STATE OF CALIFORNIA

GRANT REQUEST FORM (GRF)

CEC-270 (Revised 12/2019) CALIFORNIA ENERGY COMMISSION

A) New Agreement # ARV-21-016 (to be completed by CGL office)

B) Division	Agreement Manager:	MS-	Phone
600 Fuels and Transportation Division	Ian Baird	27	916-805-7480

C) Recipient's Legal Name	Federal ID #
Grossmont Union High School District	95-6001517

D) Title of Project
Grossmont Union High School District School Bus Fleet Electrification Blueprint

E) Term and Amount

Start Date	End Date	Amount
07 / 15 / 2021	03 / 31 / 2022	$ 199,908

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 Katie Reid Time Needed: minutes

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

Agenda Item Subject and Description:

GROSSMONT UNION HIGH SCHOOL DISTRICT. Proposed resolution approving Agreement ARV-21-016 with Grossmont Union High School for a $199,908 grant to develop a planning "blueprint" document that will identify the actions and milestones needed to accelerate the transition of the school district's 67 diesel-fueled school bus fleet to all battery-electric, install the related electric charging infrastructure and adopting staff's determination that this action is exempt from CEQA. (Clean Transportation Program funding.) Contact: Ian Baird. (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, 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. 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 destruction. 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.

☐ Common Sense Exemption. 14 CCR 15061 (b) (3) Explain reason why Agreement is exempt under the above section:

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**
Engie Insight Services, Inc.	$ 148,692.00
San Diego Workforce Partnership, Inc.	$ 33,420.00

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

Legal Company Name:

STATE OF CALIFORNIA

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J) Budget Information

Funding Source	Funding Year of Appropriation	Budget List Number	Amount
ARFVTP	FY 19/20	601.118L	$199,908
Funding Source			$
Funding Source			$
Funding Source			$
Funding Source			$

R&D Program Area: Select Program Area TOTAL: $

Explanation for "Other" selection

Reimbursement Contract #: Federal Agreement #:

K) Recipient's Contact Information

1. Recipient's Administrator/Officer

Name: Katy Wright

Address: PO Box 1043

City, State, Zip: La Mesa, CA 91944

Phone: 619-644-8154

E-Mail: kwright@guhsd.net

2. Recipient's Project Manager

Name: Lindsey Danner

Address: PO Box 1043

City, State, Zip: La Mesa, CA 91944

Phone: 619-644-8181

E-Mail: lemerson@guhsd.net

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		☒ Attached
2.	Exhibit B, Budget Detail		☒ Attached
3.	CEC 105, Questionnaire for Identifying Conflicts		☒ Attached
4.	Recipient Resolution	☒ N/A	☐ Attached
5.	CEQA Documentation	☒ N/A	☐ Attached

Ian J. Baird — 06/17/2021

Agreement Manager **Date**

Elizabeth John — 06/18/2021

Office Manager **Date**

John Butler II — 06/18/2021

Deputy Director **Date**

Exhibit A
SCOPE OF WORK
Grossmont Union High School District

TECHNICAL TASK LIST

Task #	CPR	Task Name
1		Administration
2		Essential Electrification of Existing School Bus Service
3	X	Advanced Electrification of School Bus Service
4		Essential Electrification of Expanded School Bus Service
5		Financing Solutions for Electrification of School Bus Service
6		Workforce Development for Electrification of School Bus Service
7		Project Fact Sheet
8		Blueprint

KEY NAME LIST

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
1	Lindsey Danner – GUHSD; Katy Wright – GUHSD; Rian Pinson – GUHSD; Karim Farhat – ENGIE Impact	ENGIE Impact	
2	Lindsey Danner – GUHSD; Katy Wright – GUHSD; Karim Farhat – ENGIE Impact; Jaron Weston – SDG&E	ENGIE Impact	SDG&E
3	Lindsey Danner – GUHSD; Katy Wright – GUHSD; Karim Farhat – ENGIE Impact; Jaron Weston – SDG&E	ENGIE Impact	SDG&E
4	Lindsey Danner – GUHSD; Katy Wright – GUHSD; Karim Farhat – ENGIE Impact; Jaron Weston – SDG&E	ENGIE Impact	SDG&E
5	Lindsey Danner – GUHSD; Katy Wright – GUHSD; Karim Farhat – ENGIE Impact	ENGIE Impact	
6	Lindsey Danner – GUHSD; Katy Wright – GUHSD;	SDWP	ENGIE Impact

Exhibit A
SCOPE OF WORK
Grossmont Union High School District

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
	Sarah Burns – SDWP; Karim Farhat – ENGIE Impact		
7	Lindsey Danner – GUHSD; Katy Wright – GUHSD; Karim Farhat – ENGIE Impact	ENGIE Impact	
8	Lindsey Danner – GUHSD; Katy Wright – GUHSD; Karim Farhat – ENGIE Impact	ENGIE Impact	SDG&E; SDWP

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
CAPEX	Capital Expenditures
CEC	California Energy Commission
Clean Transportation Program	Formerly known as Alternative and Renewable Fuel and Vehicle Technology Program
CPR	Critical Project Review
CNA	Community Needs Assessment
DCFC	Direct current fast charger
DER	Distributed Energy Resources
EV	Electric Vehicle
FTD	Fuels and Transportation Division
GHG	Greenhouse Gas
GUHSD	Grossmont Union High School District
OPEX	Operational expenditures
Recipient	Grossmont Union High School District
RFP	Request for Proposal
RIASEC	Realistic, Investigative, Artistic, Social, Enterprising, and Conventional
SBFEB	School Bus Fleet Electrification Blueprint
SDG&E	San Diego Gas and Electric
SDWP	San Diego Workforce Partnership

Exhibit A
SCOPE OF WORK
Grossmont Union High School District

Term/ Acronym	Definition
TCO	Total Cost of Ownership
ZEV	Zero-Emission Vehicle

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 #10 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:
Climate change is a major reality in California, necessitating urgent action to reduce greenhouse

gas emissions. From droughts to rising temperatures, wildfires, and public safety power shutoffs, the residents of California feel the effects of climate change every day. The transportation sector accounts for more than 40% of the total greenhouse gas (GHG) emissions in California, requiring urgent and decisive interventions to advance and accelerate transportation decarbonization. The state has taken several ambitious initiatives to realize that goal, from setting low-carbon fuel standards, to regulating emissions for medium- and heavy-duty vehicles, to Governor Newsom's most recent Executive Order in September 2020 to phase-out fossil fuel-powered internal combustion engines by 2035.

Today, one-in-eight California students ride the bus to and from school.[1] Public school fleet services provide one of the most accessible and reliable transit options for students, with the potential to efficiently transport large groups and minimize the number of vehicles on the road. However, California school districts everywhere will be under massive pressure to meet the state's ambitious clean transportation goals, without disrupting the existing service for families, all within the next 15 years. To be successful, schools' transition to zero-emission bus fleet will require substantial support from the public and private sectors.

The Grossmont Union High School District (GUSHD) has a fleet of 67 diesel buses that operate on recurring routes. GUHSD is excited to embark on a transition to a zero-emission school bus fleet but recognizes some immense challenges and key barriers to adoption:

- ***Technological barriers – complex solution portfolio:*** Electric school bus and charging station technologies are complex and rapidly evolving. Developing a zero-emission fleet is about more than replacing all diesel buses with electric buses. It involves (1) ensuring the new electric buses have enough range and seat capacity to run the same routes reliably; (2) purchasing and setting up the right number of charging stations – too few could leave a school bus fleet ill-equipped to support its student population and too many may take away critical budget from other district programs; (3) ensuring clean and cost-effective power supply from the utility or onsite renewables; (4) setting up the right software to manage all the different hardware pieces; and many other considerations. Successful planning for an electric school bus fleet requires the integration and coordination of several pieces: electric vehicle, charging and grid infrastructure, digital tools for fleet management, clean energy supply, and education and training.

- ***Market barriers – Fragmented solution portfolio:*** Once there is clarity on what type of bus, charging hardware, charging software, and energy technologies are needed for a zero-emission fleet, a school district must tackle a very fragmented market of different manufacturers, suppliers, and vendors selling different components of the required full solution. Developing an integrated solution is further complicated by lack of clarity in the market around product characteristics and price. Furthermore, the prospects of fleet financing solutions to reduce upfront cost remain highly uncertain and lack specificity.

[1] https://lao.ca.gov/reports/2014/education/school-transportation/school-transportation-022514.aspx

- ***Other barriers – Stakeholder engagement:*** Without strong engagement from community members as well as stakeholders at each level of GUSHD, fleet electrification and route optimization will not effectively address the needs of students and individual schools, inhibiting the project's potential return on investment. Effective stakeholder engagement requires dedicated efforts and resources, which are often very limited at school districts.

Goals of the Agreement:

The goal of this project is to develop a blueprint for the full transition of GUHSD's 67 diesel-fueled school buses to clean, affordable, and resilient electric fleet over the next 20 years. This shift to ZEVs will reduce greenhouse gas (GHG) emissions in the communities GUHSD serves, improving overall air quality and eliminating students' exposure to harmful pollutants. This blueprint will also inform the District's efforts to expand bus service in underserved areas, to endorse and support innovation that helps future-proof their electric fleet, to secure financial resources for deployment, and to facilitate meaningful community-learning and workforce-development opportunities.

Objectives of the Agreement:

The objectives of this project cover several key items for GUHSD's electric school bus fleet:

- Optimal selection and sizing of electric buses, including number of buses, seating capacity, and make/model;
- Optimal selection and sizing of EV charging stations, including number of connectors, maximum charging rate, and make/model;
- Evaluation of grid impact and the need for distributed energy resources (DERs), including needed supply capacity from the grid and/or DERs;
- Determining the need and specifics of expanding or adding new bus routes, especially within disadvantaged and low-income communities;
- Determining the lowest Total Cost of Ownership (TCO) option for fleet transition, including required CAPEX and OPEX for buses, charging infrastructure, and energy supply;
- Quantifying CO2 emissions savings and other environmental benefits;
- Identifying funding options, including grants and financing solutions;
- Assessing the value of bi-directional charging capabilities, including additional potential revenue from offering resiliency and grid services;
- Investing in workforce development that focus on career counseling for students in the electric mobility space.

At the end of the project, to verify and document the completion and fulfillment of these objectives, the blueprint will include specific numerical results for each objective, along with qualitative description and confirmation of support and buy-in from relevant stakeholders.

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.

Exhibit A
SCOPE OF WORK
Grossmont Union High School District

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 ESSENTIAL ELECTRIFICATION OF EXISTING SCHOOL BUS FLEET

The overarching goal of this major task is to conduct a thorough technical, environmental, and economic analysis to transition the existing GUHSD school bus fleet from conventional diesel to electric. This Essential Electrification of Existing School Bus Fleet analysis covers the full transition of the existing 67 buses over a period of 20 years, and it includes: optimal selection and sizing of electric school buses; optimal selection and sizing of EV charging infrastructure; needed grid capacity upgrades; optimal selection and sizing of distributed energy resources (DERs) – primarily onsite solar and battery storage systems – to avoid or reduce the need for grid upgrades; evaluation of total cost of ownership and economic savings relative to diesel fleet; and CO_2 emissions reduction and other environmental benefits.

Task 2.1 Stakeholder Engagement

The goal of this task is to identify, engage with, and secure the alignment among and support of all the stakeholders who need to be informed about and/or involved in the decision-making for planning the Essential Electrification of Existing School Bus Fleet. This task ensures clear mutual understanding of objectives, roles and responsibilities, processes, and timelines.

The Recipient shall:

- Identify a list of key Decision-Making Stakeholders who need to be involved in the decision-making for planning and executing the Essential Electrification of Existing School Bus Fleet analysis.
- Schedule regular monthly meetings to provide progress updates and facilitate decisions by Decision-Making Stakeholders.
- Provide minutes of discussions and decisions to the CAM.
- Conduct 2-3 deep-dive workshops to solicit, map, and prioritize feedback by the Decision-Making Stakeholders.
- Provide copies of the agendas, materials, and summaries of discussions, agreements, and takeaways to the CAM.
- Identify a list of key Advisory Stakeholders who need to be informed and engaged in the planning and the analysis.
- Schedule townhalls and develop surveys to gather feedback from and provide updates to Advisory Stakeholders.
- Provide townhall meeting minutes, documented feedback, and survey results to the CAM.

Products:

- Decision-Making Stakeholders meetings: Minutes of discussions and decisions
- Decision-Making Stakeholders workshops: Agendas, materials, and summaries of discussions, agreements, and takeaways
- Advisory Stakeholders: Townhall meeting minutes, documented feedback, and survey results

Task 2.2 Acquisition and Validation of Input Data for Optimization Analysis

The goal of this task is to collect all data needed as input into the modeling digital tool to optimize the progressive electrification of the school buses. This includes data related to the fleet mobility schedules, energy supply, as well as the technical and economic specifications for buses and infrastructure (EV charging stations, grid infrastructure, solar panels, and battery energy storage systems).

The Recipient shall:

- Develop a Master Input Data Template to identify, structure, and gather all necessary data input for the assessment.
    - Categorize the input data into nine distinct sets: (1) general financial input; (2) existing buses' schedules and routes; (3) current diesel bus specifications; (4) electric bus specifications; (5) EV charging infrastructure specifications; (6) grid infrastructure specifications; (7) solar panels and battery energy systems specifications; (8) utility energy supply; (9) facility load profile
    - Further characterize the data in each of input data sets into three quantifiable sub-categories: (i) technical, (ii) economic, and (iii) environmental

- Determine the sources of data inputs and design a plan for securing that data.
- Ensure needed input data is accurate and delivered on schedule.
- Produce a Master Input Data File, with clean, structured, parametrized, gap-free, and high-quality data, covering all categories (1)-(9) and sub-categories (i)-(iii) identified above, to serve as input into the modeling digital tool.
- Provide a copy of the Master Input Data Template and Master Input Data File to the CAM.

Products:

- Master Input Data Template
- Master Input Data File

Task 2.3 Running the Optimization Analysis

The goal of this task is to use the input data from Task 2.2 to run a mobility-energy optimization to determine the best fleet electrification option. The optimization aims to identify the optimal technical configuration that minimize the total cost of ownership of the whole fleet over its lifetime, while also accounting for strict environmental and emissions constraints when selecting that technical configuration. To ensure accurate and insightful results, rigorous troubleshooting and quality control will be applied throughout the whole process, to identify and resolve any issues that might arise while conducting the optimization runs.

The Recipient shall:

- Prepare a Reference Fleet Report, including but not limited to, analysis of the total cost of ownership (TCO) and CO2 emissions of the existing fleet, assuming business-as-usual operation and renewal of diesel buses over the next 20 years.
- Provide the Reference Fleet Report to the CAM.
- Run the modeling digital tool to conduct a techno-economic mobility-energy optimization for four sequential phases, defined as:
    - Phase 1: the electrification of the first 19 buses in the fleet service over a period of three years (2021-2023).
    - Phase 2: the electrification of the next batch of 13 buses in the fleet service over a period of two years (2024-2025).
    - Phase 3: the electrification of the next batch of 15 buses in the fleet service over a period of three years (2027-2029).
    - Phase 4: the electrification of all 20 remaining diesel buses in the fleet service over a period of 10 years (2030-2040).
- Prepare a Phase 1-4 Report, including but not limited to, a description of the modeling and analysis process developed.
- Provide the Phase 1-4 Report to the CAM.
- Conduct regular updates on the process with the Decision-Making Stakeholders, including preliminary findings and unexpected delays or hurdles along the way. Provide a copy of Progress Reports to the CAM.

Products:

- Reference Fleet Report
- Phase 1-4 Report
- Progress Reports

Task 2.4 Synthesis and Documentation of Results and Recommendations from Optimization Analysis

The goal of this task is to effectively synthesize, document, and report the methods, results, and findings from the optimization analysis. The results outline the combination of technologies and systems that offer the best mix of economic, environmental, and technical performance, and they help identify the key actions and milestones needed for the optimal implementation of the electric school charging infrastructure. In addition, this task aims to leverage the analysis results to articulate clear recommendations that minimize the risks and uncertainties surrounding the design and permitting of the bus charging infrastructure for this project, and that guide the development of a replicable approach for other school bus fleets transitioning to zero-emission.

The Recipient shall:

- Document and synthesize the raw results from the optimization analysis in clearly structured Output Datasheets.
- Provide Output Datasheets to the CAM.
- Develop a Brief Overview Report and Full Technical Report, to be used by the Decision-Making and Advisory Stakeholders. The Brief Overview Report should provide a shorter summary of the Full Technical Report, and the Full Technical Report should document the Essential Electrification of Existing Fleet optimization analysis input data, process, outputs, findings, and recommendations, and include:
    - Technology selection:
        - Optimal electric bus model to replace diesel model for each existing bus route.
        - Optimal number and model(s) of EV charging stations needed to fulfill the charging needs for all electrified buses, collectively.
            - Charging profile of each electrified school bus.
            - Charging profile associated with each EV charging station, potentially fulfilling the charging needs of multiple buses.
        - Optimal energy supply:
            - Optimal energy supply from the grid (if any); any needed grid infrastructure upgrades.
            - Optimal energy supply from onsite DERs (if any); selection and size of equipment.
    - Total cost of ownership for transitioning the full school bus fleet over the next 20 years.

- Identification of the different cost components: CAPEX vs. OPEX; electric buses; charging infrastructure; grid infrastructure; DER infrastructure.
- Comparison of TCO of Reference diesel fleet to that of fully electrified fleet, and documentation of total cost savings.

- Environmental benefits associated with transitioning the full school bus fleet over the next 20 years.
  - Comparison of CO2 emissions from Reference diesel fleet to that of fully electrified fleet, and documentation of total CO2 emissions reduction.
  - Description of other health and environmental benefits associated with fleet electrification, including reduction in particulate matter.
  - Special emphasis on quantifying the environmental benefits for disadvantaged and low-income communities.
- Recommendations:
  - Identify the key actions and milestones needed to effectively implement the optimal electric school charging infrastructure, and that help minimize the risks and uncertainties surrounding the design and permitting for this project.
  - A clear timeline and scope of work for local jurisdictions and planning organizations to ensure they are involved in the planning and permitting of the infrastructure.
  - A clear timeline and scope of work for local utility to support with grid infrastructure, including needed upgrades.

- Provide Brief Overview Report and Full Technical Report to the CAM.
- Develop infographics, presentations, web content, brochures, or similar material to share the main findings of the Essential Electrification of Existing Fleet optimization analysis with broader audience, including the local communities and the general public. Provide copies of materials to the CAM.

- Develop “RFP Guidebook” to inform the design of the Request for Proposal (RFP) requirements for the school district to procure electric buses, charging stations, and any needed DERs. The RFP Guidebook will include technical requirements and equipment specifications; supplier requirements; desired timeline and budget; desired ownership and operation models for the buses as well as charging and energy infrastructure.

Products:

- Output Datasheets
- Brief Overview Report
- Full Technical Report
- Infographics, seminars, presentations, web content, brochures, or similar material

- RFP Guidebook

TASK 3 ADVANCED ELECTRIFICATION OF SCHOOL BUS FLEET

The overarching goal of this major task is to further advance innovation for school bus electrification in California, specifically conducting a thorough technical, environmental, and economic analysis for implementing bi-directional charging of the school buses. The bi-directional charging would leverage the buses as an energy and grid asset while still completely fulfilling their original mobility service. The aim of this Advanced Electrification of School Bus Fleet task is to quantify how bi-directional charging changes the optimal fleet configuration and operation for specific vehicle-to-building (V2B) and/or vehicle-to-grid (V2G) use-cases; for each use-case, the assessment covers changes in technical specifications of installed assets, economics, and environmental impact.

Task 3.1 Select Vehicle-to-Building (V2B) and Vehicle-to-Grid (V2G) Use-Cases

The goal of this task is to define, select, and fully scope specific use-cases for bi-directional charging of electric school buses, covering V2G and/or V2B use-cases. This subtask will identify, engage with, and secure support of all relevant stakeholders, with special emphasis on engaging utility partner (SDG&E) and the populations that would be directly impacted by these use-cases.

The Recipient shall:

- Identify and update, as needed the list of key Decision-Making Stakeholders.
- Conduct regular meetings, workshops, and other means of engagement to consider and review potential options for V2B and V2G use-cases.
- Define a list of criteria, as well as decision-making process, for selecting and prioritizing use-cases for the assessment.
- Secure stakeholder consensus on the selected use-cases and the scope of the assessment: total number of use-cases; use-cases' objectives, timeframe, and special requirements; number of buses and/routes involved; etc.
- Provide a Use-Case Summary Report, describing and detailing the objective and scope of each use-case.

Products:

- Use-Case Summary Report

Task 3.2 Acquisition and Validation of Input Data for Optimization Analysis

The goal of this task is to collect all data needed as input into the modeling digital tool to optimize the bi-directional charging of school buses, enabling them to both fulfill their mobility original service as well as deliver energy and grid services. This includes all the data previously identified in Task 2.2, in addition to any unique data needed for the use-cases agreed upon in Task 3.1.

The Recipient shall:

- Update the Master Input Data Template and Master Input Data File. Include any unique data needed for the use-cases agreed upon in Task 3.1, to complete the Master Input Data Template. Such data may span category (8) and (9) related to utility energy supply and building load, respectively. Examples of such data could be:
    - Interconnection specifications impacting technical and/or economic optimization.
    - Technical and economic specifications for net-energy-metering programs, to account for net-export of electricity into the grid.
    - Technical and economic specifications for demand-response programs, in which the buses might participate through a vehicle-to-building setting, to offer reliability services. Such specifications include schedules of events, compensation mechanism and provisions, etc.

Products:

- Updated Master Input Data Template
- Updated Master Input Data File

Task 3.3 Running the Optimization Analysis

The goal of this task is to use the updated input data to run a mobility-energy optimization to determine the best fleet electrification option for V2G/V2B use-cases.

The Recipient shall:

- Run the modeling digital tool to conduct a techno-economic mobility-energy optimization for V2G/V2B use-cases.
- Prepare a V2G/V2B Use-Case Optimization Report, including but not limited to, a description of the modeling and analysis process developed.
- Conduct regular updates on the process with the Decision-Making Stakeholders, including preliminary findings and unexpected delays or hurdles along the way. Provide a copy of Progress Reports to the CAM.

Products:

- V2G/V2B Use-Case Optimization Report
- Progress Reports

Task 3.4 Synthesis and Documentation of Results and Recommendations from Optimization Analysis

The goal of this task is to effectively synthesize, document, and report the results and findings from the optimization analysis of the V2G/V2B use-cases. The results will outline the combination of technologies and systems that offer the best mix of economic, environmental, and technical performance for the bi-directional charging of school bus fleet.

The Recipient shall:

- Document and synthesize the raw results from the optimization analysis in clearly structured Output Datasheets.
- Provide Output Datasheets to the CAM.
- Develop a Brief Overview Report and Full Technical Report, to be used by the Decision-Making and Advisory Stakeholders. The Brief Overview Report should provide a shorter summary of the Full Technical Report, and the Full Technical Report should document the Advanced Electrification of School Bus Fleet optimization analysis input data, process, outputs, findings, and recommendations, and include:
    - Technology selection of: optimal electric bus model; optimal number and model(s) of EV charging stations needed to fulfil the bi-directional charging requirements for electrified buses, collectively; optimal energy supply from the grid and DERs.
    - Total cost of ownership over the next 20 years.
    - Environmental benefits over the next 20 years.
    - Highlight key differences in technology selection, economics, and environmental impact for each considered V2G/V2B use-case.
    - Identify the key actions and milestones needed to effectively implement the optimal electric school charging infrastructure with bi-directional capabilities.
    - Minimize the risks and uncertainties surrounding the design and permitting for this project with bi-directional capabilities.
- Develop dedicated “bi-directional charging” section in the procurement RFP Guidebook. This section will provide instructions and guidance on how to use the analysis findings from the V2G/V2B use-cases to effectively articulate requirements and solicit solutions for bi-directional charging in the RFP process to procure electric buses, charging equipment, and any needed DERs for fleet electrification.

Products:

- Output Datasheets
- Brief Overview Report
- Full Technical Report
- Updated RFP Guidebook

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

Exhibit A
SCOPE OF WORK
Grossmont Union High School District

TASK 4 ESSENTIAL ELECTRIFICATION OF EXPANDED SCHOOL BUS FLEET

The overarching goal of this major task is to conduct a thorough technical, environmental, and economic analysis for the electrification of new bus routes that the school district community will likely need over the next five years. Building on Task 2, the aim of this Essential Electrification of Expanded School Bus Fleet task is to quantify the incremental increase in total number of electric buses and in sizing/capacity of charging and energy supply infrastructure to accommodate the new bus routes. This covers: optimal selection and sizing of the electric school buses for the new routes; incremental change in selection and sizing of EV charging infrastructure; incremental change in grid capacity upgrades; incremental change in selection and sizing of distributed energy resources (DERs) – primarily onsite solar and battery storage systems – to avoid or reduce the need for grid upgrades; incremental change in total cost of ownership and economic savings; and incremental change in CO2 emissions reduction and other environmental benefits.

Task 4.1 Community Needs Assessment

The goal of this task is to build on and expand the stakeholder engagement process in Task 2.1, to develop comprehensive understanding of and secure alignment around community needs for new school bus service, especially in disadvantaged and low-income communities. This subtask will identify, engage with, and secure support of all the stakeholders involved in planning the Essential Electrification of Expanded School Bus Fleet, ensuring clear mutual understanding of objectives, roles and responsibilities, processes, and timelines.

The Recipient shall:

- Form a dedicated Community Needs Assessment (CNA) team to focus on assessing the needs for new school bus service routes, with special emphasis on service in disadvantaged and low-income community.
    - Assemble a diverse and representative CNA Team, including but not limited to members of the following types of stakeholders in disadvantaged and low-income communities: schools parent councils; school principals; neighborhood councils; civic leaders; and local clean energy advocates. Limit the team to 8-10 members.
    - Facilitate discussions and secure consensus on the CNA Scope: goals; geographic focus area; number of new bus routes; timeline to commission new bus routes; etc.
    - Develop and secure buy-in on the CNA Strategy and Workplan, including but not limited to:
        - Determine workplan schedule and timeline for data gathering, data processing, presenting recommendations, etc.
        - Determine roles and responsibilities of team members; optimize task assignments.
        - Agree on decision-making process.
    - Determine existing data to use or methods for collecting and processing new data.

- Provide a CNA Strategy and Workplan Summary to the CAM, including but not limited to, discussions, timeline, roles and responsibilities, and decision-making process.

Products:

- CNA Strategy and Workplan Summary

Task 4.2 Acquisition and Validation of Input Data for Optimization Analysis

The goal of this task is to collect all data needed as input into the modeling digital tools to optimize the progressive electrification of the expanded school bus service. This includes all the data previously identified in Task 2.2, in addition to the data on proposed new bus routes from the Community Needs Assessment in Task 4.1.

The Recipient shall:

- Update the Master Input Data Template and Master Input Data File. Include any unique data needed proposed new bus routes from the Community Needs Assessment in Task 4.1.

Products:

- Updated Master Input Data Template
- Updated Master Input Data File

Task 4.3 Running the Optimization Analysis

The goal of this task is to use the input data from Task 3.2 to run a mobility-energy optimization to determine the best fleet electrification option. This Task repeats the optimization process described in Task 2.3, with the addition of the new bus routes.

The Recipient shall:

- Run the modeling digital tool to conduct a techno-economic mobility-energy optimization for new bus routes.
- Prepare a New Bus Route Optimization Report, including but not limited to, a description of the modeling and analysis process developed.
- Conduct regular updates on the process with the Decision-Making Stakeholders, including preliminary findings and unexpected delays or hurdles along the way. Provide a copy of Progress Reports to the CAM.

Products:

- New Bus Route Optimization Report
- Progress Reports

Task 4.4 Synthesis and Documentation of Results and Recommendations from Optimization Analysis

The goal of this task is to effectively synthesize, document, and report the results and findings from the optimization analysis. Building on Task 2.4, the results outline the combination of technologies and systems that offer the best mix of economic, environmental, and technical performance for the expanded school bus fleet, with the new routes accounted for.

The Recipient shall:

- Document and synthesize the raw results from the optimization analysis in clearly structured Output Datasheets.
- Provide Output Datasheets to the CAM.
- Develop a Brief Overview Report and Full Technical Report, to be used by the Decision-Making and Advisory Stakeholders. The Brief Overview Report should provide a shorter summary of the Full Technical Report, and the Full Technical Report should document the Essential Electrification of Expanded School Bus Fleet optimization analysis input data, process, outputs, findings, and recommendations, and include:
    - Technology selection of: optimal electric bus model; optimal number and model(s) of EV charging stations needed to fulfil the charging needs for all electrified buses with new routes, collectively; optimal energy supply from the grid and DERs.
    - Total cost of ownership for transitioning the full expanded school bus fleet over the next 20 years.
    - Environmental benefits associated with transitioning the full expanded school bus fleet over the next 20 years.
    - Key differences in technology selection, economics, and environmental impact, especially on disadvantaged and low-income communities.

Products:

- Output Datasheets
- Brief Overview Report
- Full Technical Report

TASK 5 FINANCING SOLUTIONS FOR ELECTRIFICATION OF SCHOOL BUS SERVICE

The goal of this task is to explore feasible financing options to help GUHSD implement the full transition to electric school bus fleet over time. Informed by Tasks 2, 3, and 4, this Task would quantify GUHSD's specific financing needs, and it would propose concrete financing partners, solutions, and models that would address the ownership and operation of the school buses, EV charging infrastructure, grid infrastructure, and onsite DERs.

Task 5.1 Identify Total Financing Needs

The goal of this task is to articulate, scope, and quantify the financing resources needed by GUHSD to implement the full electrification of the school bus fleet over time. Assessing the need for financing encompasses the purchase of the electric buses, EV charging infrastructure, and supporting energy supply infrastructure. This task builds on the economic findings of Task 2, Task 3, and Task 4, leveraging the total cost of ownership results to inform the estimates for financing needs.

The Recipient shall:

- Identify relevant federal and state grants that help fund the school district fleet electrification.
- Estimate the total amount of funds that can be available for GUHSD through public and private grants to procure and deploy electric fleet assets.
- Compare the grant-funding estimates with the total cost of ownership estimates from Task 2, Task 3, and Task 4, in order to quantify the needed financial resources year after year, termed “Total Financing Need”.
- Document all findings in a Financing Need Summary report and spreadsheet, which describe and quantify: (1) the grant-funding estimates and (2) the Total Financing Need for the School District to fully implement fleet electrification.
    - For each year over the next 20 years.
    - For each type of asset: (i) school buses, (ii) EV charging infrastructure, and (iii) grid infrastructure, (iv) DER infrastructure.
- Provide Financing Need Summary Report to the CAM.

Products:

- Financing Need Summary Report

Task 5.2 Identify Attractive Financing Models, Solutions, and Partners

The goal of this task is to investigate and recommend feasible and attractive financing models, solutions, and partners that can help GUHSD secure the financial resources needed to fully implement the school bus fleet electrification. This task will assess several financing options, highlighting the advantages, disadvantages, risks, and strategic fit of each option for the Recipient, and it will help the Recipient engage in informed and direct conversations with potential financiers.

The Recipient shall:

- Identify a list of potential financing models that might be suitable for the electrification of GUHSD school bus fleet.
- Develop a List of Financing Model Criteria, focusing on advantages, disadvantages, risks, and strategic fit of those models for school bus electrification in general and for the GUHSD circumstances in particular. Evaluate the financing models based on the criteria.
- Provide List of Financing Model Criteria to the CAM.
- Prioritize and recommend a short list of two-to-three (2-3) financing models that are most suitable to finance a school bus fleet electrification project.
- Identify the top financiers in the market who can offer the identified financing models, and initiate conversation with these financiers to assess suitability.
- Provide List of Financiers to the CAM.

- Develop a Financing Models Report summarizing the process and findings of identifying and evaluating financing solutions that are suitable for GUHSD school bus fleet electrification, including generalizable insights and lessons-learned that can be applicable to electrification of school bus fleets across California school districts.

Products:

- List of Financing Model Criteria
- List of Financiers
- Financing Models Report

TASK 6 WORKFORCE DEVELOPMENT FOR ELECTRIFICATION OF SCHOOL BUS SERVICE

The goal of this task is to design workforce development strategies that inform and engage with local communities, focusing on training, education, and readiness that can support school bus fleet electrification efforts over time. This includes a clear articulation and analysis of the jobs that fleet electrification will facilitate, along with the skills and requirements to prepare for and fulfill these jobs. Furthermore, this task puts extra emphasis on supporting career opportunities for local students, especially in disadvantaged and low-income communities, by creating materials and initiatives that inform about such opportunities and help facilitate recruitment.

Task 6.1 Workforce & Training Needs Analysis

The goal of this task is to develop a summary of the types of jobs that will be created for the local community, the requisite knowledge, skills and abilities for each position, and training programs available to prepare the local workforce for these needs.

The Recipient shall:

- Conduct conversations with two other local school districts who have pursued MD/HD ZEV fleets to learn from their experience in securing the necessary workforce for the projects.
- Interview 3-5 companies that specialize in installing or maintaining the necessary infrastructure to support MD/HD ZEV bus fleets to assess local challenges in recruiting for these occupations.
- Analyze labor market data to estimate workforce availability and supply gap.
- Research available training programs offered by public or private entities that can help to close the workforce supply gap.
- Develop a Workforce Training Needs Summary Report to document occupation supply gap analysis, overview of currently available training programs, and recommendations for any training programs that may need to be created.

Products:

- Workforce Training Needs Summary Report

Task 6.2 Career Pathway Recruitment Resources

The goal of this task is to create materials to advertise career opportunities in clean transportation and fleet electrification to local students and their families, and to design a strategy to recruit the necessary workforce with an emphasis on reaching out to and engaging with students in disadvantaged and low-income communities.

The Recipient shall:

- Create three day-in-the Life Profiles to showcase careers. Provide copies of Life Profiles to the CAM.
- Design 3-5 one-page "Career Pathway" documents to illustrate career opportunities, including required training/education and wage expectations. Provide copies of Career Pathway documents to the CAM.
- Develop a Strategy Guidebook for using new collateral to advertise career opportunities to the local community. The Strategy Guidebook will include, but is not limited to, recommended partners and channels through which to promote career opportunities, specific school programs to reach out to, lists of target audiences, and recommended language for communicating with different audiences.
- Provide Strategy Guidebook to the CAM.
- Develop training materials for GUHSD staff. Provide materials to the CAM.
- Train GUHSD staff to execute on workforce recruitment strategy.
- Translate all print or recorded recruitment content into other languages such as Spanish, Arabic and/or Farsi to create access for more individuals in the local community.

Products:

- Life Profiles
- Career Pathway documents
- Strategy Guidebook
- Training Materials

TASK 7 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 8 BLUEPRINT

The goal of this task is to develop a comprehensive School Bus Fleet Electrification Blueprint (SBFEB) that guides and facilitates a step-by-step implementation of the GUHSD school bus fleet electrification over the next 20 years. The SBFEB builds on and leverages all the analyses, findings, recommendations, information sharing, and engagement activities in Tasks 2-7, in order to ensure clarity, emphasize transparency, stimulate enthusiasm, secure commitment, and track progress among all parties involved in implementing this transition.

The Recipient shall:

- Define an aspirational and inclusive Vision for the electrification of school bus fleet, to serve as the overarching “mission statement”
- Articulate three strategies for the school bus service electrification, stemming from the Vision, including:
    - Strategy 1: covers the essential electrification of existing fleet service.
    - Strategy 2: covers the essential electrification of expanded fleet service, with additional routes.
    - Strategy 3: covers the advanced electrification of expanded fleet service, with school buses providing energy and grid services atop their mobility services.
- For each of the three strategies, over the 20-year timeline, the Blueprint will:
    - Articulate Needs & Benefits, with special emphasis on how the strategy:
        - Is consistent with state and local environmental goals
        - Supports disadvantaged and low-income communities
        - Covers intangible benefits such as nurturing innovation and creating economic opportunities
    - Provide detailed description of combination of technologies and systems that offer the best mix of economic, environmental, and technical performance for the school bus fleet; this includes selection, sizing, and replacement schedule of school buses, selection and sizing of EV charging stations, impact on grid infrastructure, sizing of onsite energy supply, and choice of utility billing rate.
    - Set major implementation Milestones/Goals that must be reached at or before specific dates; those milestones include but are not limited to:
        - Environmental milestones related to: (i) CO2 emission reduction; (ii) electric bus and EV charging infrastructure deployment.

        - Societal milestones related to: (i) extent of mobility and/or energy/grid services provided; (ii) extent of mobility and/or energy/grid services provided specifically in DACs and low-income communities; and (iii) workforce development.
    - Define concrete Metrics to quantify, measure, and track progress on the set milestones.
    - Identify and assign Stakeholders that should be involved to fulfill each milestone, as well as their roles and responsibilities.
    - Determine Business Enablers that can help fulfill each milestone; business enables include but are not limited to:
        - Funding opportunities, such as grants.
        - Financing solutions, such as asset financing or leasing.
        - Ownership, operation, and partnership models.

Products:

- Draft School Bus Electrification Blueprint
- Final School Bus Electrification Blueprint with: Vision, Strategies, Needs & Benefits, Milestones, Metrics, Stakeholders, and Business Enablers

RESOLUTION NO: 21-0715-5i

STATE OF CALIFORNIA

STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION - RE: GROSSMONT UNION HIGH SCHOOL DISTRICT

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-21-016 with Grossmont Union High School District for a $199,908 grant to develop a planning blueprint that will identify the actions and milestones needed to accelerate the transition of the school district's 67 diesel-fueled school bus fleet to all battery electric, and install the related electric charging infrastructure; 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