



STATE OF CALIFORNIA

GRANT REQUEST FORM (GRF)

CEC-270 (Revised 12/2019)

CALIFORNIA ENERGY COMMISSION

A) New Agreement # ARV-21-010 (to be completed by CGL office)

B) Division	Agreement Manager:	MS-	Phone
600 Fuels and Transportation Division	Matthew Kozuch	27	916-477-1564

C) Recipient's Legal Name	Federal ID #
STC Traffic, Inc.	56-2636889

D) Title of Project
STC Equity-Driven Public Access ZEV Charging Blueprint

E) Term and Amount

Start Date	End Date	Amount
07 / 15 / 2021	02 / 28 / 2023	\$ 200,000

F) Business Meeting Information

☐ ARFVTP agreements \$75K and under delegated to Executive Director

Proposed Business Meeting Date 07 / 15 / 2021 ☐ Consent ☒ Discussion

Business Meeting Presenter Kate Reid Time Needed: 5 minutes

Please select one list serve. Altfuels (AB118- ARFVTP)

Agenda Item Subject and Description:

STC TRAFFIC, INC. Proposed resolution approving Agreement ARV-21-010 with STC Traffic, Inc. for a \$200,000 grant to develop a planning blueprint that will provide cost-effective zero-emission charging for all members of the freight and goods movement ecosystem, and adopting staff's determination that this action is exempt from CEQA. (Clean Transportation Program funding.) Contact: Matt Kozuch. (Staff Presentation: 5 minutes)

G) California Environmental Quality Act (CEQA) Compliance

1. Is Agreement considered a "Project" under CEQA?

☒ Yes (skip to question 2) ☐ No (complete the following (PRC 21065 and 14 CCR 15378)):

Explain why Agreement is not considered a "Project":

Agreement will not cause direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment because .

2. If Agreement is considered a "Project" under CEQA:

a) ☒ Agreement **IS** exempt.

☐ Statutory Exemption. List PRC and/or CCR section number:

☒ Categorical Exemption. List CCR section number: Cal. Code Regs., tit. 14, § 15306

☐ Common Sense Exemption. 14 CCR 15061 (b) (3) Explain reason why Agreement is exempt under the above section: Agreement is exempt under the above section: Cal. Code Regs, tit. 14, §15306, Information Collection, provides that projects which consist of basic data collection, research and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource are categorically exempt from the provisions of CEQA.

**GRANT REQUEST FORM (GRF)**

This project consists of developing a planning document for possible, future deployment of zero emission vehicles and related infrastructure equipment. The project will not cause direct physical changes to the environment, and there will be no physical construction. This project involves data collection, technology assessment, public outreach, administrative coordination efforts, planning, and similar activities. Therefore, the proposed project will have no significant effect on the environment and is categorically exempt under section 15306.

- b) ☐ Agreement **IS NOT** exempt. (consult with the legal office to determine next steps)

Check all that apply

- ☐ Initial Study
☐ Negative Declaration
☐ Mitigated Negative Declaration
☐ Environmental Impact Report
☐ Statement of Overriding Considerations

H) List all subcontractors (major and minor) and equipment vendors: (attach additional sheets as necessary)

Legal Company Name:	Budget
Build Momentum	\$ 70,000.00
Arup North America Ltd,	\$ 49,500.00
e-Mission Control	\$ 5,500.00

I) List all key partners: (attach additional sheets as necessary)

Legal Company Name:
National City Chamber of Commerce
San Diego Port Tenants Association (SDPTA)
San Diego Gas & Electric (SDG&E)

J) Budget Information

Funding Source	Funding Year of Appropriation	Budget List Number	Amount
Funding Source	FY 19/20	601.118L	\$200,000
Funding Source			\$
Funding Source			\$
Funding Source			\$
Funding Source			\$

R&D Program Area: Select Program Area TOTAL: \$200,000

Explanation for "Other" selection

Reimbursement Contract #:

Federal Agreement #:

K) Recipient's Contact Information



STATE OF CALIFORNIA

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CALIFORNIA ENERGY COMMISSION

1. Recipient's Administrator/Officer

Name: Stephen Manganiello
Address: 5865 Avenida
Encinas,Suite 142-B
City, State, Zip: Carlsbad, CA
92008
Phone: (608) 469-1169
E-Mail:
stephen.manganiello@stctraffic.co
m

2. Recipient's Project Manager

Name: Stephen Manganiello
Address: 5865 Avenida
Encinas,Suite 142-B
City, State, Zip: Carlsbad, CA
92008
Phone: (608) 469-1169
E-Mail:
stephen.manganiello@stctraffic.co
m

L) Selection Process Used

- ☒ Competitive Solicitation Solicitation #: GFO-20-601
☐ First Come First Served Solicitation Solicitation #: - -

M) The following items should be attached to this GRF

- | | | |
|---|---|-----------------------------------|
| 1. Exhibit A, Scope of Work | <input checked="" type="checkbox"/> | Attached |
| 2. Exhibit B, Budget Detail | <input checked="" type="checkbox"/> | Attached |
| 3. CEC 105, Questionnaire for Identifying Conflicts | <input checked="" type="checkbox"/> | Attached |
| 4. Recipient Resolution | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> Attached |
| 5. CEQA Documentation | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> Attached |

Agreement Manager **Date**

Office Manager **Date**

Deputy Director **Date**

Exhibit A SCOPE OF WORK

TECHNICAL TASK LIST

Task #	CPR	Task Name
1		Administration
2	X	Community Engagement and Stakeholder Outreach
3		Public Access ZEV Infrastructure Design
4		Business Case Development
5		Knowledge Sharing
6		Project Fact Sheet
7		Blueprint Production

KEY NAME LIST

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
1	Stephen Manganiello (STC Traffic), Andrea Swanson (Momentum)	Momentum	
2	Andrea Swanson (Momentum)	Momentum	National City, Port of San Diego, San Diego Port Tenants Association
3	Stephen Manganiello (STC Traffic)		National City, Port of San Diego, San Diego Port Tenants Association, TAC Member
4	Stephen Manganiello (STC Traffic)	Arup, e-Mission Control	National City, Port of San Diego, San Diego Port Tenants Association, TAC Members
5	Andrea Swanson (Momentum)	Momentum	National City, Port of San Diego, San Diego Port Tenants Association
6	Andrea Swanson (Momentum)	Momentum	
7	Andrea Swanson (Momentum)	Momentum, Arup, e-Mission Control	

GLOSSARY

Specific terms and acronyms used throughout this scope of work are defined as follows:

Term/ Acronym	Definition
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
CBO	Community-based organization
CEC	California Energy Commission
Clean Transportation Program	Formerly known as Alternative and Renewable Fuel and Vehicle Technology Program
CPR	Critical Project Review
DVBE	Disabled veteran business enterprise
FTD	Fuels and Transportation Division
IOO	Independent owner-operator
MBE	Minority-owned business enterprise
MD/HD	Medium- and Heavy-Duty
Recipient	STC Traffic
SB	Small business
TAC	Technical Advisory Committee
WBE	Woman-owned business enterprise

BACKGROUND

Assembly Bill (AB) 118 (Núñez, Chapter 750, Statutes of 2007), created the Clean Transportation Program (formerly known as the Alternative and Renewable Fuel and Vehicle Technology Program). The statute authorizes the California Energy Commission (CEC) to develop and deploy alternative and renewable fuels and advanced transportation technologies to help attain the state's climate change policies. AB 8 (Perea, Chapter 401, Statutes of 2013) re-authorizes the Program through January 1, 2024, and specifies that the CEC allocate up to \$20 million per year (or up to 20 percent of each fiscal year's funds) in funding for hydrogen station development until at least 100 stations are operational. The Clean Transportation Program has an annual budget of approximately \$100 million and provides financial support for projects that:

- Reduce California's use and dependence on petroleum transportation fuels and increase the use of alternative and renewable fuels and advanced vehicle technologies.
- Produce sustainable alternative and renewable low-carbon fuels in California.
- Expand alternative fueling infrastructure and fueling stations.
- Improve the efficiency, performance, and market viability of alternative light-, medium-, and heavy-duty vehicle technologies.

- Retrofit medium- and heavy-duty on-road and non-road vehicle fleets to alternative technologies or fuel use.
- Expand the alternative fueling infrastructure available to existing fleets, public transit, and transportation corridors.
- Establish workforce training programs and conduct public outreach on the benefits of alternative transportation fuels and vehicle technologies.

The CEC issued GFO-20-601 entitled “Blueprints for Medium- and Heavy-Duty Zero-Emission Vehicle Infrastructure” under the CEC’s Clean Transportation Program. To be eligible for funding under GFO-20-601, projects must also be consistent with the CEC’s current Clean Transportation Program Investment Plan, updated annually. In response to GFO-20-601, the Recipient submitted Proposal #41, which was proposed for funding in the CEC’s Notice of Proposed Awards on April 8, 2021. GFO-20-601 is hereby incorporated by reference into this Agreement in their entirety.

In the event of any conflict or inconsistency between the terms of the Solicitation and the terms of the Recipient’s Application, the Solicitation shall control. Similarly, in the event of any conflict or inconsistency between the terms of this Agreement and the terms of the Recipient’s Application, the terms of this Agreement shall control.

Problem Statement:

The transition to MD/HD ZEVs creates important equity considerations for communities surrounding freight hubs where many IOOs live. Fueling paradigms are shifting and electric charging is increasingly shifting away from public accessibility to private fleet charging in equipment yards. How will IOOs—those with the least ability to pay for their own MD/HD ZEV chargers—compete for work in markets where clients increasingly prefer to seek contractors with ZEVs to meet their own sustainability goals? Without public-access to MD/HD ZEV infrastructure, IOOs may be forced out of the industry, as large companies and fleet managers—that can better manage technology and financial risk—adopt ZEVs more quickly and capture greater market share.

Goals of the Agreement:

The goal of this Agreement is to support and encourage equity in the marketplace by promoting public access to MD/HD ZEV infrastructure so that small business and individuals are not squeezed out of the market during the zero-emission technology transition.

Objectives of the Agreement:

The objectives of this Agreement are to:

1. Engage a broad stakeholder network to develop a comprehensive, economic, and equitable approach to designing and financing MD/HD ZEV infrastructure that will be accessible to all industry participants.
2. Evaluate the ZEV charging technologies, infrastructure deployment considerations, and associated traffic flows for public access MD/HD ZEV infrastructure.
3. Create a credible business case identifying, among other things, key roles and responsibilities for market players (public and private) and strategies to overcome cost and revenue barriers to achieve scalable and replicable networks of MD/HD ZEV infrastructure to be deployed throughout neighborhoods that surround freight facilities.

4. Support locally-based minority business enterprises (MBE), woman-owned business enterprises (WBE), small businesses (SB), and disabled veteran business enterprises (DVBE) through knowledge transfer and skills training programs to enable organically grown efforts to thrive.

TASK 1 ADMINISTRATION

Task 1.1 Attend Kick-off Meeting

The goal of this task is to establish the lines of communication and procedures for implementing this Agreement. The Commission Agreement Manager (CAM) shall designate the date and location of this meeting and provide an agenda to the Recipient prior to the meeting.

The Recipient shall:

- Attend a “Kick-Off” meeting with the CAM, the Commission Agreement Officer (CAO), and a representative of the California Energy Commission (CEC) Accounting Office. The Recipient shall bring their Project Manager, Agreement Administrator, Accounting Officer, and any others determined necessary by the Recipient or specifically requested by the CAM to this meeting.
- Discuss the following administrative and technical aspects of this Agreement:
 - Agreement Terms and Conditions
 - Critical Project Review (Task 1.2)
 - Match fund documentation (Task 1.6) No reimbursable work may be done until this documentation is in place.
 - Permit documentation (Task 1.7)
 - Subcontracts needed to carry out project (Task 1.8)
 - The CAM’s expectations for accomplishing tasks described in the Scope of Work
 - An updated Schedule of Products and Due Dates
 - Monthly Progress Reports (Task 1.4)
 - Technical Products (Product Guidelines located in Section 5 of the Terms and Conditions)
 - Final Report (Task 1.5)

Recipient Products:

- Updated Schedule of Products
- Updated List of Match Funds
- Updated List of Permits

Commission Agreement Manager Product:

- Kick-Off Meeting Agenda

Task 1.2 Critical Project Review (CPR) Meetings

CPRs provide the opportunity for frank discussions between the CEC and the Recipient. The goal of this task is to determine if the project should continue to receive Energy Commission

funding to complete this Agreement and to identify any needed modifications to the tasks, products, schedule or budget.

The CAM may schedule CPR meetings as necessary, and meeting costs will be borne by the Recipient.

Meeting participants include the CAM and the Recipient and may include the CAO, the Fuels and Transportation Division (FTD) program lead, other CEC staff and Management as well as other individuals selected by the CAM to provide support to the CEC.

The CAM shall:

- Determine the location, date, and time of each CPR meeting with the Recipient. These meetings generally take place at the CEC, but they may take place at another location or remotely.
- Send the Recipient the agenda and a list of expected participants in advance of each CPR. If applicable, the agenda shall include a discussion on both match funding and permits.
- Conduct and make a record of each CPR meeting. Prepare a schedule for providing the written determination described below.
- Determine whether to continue the project, and if continuing, whether or not modifications are needed to the tasks, schedule, products, and/or budget for the remainder of the Agreement. Modifications to the Agreement may require a formal amendment (please see section 8 of the Terms and Conditions). If the CAM concludes that satisfactory progress is not being made, this conclusion will be referred to the Lead Commissioner for Transportation for his or her concurrence.
- Provide the Recipient with a written determination in accordance with the schedule. The written response may include a requirement for the Recipient to revise one or more product(s) that were included in the CPR.

The Recipient shall:

- Prepare a CPR Report for each CPR that discusses the progress of the Agreement toward achieving its goals and objectives. This report shall include recommendations and conclusions regarding continued work of the projects. This report shall be submitted along with any other products identified in this scope of work. The Recipient shall submit these documents to the CAM and any other designated reviewers at least 15 working days in advance of each CPR meeting.
- Present the required information at each CPR meeting and participate in a discussion about the Agreement.

CAM Products:

- Agenda and a list of expected participants
- Schedule for written determination
- Written determination

Recipient Product:

- CPR Report(s)

Task 1.3 Final Meeting

The goal of this task is to closeout this Agreement.

The Recipient shall:

- Meet with CEC staff to present the findings, conclusions, and recommendations. The final meeting must be completed during the closeout of this Agreement.

This meeting will be attended by, at a minimum, the Recipient, the Commission Grants Office Officer, and the CAM. The technical and administrative aspects of Agreement closeout will be discussed at the meeting, which may be two separate meetings at the discretion of the CAM.

The technical portion of the meeting shall present an assessment of the degree to which project and task goals and objectives were achieved, findings, conclusions, recommended next steps (if any) for the Agreement, and recommendations for improvements. The CAM will determine the appropriate meeting participants.

The administrative portion of the meeting shall be a discussion with the CAM and the Grants Officer about the following Agreement closeout items:

- What to do with any equipment purchased with CEC funds (Options)
 - CEC request for specific “generated” data (not already provided in Agreement products)
 - Need to document Recipient’s disclosure of “subject inventions” developed under the Agreement
 - “Surviving” Agreement provisions
 - Final *invoicing and release of retention*
- Prepare a schedule for completing the closeout activities for this Agreement.

Products:

- Written documentation of meeting agreements
- Schedule for completing closeout activities

Task 1.4 Monthly Progress Reports

The goal of this task is to periodically verify that satisfactory and continued progress is made towards achieving the objectives of this Agreement on time and within budget.

The objectives of this task are to summarize activities performed during the reporting period, to identify activities planned for the next reporting period, to identify issues that may affect performance and expenditures, and to form the basis for determining whether invoices are consistent with work performed.

The Recipient shall:

- Prepare a Monthly Progress Report which summarizes all Agreement activities conducted by the Recipient for the reporting period, including an assessment of the ability to complete the Agreement within the current budget and any anticipated cost overruns. Each progress report is due to the CAM within 10 days of the end of the reporting period. The recommended specifications for each progress report are contained in Section 6 of the Terms and Conditions of this Agreement.
- In the first Monthly Progress Report and first invoice, document and verify match expenditures and provide a synopsis of project progress, if match funds have been

expended or if work funded with match share has occurred after the notice of proposed award but before execution of the grant agreement. If no match funds have been expended or if no work funded with match share has occurred before execution, then state this in the report. All pre-execution match expenditures must conform to the requirements in the Terms and Conditions of this Agreement.

Product:

- Monthly Progress Reports

Task 1.5 Final Report

The goal of the Final Report is to assess the project's success in achieving the Agreement's goals and objectives, advancing science and technology, and providing energy-related and other benefits to California.

The objectives of the Final Report are to clearly and completely describe the project's purpose, approach, activities performed, results, and advancements in science and technology; to present a public assessment of the success of the project as measured by the degree to which goals and objectives were achieved; to make insightful observations based on results obtained; to draw conclusions; and to make recommendations for further projects and improvements to the FTD project management processes.

The Final Report shall be a public document. If the Recipient has obtained confidential status from the CEC and will be preparing a confidential version of the Final Report as well, the Recipient shall perform the following activities for both the public and confidential versions of the Final Report.

The Recipient shall:

- Prepare an Outline of the Final Report, if requested by the CAM.
- Prepare a Final Report following the latest version of the Final Report guidelines which will be provided by the CAM. The CAM shall provide written comments on the Draft Final Report within fifteen (15) working days of receipt. The Final Report must be completed at least 60 days before the end of the Agreement Term.
- Submit one bound copy of the Final Report with the final invoice.

Products:

- Outline of the Final Report, if requested
- Draft Final Report
- Final Report

Task 1.6 Identify and Obtain Matching Funds

The goal of this task is to ensure that the match funds planned for this Agreement are obtained for and applied to this Agreement during the term of this Agreement.

The costs to obtain and document match fund commitments are not reimbursable through this Agreement. Although the CEC budget for this task will be zero dollars, the Recipient may utilize match funds for this task. Match funds shall be spent concurrently or in advance of CEC funds for each task during the term of this Agreement. Match funds must be identified in writing and the associated commitments obtained before the Recipient can incur any costs for which the Recipient will request reimbursement.

The Recipient shall:

- Prepare a letter documenting the match funding committed to this Agreement and submit it to the CAM at least 2 working days prior to the kick-off meeting. If no match funds were part of the proposal that led to the CEC awarding this Agreement and none have been identified at the time this Agreement starts, then state such in the letter. If match funds were a part of the proposal that led to the CEC awarding this Agreement, then provide in the letter a list of the match funds that identifies the:
 - Amount of each cash match fund, its source, including a contact name, address and telephone number and the task(s) to which the match funds will be applied.
 - Amount of each in-kind contribution, a description, documented market or book value, and its source, including a contact name, address and telephone number and the task(s) to which the match funds will be applied. If the in-kind contribution is equipment or other tangible or real property, the Recipient shall identify its owner and provide a contact name, address and telephone number, and the address where the property is located.
- Provide a copy of the letter of commitment from an authorized representative of each source of cash match funding or in-kind contributions that these funds or contributions have been secured. For match funds provided by a grant a copy of the executed grant shall be submitted in place of a letter of commitment.
- Discuss match funds and the implications to the Agreement if they are reduced or not obtained as committed, at the kick-off meeting. If applicable, match funds will be included as a line item in the progress reports and will be a topic at CPR meetings.
- Provide the appropriate information to the CAM if during the course of the Agreement additional match funds are received.
- Notify the CAM within 10 days if during the course of the Agreement existing match funds are reduced. Reduction in match funds must be approved through a formal amendment to the Agreement and may trigger an additional CPR meeting.

Products:

- A letter regarding match funds or stating that no match funds are provided
- Copy(ies) of each match fund commitment letter(s) (if applicable)
- Letter(s) for new match funds (if applicable)
- Letter that match funds were reduced (if applicable)

Task 1.7 Identify and Obtain Required Permits

The goal of this task is to obtain all permits required for work completed under this Agreement in advance of the date they are needed to keep the Agreement schedule on track.

Permit costs and the expenses associated with obtaining permits are not reimbursable under this Agreement. Although the CEC budget for this task will be zero dollars, the Recipient shall budget match funds for any expected expenditures associated with obtaining permits. Permits must be identified in writing and obtained before the Recipient can make any expenditure for which a permit is required.

The Recipient shall:

- Prepare a letter documenting the permits required to conduct this Agreement and submit it to the CAM at least 2 working days prior to the kick-off meeting. If there are no permits required at the start of this Agreement, then state such in the letter. If it is

known at the beginning of the Agreement that permits will be required during the course of the Agreement, provide in the letter:

- A list of the permits that identifies the:
 - Type of permit
 - Name, address and telephone number of the permitting jurisdictions or lead agencies
- The schedule the Recipient will follow in applying for and obtaining these permits.
- Discuss the list of permits and the schedule for obtaining them at the kick-off meeting and develop a timetable for submitting the updated list, schedule and the copies of the permits. The implications to the Agreement if the permits are not obtained in a timely fashion or are denied will also be discussed. If applicable, permits will be included as a line item in the Progress Reports and will be a topic at CPR meetings.
- If during the course of the Agreement additional permits become necessary, provide the appropriate information on each permit and an updated schedule to the CAM.
- As permits are obtained, send a copy of each approved permit to the CAM.
- If during the course of the Agreement permits are not obtained on time or are denied, notify the CAM within 5 working days. Either of these events may trigger an additional CPR.

Products:

- Letter documenting the permits or stating that no permits are required
- A copy of each approved permit (if applicable)
- Updated list of permits as they change during the term of the Agreement (if applicable)
- Updated schedule for acquiring permits as changes occur during the term of the Agreement (if applicable)
- A copy of each final approved permit (if applicable)

Task 1.8 Obtain and Execute Subcontracts

The goal of this task is to ensure quality products and to procure subcontractors required to carry out the tasks under this Agreement consistent with the Agreement Terms and Conditions and the Recipient's own procurement policies and procedures. It will also provide CEC an opportunity to review the subcontracts to ensure that the tasks are consistent with this Agreement, and that the budgeted expenditures are reasonable and consistent with applicable cost principles.

The Recipient shall:

- Manage and coordinate subcontractor activities.
- Submit a draft of each subcontract required to conduct the work under this Agreement to the CAM for review.
- Submit a final copy of the executed subcontract.
- If Recipient decides to add new subcontractors, then the Recipient shall notify the CAM.

Products:

- Letter describing the subcontracts needed, or stating that no subcontracts are required
- Draft subcontracts
- Final subcontracts

TECHNICAL TASKS

TASK 2 COMMUNITY AND STAKEHOLDER ENGAGEMENT

The goal of this task is to bring together a broad and diverse stakeholder audience—including industry participants, community stakeholders, finance partners, and technology providers—to foster productive and thoughtful dialogue around the deployment of ZEV infrastructure.

The Recipient shall:

- Prepare a *List of Outreach Targets* to ensure a diverse stakeholder audience. Provide a copy to the CAM.
- Prepare a *Community and Stakeholder Engagement Plan* to identify the purpose of its engagement with communities and stakeholders and the goals and intended outcomes of the outreach by each stakeholder segment. Provide a copy to the CAM.
- Engage electric utilities to support grid delivery, reliability, and resiliency. Engagement will include:
 - Outreach to San Diego Gas & Electric.
 - Discussions about existing or near-term programs managed by utilities to support the development of MD/HD ZEV infrastructure, including rebates and preferential tariffs.
 - Identification of opportunities and challenges associated with MD/HD ZEV infrastructure deployments.
- Engage local jurisdictions and planning organizations to ensure they are involved in the planning and permitting of the infrastructure. Engagement will include:
 - Outreach to the City of San Diego, National City, Chula Vista, and Barrio Logan to assess the permitting process for the installation of ZEV charging and relevant distributed energy resource (DER) technologies.
 - Outreach to San Diego County Air Pollution Control District.
 - Document actions or steps already adopted by local, state, and federal jurisdictions and the impact of those actions or steps on the development of MD/HD ZEV infrastructure and the electrification of multimodal transportation.
- Engage regional workplaces, business owners and operators, regional CBOs, community leaders, California Native American Tribes, and potentially affected local residents in the planning process and educate them on the benefits of ZEV transportation. Engagement will include:
 - Education about new and innovative technologies that solicit dialogue and conversation about the electrification of multimodal transportation and the future of sustainable freight.

- Work with community colleges, California State University Maritime Academy, CBOs, and community leaders to develop workforce development strategies that will enable training, education, and readiness for the local community workforce to obtain the requisite knowledge, skills, and ability to develop, support, and maintain the MD/HD ZEV fleets.
- Develop an outreach approach tailored to local community, supported by education and outreach materials appropriate for potentially affected residents, in the languages needed for the community, to educate on the planning efforts and potential future impacts.
- Engage drayage truck operators to foster dialogue and communication around new transportation paradigms.
- Engage financial institutions to ensure they are educated, involved, and committed to participate in the implementation of the MD/HD ZEV infrastructure blueprint. Engagement will include:
 - Outreach to clean energy infrastructure financiers with a history of supporting the development, installation, and operation of renewable energy technologies including DER technologies, microgrids, light-duty (LD) ZEV infrastructure, and renewable fuels projects.
 - Discussions to understand new and innovative business models around energy-as-a-service, incentive and credit monetization, and third-party ZEV fueling operations.
- Prepare a *Community and Stakeholder Engagement Report* including but not limited to:
 - Organizations, companies, and stakeholders that received outreach.
 - Summary of the outcomes of such outreach (e.g. engaged in dialogue, declined to participate, did not respond).
 - Overview of topics discussed.
 - Summary of the key findings aggregated by stakeholder segment.
- Provide a copy of the *Community and Stakeholder Engagement Report* to the CAM.

Products:

- List of Outreach Targets
- Community and Stakeholder Engagement Plan
- Community and Stakeholder Engagement Report

[CPR WILL BE HELD IN THIS TASK. See Task 1.2 for details]

TASK 3 PUBLIC ACCESS ZEV INFRASTRUCTURE DESIGN

The goal of this task is to assess viable technology options, analytical tools, software applications, and data that will be needed to evaluate the economic and technological feasibility of MD/HD ZEVs and ZEV infrastructure supporting the movement of goods from California's freight hubs.

The Recipient shall:

- Analyze the combination of technologies and systems that offer the best mix of economic, environmental, and technical performance specific to the project/region.
 - Explore innovative MD/HD charging options to address potential infrastructure barriers. Technology options may include wireless charging, high-powered charging, overhead catenary systems, solar chargers, robotic chargers, mobile chargers, curbside, streetlamp, and intersection chargers, or autonomous garages.
 - Include appropriate Vehicle-Grid Integration (VGI) standards and open standards-based network communications.
 - Include the ability to support emerging connectors and/or interfaces for heavy-duty vehicles, open standards-based network communications, the inclusion of appropriate VGI standards, and/or other methods for enhancing grid-reliability by providing data to utilities to predict charging behavior and associated impacts on the grid.
 - Include how the project integrates energy storage for the electricity grid.
 - Include the use of interoperable MD/HD charging connectors and/or charging interfaces compatible with MD/HD vehicles sold by multiple original automotive equipment manufacturers for widespread use across California and North America.
 - Engage with original equipment manufacturers (OEMs) of MD/HD ZEV vehicles to understand their visions for connectors and interfaces.
 - Include other methods for enhancing grid-reliability by providing data to utilities to predict charging behavior and associated impacts on the grid.
 - Produce a *MD/HD ZEV Technical Report* summarizing MD/HD ZEV charging technology and system research and analysis. Provide a copy to the CAM.
- Identify the actions and milestones needed for implementation of MD/HD ZEVs and ZEV charging infrastructure, as follows:
 - Quantitative goals and specific, realistic timelines for installation and implementation of MD/HD electric vehicle charging infrastructure within the project.
 - Identify analytical tools, software applications, and data needed to improve future MD/HD ZEV infrastructure planning activities.
 - Potential sites, maps, and accessibility to travel routes identified for proposed MD/HD charging.
 - Identify optimal locations for MD/HD ZEV infrastructure deployment and the rationale for being considered optimal.
 - Evaluate MD/HD vehicle usage and driving patterns in order to maximize and optimize the type and placement of ZEV infrastructure to support the MD/HD ZEVs.
- Produce a *Public Access ZEV Infrastructure Feasibility Study and Technical Report* including but not limited to:

- The approach to evaluating public access locations.
 - Site considerations.
 - Site identification process.
 - Site evaluation results.
- Provide a copy of the *Public Access ZEV Infrastructure Feasibility Study and Technical Report* to the CAM.
- Produce *Public Access ZEV Infrastructure GIS Maps* including but not limited to:
 - Existing and proposed electrical infrastructure
 - Potential ZEV charging sites
 - Roadway network
 - Access routes
 - Right of way and parcel boundaries
- Provide a copy of the *Public Access ZEV Infrastructure GIS Maps* to the CAM.
- Produce *Schematic Design and Simulations* for on-street and off-street ZEV charging hubs. Provide a copy to the CAM.

Products:

- MD/HD ZEV Technical Report
- Public Access ZEV Infrastructure Feasibility Study and Technical Report
- Public Access ZEV Infrastructure GIS Maps
- Schematic Design and Simulations

TASK 4 BUSINESS CASE DEVELOPMENT

The goal of this task is to create the business case for public-access ZEV infrastructure by taking a holistic look at the technology and infrastructure considerations, the public sector objectives, relevant private sector players, existing business model framework from comparable sectors, and key risks.

The Recipient shall:

- Develop a baseline business model for public access ZEV charging stations, identifying core cost and revenue centers.
- Identify and rank the financial risk associated with the various components of the business case to prioritize investment hurdles.
- Identify each potential stakeholder and potential area of responsibility required of the project partners and stakeholder groups to develop a replicable approach for other fleets transitioning to zero-emission.
- Evaluate how potential stakeholder values align with the identified risks and mitigations strategies.
- Illustrate a possible deal structure, defining roles for key stakeholder and market participants.

- Conduct high-level market soundings with equity investors, lenders, and rating agency representatives to solicit feedback on risk and bankability.
- Produce a *Public Access ZEV Infrastructure Business Framework* report summarizing the activities conducted in this task and the feedback provided by key stakeholders. Provide a copy to the CAM.

Products:

- Public Access ZEV Infrastructure Business Framework

TASK 5 KNOWLEDGE SHARING

The goal of this task is to conduct outreach to key stakeholders across the state so that the Blueprint can be adopted, adapted, utilized, and replicated.

The Recipient shall:

- Identify goals to reduce greenhouse gas (GHG) emissions, criteria air pollutants, and toxic air contaminants for the region, and the emitters at the local level that would need to be targeted.
- Summarize the types of jobs that will be created for the local community.
- Identify the benefits that would accrue to disadvantaged communities (DACs), low-income communities, priority populations, and/or tribal lands to the maximum extent possible. Address health and safety, access and education, financial benefits, economic development, and consumer protection.
- Identify stakeholders that could benefit from the Blueprint findings outside of the core group of participants and technical advisors.
- Create a *Blueprint Findings Presentation* to summarize the key findings and resources developed through the blueprint process. Provide a copy to the CAM.
- Conduct outreach to stakeholders that participated in Task 2 outreach and the newly identified additional stakeholders.
- Submit a *Summary of Knowledge Transfer Outreach Activities* to document the organizations that were addressed and any feedback provided. Provide a copy to the CAM.

Products:

- Blueprint Findings Presentation
- Summary of Knowledge Transfer Outreach Activities

TASK 6 PROJECT FACT SHEET

The goal of this task is to develop an initial and final project fact sheet that describes the CEC-funded project and the benefits resulting from the project for the public and key decision makers.

The Recipient shall:

- Prepare an Initial Project Fact Sheet at start of the project that describes the project and the expected benefits. Use the format provided by the CAM.

- Prepare a Final Project Fact Sheet at the project's conclusion that describes the project, the actual benefits resulting from the project, and lessons learned from implementing the project. Use the format provided by the CAM.
- Provide at least (6) six High Quality Digital Photographs (minimum resolution of 1300x500 pixels in landscape ratio) from the project.

Products:

- Initial Project Fact Sheet
- Final Project Fact Sheet
- High Quality Digital Photographs

TASK 7 BLUEPRINT PRODUCTION

The goal of this task is to develop a Blueprint with the relevant process, information, and lessons learned to be adopted and replicated by interested stakeholders.

The Recipient shall:

- Prepare a *Blueprint Outline* that conveys the intended structure of the Blueprint and the intended goals and outcomes of major sections.
- Integrate findings from the Technical Tasks into the *Blueprint Outline*
- Complete *Blueprint Draft*
- Incorporate feedback as provided by the CAM
- Prepare *Blueprint Final*

Products:

- Blueprint Outline
- Blueprint (Draft and Final)

STATE OF CALIFORNIA

STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION - RE: STC TRAFFIC, INC.

RESOLVED, that the State Energy Resources Conservation and Development Commission (CEC) adopts the staff CEQA findings contained in the Agreement or Amendment Request Form (as applicable); and

RESOLVED, that the CEC approves Agreement ARV-21-010 with STC Traffic, Inc. for a \$200,000 grant to develop a planning blueprint that will provide cost-effective zero-emission charging for all members of the freight and goods movement ecosystem; and

FURTHER BE IT RESOLVED, that the Executive Director or his/her designee shall execute the same on behalf of the CEC.

CERTIFICATION

The undersigned Secretariat to the CEC does hereby certify that the foregoing is a full, true, and correct copy of a Resolution duly and regularly adopted at a meeting of the CEC held on July 15, 2021.

AYE:

NAY:

ABSENT:

ABSTAIN:

Liza Lopez
Secretariat