation Develop evaluation plan for impact of outreach, engagement, education on project use Public solicitation for program evaluation/equity assessment consultant Program evaluation/equity assessment (mid-grant and final) Final report

Project Timeline

Over the 7-yr grant term, the project team will phase installations of the off-street L2, off-street DCFC, and on-street L2 ports and conduct both pre-installation and ongoing community

engagement and education to ensure communities participate and benefit from the infrastructure. The Project team anticipates installing all charging infrastructure within the first 24-36 months; potential risks to this timeline are indicated below and anticipated delays have been reflected in the above Gantt chart.

Year 1

- Complete subgrant contract negotiations
- Planning and public solicitation(s) to select contractor(s) and CBOs for outreach, engagement, and education
- Finalize lease agreements and begin permitting, power connections, and construction/installation for the off-street L2 sites
- Complete technical feasibility (site assessment/survey and final design) to confirm up to 3 off-street DCFC charging sites, including consideration of community preferred sites in Bayview Hunters Point
- Begin technical feasibility/site review and community engagement to prioritize and confirm on-street L2 charging sites
- Complete NEPA Clearance, submit utility applications, and complete permitting for offstreet DCFC sites *Assumes NEPA clearance is complete within 6 months, but this may be delayed up to 12 months, in which case DCFC project timelines will shift by 6 months*
- Kick off outreach and education in target neighborhoods (focused on EVs/Charging 101, residential EV incentives, and the Project's off-street L2 installations)

Year 2

- Complete permitting, power connections, and construction/installation for off-street L2 sites
- Complete final utility design, construction, energization, and commissioning for DCFC sites *May be delayed based on utility timeline to energization*
- Complete community engagement to prioritize and confirm on-street L2 sites and complete permitting *May require additional engagement if proposed sites need to be reevaluated based on community feedback*
- Continue outreach and education in target neighborhoods (focused on residential EV incentives and programs for ride-share drivers, and the Project's DCFC installations)

Year 3

- Complete installation, energization, and commissioning for on-street L2 sites
- Continue outreach and education in target neighborhoods (focused on the Project's onstreet L2 installations, including how to use on-street charging stations and access innovative payment methods and pricing)
- Complete mid-grant program (engagement/education) evaluation and equity assessment, and use learnings to inform remaining project work

Year 4

• Continue outreach and education in target neighborhoods (focused on e-micromobility 101 and incentives to build demand for potential future integrations with e-micromobility)

Year 5

- Complete outreach and education in target neighborhoods)
- Complete final program evaluation, equity assessment, and report

Years 6-7

• Continue O&M for installed charging infrastructure (up to each project's fifth year of operation)

Technical Statement of Work

All L2 sites will deploy dual port, 48A charging hardware. All DCFC sites will deploy fast charging hardware with a capacity of at least 150 kW. For all sites, CK and EVgo will first conduct site assessments and draft site layouts. For the on-street L2 locations, SFMTA will confirm that the locations proposed by CK meet City requirements, including:

- Within accepted, DPW right-of-way
- Parking adjacent to curb/sidewalk, such that no part of the charging infrastructure including the charging cord will overhang a path of travel (e.g., bike lane, traffic lane) (locations with floating parking are NOT eligible)
- Not on (but may be adjacent to) a commercial corridor, in order to retain that space for commercial activities and regulations that enable turnover for loading and visitors
- No regulatory, emergency access, or clearance conflicts (e.g., red curbs, within 20 feet of an approach of intersection, bus stops, loading zones, hydrants, etc.)
- At least 24 inches from the outside edge of the sidewalk curb where parallel parking is allowed, and at least 48 inches from the outside edge of the sidewalk curb where diagonal or perpendicular parking is allowed
- Slope grade does not exceed 5%
- Meets latest City accessibility rules and regulations (e.g., regarding curb ramp access)

For L2 sites, CK will prepare a set of draft preliminary design drawings which will be used to obtain permits and site-required documentation along with the official request to the power company for the power connection and an initial safety audit prior to the detailed design. At this point there will be a formal request for approval to proceed. The Detailed design phase will consist of Producing a set of General arrangement drawings inclusive of the construction Traffic management plan, apply for parking suspensions, Produce Risk assessment Method Statement (RAMS) which all form part of the site pack and final project budgets for approval to proceed. The Construction and Installation processes will then vary depending by site type:

- **On-Street L2**: CK will complete pre-site measures, encroachment, excavation and electrical permit applications with DPW and DBI. Once permitting is complete, SFMTA will then legislate the parking space at the curb for EV Charging and CK may then begin undertaking the civil work, rectifying any defects, installing the EV charging points, electrical certification, software calibration and verification, testing of equipment, notice of completion and Completion certificate issued, Test script issued, Health and safety information and as built information submitted to SF. Take over certificate issued.
- Off-Street L2: CK will complete pre-site measures, formal permit applications, civil work, and rectifying any defects. CK will then complete site induction, install Unistrut and transformers; power and data connections; and install data cables, router cabinets, antennas, and ethernet connections if required. CK will then install conduit drops on Unistrut, install all

metal work and flexible conduit, and run data and power cables, followed by fitting the charging port and connecting it to the network and testing and commissioning.

• Off-Street DCFC: EVgo will construct the required improvements or any material alterations or additions on the project site in a manner consistent with the approved plans. All required improvements shall be constructed in accordance with all generally applicable San Francisco Planning and Public Works Department construction policies and applicable regulations of the San Francisco Department of Building Inspection and Fire Departments and other agencies with jurisdiction over the project site, in each case as in effect as of the date on which such construction is to commence. To the extent construction permits are required under applicable laws and ordinances, EVgo shall process such permits and obtain approvals through the City of San Francisco.

Energy Source and Storage Needs

SFPUC is a part of the project team, and to prepare this proposal, the Project team has worked with both utility companies to assess power viability. During the project, CK and EVgo will work with SFPUC and PG&E for grid connection at the proposed locations. The Project team has worked with SFPUC, the utility provider for City-owned sites, to review preliminary electrical capacity in support of this application. During the grant term, SFPUC will continue to provide technical assistance and facilitate review and approvals of the Project's utility service applications on City-owned sites. The team will also work with PG&E on grid connection for the on-street and, if feasible, private lot in Bayview Hunters Point. It is likely that utility upgrades will be needed to complete the DCFC projects, and estimated budgets have been included for minor grid upgrades.

Real Property/ROW Acquisition

City agencies (i.e., SFMTA, Rec & Park, and the Port) currently have site control for the Cityowned property under consideration in this proposal. As key partners on this proposal and the property owners/managers of the proposed City-owned garages/lots, SFMTA and the Port will negotiate commercial lease agreements with the charging providers for the facilities it manages. Approval times can vary and the City's ability to execute a lease is subject to required approvals from the relevant Agency Commissions and/or, in some cases, the Board of Supervisors.

SFMTA would expect to negotiate a base rent for use of parking spaces, but beyond that it will be flexible in negotiating with the charging vendors to develop a program that provides maximum possible access to all user groups, especially those that currently struggle to find convenient access to charging. The Port sets a parameter rental rate schedule for its properties based on a comprehensive market review to determine the minimum rent based on facility, use, and location. If the charging projects propose improvements that upgrade or extend the life of Port infrastructure and/or improve its facilities, the Port may offer limited rent abatement to assist offsetting the cost and/or early entry to the premises for the construction of tenant improvements prior to rent commencing subject to pre-approval and verification the improvement costs and schedule.

As noted above, CK will complete encroachment permit applications with DPW and DBI for the on-street L2 locations. Once permitting is complete, SFMTA will then legislate the parking space at the curb for EV Charging, permitting CK to operate its L2 charging technology in the ROW.

Site Assessments and Permits

As part of the preliminary designs, site analysis and site selection for the preparation of this grant,

our EVSP providers have initially assessed and verified the potential installations on the identified City sites to ensure there is adequate electrical headroom and physical properties within the site to facilitate a standard installation without the need for costly upgrades or enhancements. Our EVSP providers will work with the City to secure all permits and leases.

Known or Anticipated Project Risks

The primary Project risk is related to the availability of adequate electric capacity from SFPUC and/or PG&E, and the potential delay on the utility side to assess and increase the capacity of the site to the full amount of power required in a timely fashion. Initial indications are promising, but the project team will work with SFPUC and PG&E to make the assessment on the utility capacity. Other top risks to a successful Project include:

- **Expensive power upgrades to the power network:** Early site evaluation with SFPUC and review of PG&E grid capacity data to understand existing electrical capacity has been undertaken during the initial site selection, but the team has selected several viable sites with the intention of ultimately screening out sites that may require costly, major grid upgrades such as new substations or extensive line extensions.
- Low utilization of services or EV adoption: Low utilization of units where there are limited EV users will result in expensive O&M and potential losses to the EVCP operators- This is mitigated through the grant covering O&M for the L2 ports for the first 5 years of operation to allow for EV adoption to catch up and reduce initial reliance on utilization to ensure project success. The Project's proposed ongoing outreach and education campaigns will also help increase utilization.
- **Risk or Injury to Users:** Where applicable, only UL certified equipment will be used as part of the project, with suppliers that have extensive experience in the delivery and operations of large-scale deployments of DC and AC charging equipment.
- Equipment and software failure: Only UL and fully certified and tested equipment will be used in the project. Software with our suppliers is already in extensive use and proven to be reliable and stable.

Equity and Accessibility

As discussed above, the Project team will work with the San Francisco Mayor's Office on Disability to ensure that access to all sites follow ADA requirements and all charging stalls will conform to local rules and regulations regarding ADA accessibility. Both CK and EVgo have extensive experience with ADA accessibility recommendations and requirements. EVgo has developed a set of industry-leading station design guidelines used for all sites that include specific design parameters for stalls to meet or exceed ADA accessibility standards. CK has also engaged with government and disability organizations to establish a framework that has reviewed accessibility of EV charging ports, which lead to the introduction of a UK standard (PAS1899) that outlines the best practice principles for the design, installation, and operation of EV charge points making them as accessible as possible for all people. CK's platform also supports a potential transition to future accessible charging solutions such as wireless charging.

Environmental Impacts

EVgo and CK will ensure compliance with relevant environmental regulations and coordinate NEPA compliance where required. EVgo has extensive experience working with Title 23 and

NEPA compliance through work with the federally funded Colorado Energy Office Electric Vehicle Direct Current Fast Charging Plazas Grant Program (CEO Plazas) and the National Electric Vehicle Infrastructure (NEVI) Formula Program in several states. EVgo has been awarded for 6 sites through the CEO Plazas program since 2020 and has operationalized 5 of these sites. As part of the award process, EVgo completed NEPA compliance reviews with CDOT, including completing NEPA requirements for two NEVI compliant sites. EVgo has experience and a documented internal review process for achieving NEPA compliance for Title 23 labor, safety, construction, documentation, and reimbursement requirements. With previous federal funded projects, EVgo would provide the environmental project manager a site plan that contains the limits of disturbance for each site, right of way or easements, a description of the project including construction techniques, depth of disturbance, removal of any vegetation or trees, the aesthetics of the equipment and any other details pertinent to the construction. Since charging infrastructure will be installed in locations that are part of the existing built environment, the team does not anticipate environmental impacts.

Build America Buy America

Both EVgo and CK will use goods, products, and materials produced in, and services offered in, the United States as part of the Build America, Buy America Act.