



Placerville Police Department

730 Main St.

Placerville, California 95667

(530) 642-5210

Fax: (530) 642-5258

August 11, 2020

Air Quality Management District
330 Fair Lane
Placerville, California 95667
(530)621-7578

Subject: AB2766 Motor Vehicle Emission Reduction Project

AQMD,

Please find the Placerville Police Departments proposal to purchase a Tesla Model 3 using \$46,000 of AB 2766 funds. This vehicle will be used as a commute vehicle for one of our police officers and also for daily work activities including but not limited to; patrol, attend meetings or trainings, responding to emergencies, community events, parades, the annual El Dorado County Fair, National Night Out and joint law enforcement activities with other agencies; including the El Dorado County Sheriff, CHP, South Lake Tahoe Police and the Folsom Police Department.

As the El Dorado County Seat, The City of Placerville is proud to take the lead on reducing emissions that pollute our community. Through the AQMD Motor Vehicle Emission Program, the City of Placerville hopes to be more proactive in reducing pollutants, specifically those caused by vehicle emissions.

I am looking forward to hearing that our proposed project has been accepted and I appreciate your consideration in helping the City of Placerville provide an environmentally responsible solution to pollution within our community. If there are any questions, please let me know.

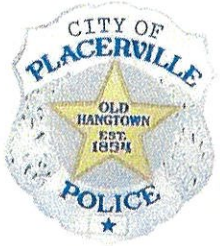
Respectfully,

John Meuser, Commander
(530)642-5210 Office
730 Main Street
Placerville, Ca. 95667
jmeuser@cityofplacerville.org

CONTENTS CHECKLIST

Applicant: Placerville Police Department

- Project Summary Sheet (Cover) – _____
- Request for Proposal Contents Checklist (Second Page) – _____
- Authorization Letter/Resolution - _____
- Project Description – _____
- Project Organization/Background – page _____
- Emission Benefits/Cost Effectiveness – page _____
(*Must utilize **May 2013** Emission Factors*)
- Work Statement – page _____
- Funding Request/Cost Breakdown – page _____
- Matching Funds – page _____
- Schedule of Deliveries/Self-Monitoring Program – page _____
- Local TRPA Review (If Applicable) – page _____
- 2 Copies of Proposal – page ENCLOSED
- Attachments _____



Joseph Wren
Chief of Police (Interim)
jwren@cityofplacerville.org
530-642-5218



August 13, 2020

El Dorado County Air Quality Management District
330 Fair Lane
Placerville, CA 95667

Re: AB2766 Grant Funding RFP

EDC AQMD,

The City of Placerville City Manager has authorized the Placerville Police Department to apply for 2020 AB2766 Funding for a zero emissions vehicle. This authorization is in accordance with City Council policy and upon successful awarding of the grant the City Council will provide a resolution of acceptance as required.

Thank you for this opportunity.

Respectfully,

A handwritten signature in blue ink, appearing to read "J. Wren".

Joseph Wren
Chief of Police

PROJECT SUMMARY

Applicant: City of Placerville Police Department

Contact Person: John Meuser, Commander

Address: 730 Main Street, Placerville, Ca. 95667

Telephone: (530)642-5210

FAX: (530)642-5258

Email: jmeuser@cityofplacerville.org

Project Description:

This project will provide a zero-emissions vehicle to the Placerville Police Department to be used as a take home car for a sworn police officer. The vehicle will be used daily as a command vehicle and will be used for an employee’s commute as well as for other law enforcement activities.

This zero-emission vehicle will replace a 2005 Jeep Liberty with 78,320 miles on it. If this vehicle is not replaced it will be driven for 5-7 more years, or until it has 120,000 miles on it. The Tesla Model 3 will supplement the Placerville Police Departments other low emission vehicles, a Ford Escape Hybrid and a Ford Fusion Hybrid. This electric vehicle will reduce our tail-pipe emissions and be a public display of the Placerville Police Departments dedication to reducing our carbon footprint.

The Tesla Model 3 would be used as a take home vehicle, reducing emissions during the officers commute to and from work. It will also be used for; commuting to trainings, meetings, call outs during the officers off time, in our annual Christmas Parade and posted on the Placerville Police Departments Social Media Page.

The Tesla Model 3 electric vehicle provides several benefits to the community of Placerville and surrounding areas. In addition to the electric vehicle being zero emissions, it is also silent and enhances the quiet atmosphere of the city and its surrounding recreational areas.

Estimated Emission Reductions/Cost-Effectiveness	
Useful Life of Project (years)	12
Total Lifetime Emissions Reduced (lbs. of ROG, NOx, PM-10)	62.4
Cost-Effectiveness (total project costs)*	\$737.17 per lb.
Cost-Effectiveness (AQMD Funded project costs)*	\$589.74 per lb.

* See Attachment 3 for instructions

Budget Summary	AB 2766 Funds	Matching Funds	In-Kind Match	Total Project Costs
Materials	\$36,800	\$9200 (20%)	\$	\$46,000
Personnel	\$	\$	\$	\$
Other	\$	\$	\$	\$
TOTAL	\$36,800	\$9200	\$	\$46,000

BUDGET ITEMIZATION

Expand Table as necessary to itemize all expenditures

Line Item	Title/Classification	No. Of Hours	Salary Rate	Benefit %	Total	Total Costs
	Contracts (removal, transportation, disposal)					
Materials & Supplies	Tesla Model 3					\$46,000
Equipment Rental						
Other Costs						

PROJECT GRAND TOTAL: \$ 46,000

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Project Description

This project will provide a zero-emission vehicle which will replace a 2005 Jeep Liberty. The vehicle will be outfitted with emergency equipment and available to respond to emergencies, conduct patrol operations and for use during special events, including the annual El Dorado County Fair and annual Christmas Parade.

The Tesla Model 3 produces no tailpipe emissions, creates virtually no noise pollution, and requires none of the consumables like fuel, oil, or coolant used by internal combustion engines. According to the EPA, the Tesla Model 3 is the most efficient electric vehicle ever made. Unlike the gas engine Crown Victoria's that get on average 24 miles per gallon, the Tesla Model 3 gets 141 miles per gallon equivalent, meaning the Tesla Model 3 vehicle is nearly six times more efficient.

Electric vehicles also have the capacity to be powered entirely by renewable resources. As the energy grid becomes greener, so does a Tesla Model 3. Over 40 studies have concluded that usage of plug-in electric vehicles would reduce carbon emissions in 49 US states, including those that are most heavily dependent on coal.

In addition to the substantial reduction in tail-pipe emission, these vehicles have a smaller footprint than a traditional police department vehicle, thus producing less dust, which will reduce airborne emission.

The Tesla Model 3 will provide tangible benefits to the City of Placerville and surrounding community immediately upon receiving it. Besides being zero emission, this electric vehicle is almost completely silent, this will be beneficial to Law Enforcement operations. The tactical advantages of these vehicles are numerous, but to list a few they are able to accelerate instantly from a silent idle and they are extremely maneuverable. They silently idle while among crowds preserving the welcoming atmosphere of our Main Street events.

The alternative, a gas powered vehicle presents several risks that the Tesla Model 3 does not. Some of these risks are:

- Increased noise and exhaust disturbances
- Gas and oil spills
- Burn and fire risks

With the addition of this zero-emission electric vehicle, we hope to further promote green technology and improve the environmental credentials of local authorities, while serving our community. The Placerville Police Department current has one (1) electric Zero Motorcycle and two hybrid vehicles, the feedback from the community has been nothing but positive. Officers using this one Zero are always met with intrigue from residents and visitor alike, inquiring into

the technology used. Showing off this zero emission vehicle allows our officers to connect with the community and act as ambassadors to living a greener lifestyle.

Project Organization

This project will be administered by the Placerville Police Department.

Project Background

For many years the Placerville Police Department has provided take home vehicles to officers subject to call-outs during off time. The take home vehicles have traditionally been gas powered vehicles that are used for the officers commute as well as during their work day. The vehicles have been used for many functions including but not limited to; patrol, detectives and command vehicles.

This is an important benefit to the police department because we need to have officers ready to respond to emergencies at all times. The take home vehicles are equipped with lights and sirens and also carry the needed personal protective equipment needed to respond directly to emergencies. Placerville Police departments take home vehicles have commutes ranging from a few miles, to 60 miles per day. This does not include miles traveled for patrol, to attend meetings, trainings or other necessary law enforcement functions.

Over the past five years the Placerville Police Department has been adding vehicles to our fleet that are less dependent on fossil fuels as we attempt to focus on renewable energy vehicles. During this time we have acquired two hybrid vehicles and an electric motorcycle.

The City of Placerville is a vibrant community, with many outdoor activities and community events. The Main Street area is shut down at least eight times during the year for special events, which draw in thousands of visitors. The City also boasts a robust park and trail system that is enjoyed year round by our community members and visitors alike.

Emission Benefits/Cost Effectiveness

The emissions benefits are calculated based on 10,000 miles annually. Since this would be a new program, we do not have historical data to reference. The estimated miles are based on the fact that this vehicle will be used as a take home vehicle used for an officer's commute as well as patrolling within the city and attending meetings and trainings within the region.

Work Statement

Task #1: Project initiation	Date	Completed
1.1 Execute Agreement with Air Quality Management District	October 2020	<input type="checkbox"/>
1.2 Purchase Vehicle	November 2020	<input type="checkbox"/>

Deliverables: Execute Agreement with AQMD

Acknowledgement

A placard acknowledging AB 2766 funding from EDC AQMD will be displayed in a conspicuous location on the vehicle. The Placerville Police Department will work in conjunction with EDC AQMD prior to selection of design to be placed on the vehicle.

Cost Estimation Breakdown

The City of Placerville Police Department requests \$46,000 in AB 2766 funds, with 20% of the total project cost as local match:

2020	AB 2766	Local Match	In-Kind	Cost
Personnel	0	0	0	0
Contract	0	0	0	0
Materials	\$36,800	\$9200	0	\$46,000
Construction	0	0	0	0
Total	\$36,800	\$9200	0	\$46,000

Matching Funds

The matching funds will come from the City of Placerville general funds.

Schedule of Deliverables/Monitoring Program

Upon contract award, Placerville Police Department will initiate procurement of the Tesla Model 3 requested within 30-days. Once the vehicle has been procured and the Police Department has taken possession of it, they will be put into service immediately.

In order to comply with the quarterly monitoring requirements, Placerville Police Department will prepare quarterly monitoring reports detailing the mileage driven and calculate the emissions benefits.

ON-ROAD PROJECTS

Subcategory: (1d) Electric Vehicle Purchases

Air District Name: El Dorado County APCD
Local Government Name: Not Applicable
Project Name: Tesla Model 3

Description: This project will provide a zero-emission vehicle to the Placerville Police Department to be used as a take home vehicle for one of our police officers. The vehicle will be used for the officers commute to and from work as well as to respond to emergencies, attend training, meetings, during special events and parades.
(Issues/Comments)

Implementing Agency: Placerville Police

Private Agency: No

FUNDING:

MVFees Funding: \$36,800
MSRC Funding: \$0
Moyer Funding: \$0
CMAQ Funding: \$0
Other COFunding: \$9200
Capital Recovery Factor: 0.12
Project Analysis Period: 10 years
Vehicle Miles Traveled (VMY): 10,000 annual miles

EMISSION FACTORS:

Baseline Vehicle Emission Factors		Cleaner Vehicle Emission Factors	
ROG:	0.092 grams per mile	0.00	grams per mile
NOx:	0.1	0.00	
PM10:	0.047	0.00	

EMISSION REDUCTIONS:

	Pounds per Year	Tons per Year
ROG:	2	0.00
NOx:	2.2	0.00
PM10:	1	0.00
Total:	<u>5.2</u>	<u>0.00</u>

COST-EFFECTIVENESS OF:

Motor Vehicle Fees and/or Moyer Funds: \$589.74 per pound \$1,179,487 per ton
CMAQ Funds: \$0.00 per pound \$0 per ton
All Funding Sources: \$737.17 per pound \$1,474,340 per ton