

EXHIBIT "A"

EXHIBIT SUMMARY SHEET

Proposing Entity (include other participating entities): Nevada County Department of Public Works

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Total Project Budget:

	AB 2766 Funds	Co-Funding	Total Project Costs
Capital Costs	\$ <u>\$30,000</u>	\$ _____	\$ _____
Operating Costs	\$ _____	\$ _____	\$ _____
TOTAL	\$ <u>30,000</u>	\$ _____	<u>\$30,000</u>

Type of Project: (check one)

____ Quantifiable Project

x Reduced Emission Vehicles Project

Implementation Area for Project: Check if District-wide Nevada County

Describe the Implementation Area for the Project (e.g. city, county, region):

Estimated Emission Reductions:

A. Emission Reductions (lbs/yr)

Reactive Organic Gases 6.3 Nitrogen Oxides 7.3 PM₁₀ 5.0

B. Vehicle Miles Traveled (VMT) Reduced 10,400/yr

Single Occupancy Vehicle Trips Reduced 520/yr

C. Number of people reached per day through public education N/A

Cost-effectiveness: \$ 1,613 **per pound** (AB 2766 Funds Only)

Brief Project Description:

The project would purchase and install electric vehicles charging equipment at the Rood Center and/or Brighton Greens facilities. The project would purchase 2 or 3 Level 2 chargers.

REQUEST FOR PROPOSAL CONTENTS CHECKLIST

Applicant: Nevada County Department of Public Works

Please complete and attach this checklist with your application.

<input checked="" type="checkbox"/>	Exhibit Summary Sheet - page _____
<input checked="" type="checkbox"/>	Request for Proposal Contents Checklist - page _____
<input checked="" type="checkbox"/>	Authorization Letter/Resolution - page _____
<input checked="" type="checkbox"/>	Project Description - page _____
<input checked="" type="checkbox"/>	Project Organization/Background - page _____
<input checked="" type="checkbox"/>	Emissions Benefits/Cost-Effectiveness - page _____
<input checked="" type="checkbox"/>	Work Statement - page _____
<input checked="" type="checkbox"/>	Funding Request/Breakdown of Cost - page _____
<input checked="" type="checkbox"/>	Schedule of Deliverables/Monitoring - page _____
<input checked="" type="checkbox"/>	All Pages Numbered
<input checked="" type="checkbox"/>	Three Copies Of Proposal Plus One Original

(CHECK ONE ONLY)

<input type="checkbox"/>	Quantifiable Project
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- OR -

<input checked="" type="checkbox"/>	Reduced Emission Vehicles Project
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D. PROJECT DESCRIPTION

The Nevada County Department of Public Works proposes to use AB 2766 grant funds to reduce pollution by installing electric vehicle charging stations at the Rood Center and/or Brighton Greens facilities. The project would purchase 2 or 3 Level 2 chargers.

Currently, a significant portion of County employee trips are less than 20 miles in length (with origins at either the Rood Center in Nevada City or County Brighton Greens facility in Grass Valley. These short trips would be more efficiently accommodated with electric vehicles. 20 mile trips in particular allow battery powered vehicles time to recharge between uses.

In April, 1,421 discrete rides were logged on the County's Local Motion tracking system. 987 of those rides were 20 miles or less (69%). There were 57 vehicles equipped with the Local Motion tracking system. 40 of those vehicles averaged 20 miles/day or less (70%).

Installation of electric vehicle charging stations will allow the County to immediately convert 2 current gas powered pool vehicles to electric vehicles. Those 2 vehicles would eliminate emissions from 2 vehicles x 20 miles per vehicle x 260 days per year = 10,400 miles per year. Ultimately, up to 40 electric vehicles could replace existing gas powered vehicles without affecting employee use, ultimately removing emissions from over 200,000 miles of travel.

Nevada County will be using the California Air Resources Board's *Methods to Find the Cost-Effectiveness of Funding Air Quality Projects, May 2005*, Ridesharing and Pedestrian Facilities section to determine the amount of emissions that will be reduced by the eliminated trips.

E. PROJECT ORGANIZATION/BACKGROUND

This project will be managed by the Nevada County Department of Public Works, Engineering Division. Under responsible charge of licensed professional engineers, the Engineering Division provides a variety of technical services, support and planning which includes: project design, inspection, traffic analysis, contract preparation and administration. In 2014, the Department delivered an AB 2766 project to install a pedestrian crosswalk on Magnolia Road. That project was successfully completed, with the final report submitted in May 2014.

Additionally, one of the department's major responsibilities is to research, secure and administer grants from a variety of State and Federal programs including: Congestion Mitigation Air Quality (CMAQ), Highway Safety Improvement Program (HSIP), High Risk Rural Roads (HR3), Highway Bridge Program (HBP), Proposition 1B, and American Recovery and Reinvestment Act (ARRA). In recent year our staff has delivered a number of federally funded pedestrian projects, including:

- Government Center Pedestrian Walkway CMAQ Project, CML -5917 (057): \$190,000 – Class I pedestrian facility between N. Bloomfield Road and the Nevada County Government Center. Construction completed September 2010.
- Penn Valley Drive Bike Path ARRA Project, ESPL 5917 (061): \$190,000 – Construction of a Class I pedestrian facility along Penn Valley Drive, from Pleasant Valley Road to Western Gateway Park. Construction completed September 2010.
- Magnolia Road Improvements ARRA Project, ESPL 5917 (062): \$500,000 – Road improvements and construction of a Class I pedestrian facility along the north side of Magnolia Road, between W. Hacienda Drive and Kingston Lane. Construction completed November 2010.
- Government Center Walkway Extension CMAQ Project, CML-5917 (066): \$100,000 – Pedestrian facility improvements that traverses the Nevada County Government Center complex. Construction completed February 2011.

Our fiscal staff is experienced with state and federal grant administration and utilizes FHWA/Caltrans approved accounting methods and Cost Accounting Management System software (Cascade Software Systems, Inc.) to track costs by project tasks and funding source. We track expenditures of both the grant and the in-kind funds using unique project and cost code numbers.

A subcontractor has not been identified at this time; however, our staff is experience in administering federal and state contracts. Additionally, all contracts and procurements done by Nevada County are done in conformance with the California Public Contract Code. The provider will be selected using a formal competitive bid process via a Request for Proposals (RFP), or we will utilize a provider currently under contract with Nevada County, previously vetted using this process. The provider will be required to guarantee that services provided will be performed in compliance with all applicable county, state and federal laws and regulations pertinent to this project including Section 86 of the Standard Specifications, May 2010 edition of the California Department of Transportation (Caltrans) and the California Manual of Uniform Traffic control Devices (CaMUTCD).

Emission reductions are based on an assumption of gas powered vehicle trips will be replaced by electric vehicle trips. In order to evaluate estimated emission reductions we are proposing to report electric vehicle mileage

F. EMISSION BENEFITS/COST EFFECTIVENESS

This project seeks to reduce the number of gas powered motor vehicle trips and replacing them with electric vehicles trips.

Daily trip assumptions come from a recent evaluation of county pool vehicle usage.

Formulas used to calculate the estimated emission reductions from the project are taken from the California Air Resources Board (ARB), "*Methods to Find the Cost-Effectiveness of Funding Air Quality Projects*" (May 2005), and the related Emission Factor Tables (March 2010), for Ridesharing and Pedestrian Facilities. We are also utilizing the Northern Sierra Air Quality Management District (NSAQMD), Access Database program for calculating emission reductions and cost effectiveness. (See Appendix B)

Auto Trips eliminated = 10 per week

Length of auto trips eliminated = 20 miles

Weeks = 52

Adjustment for auto access trips to transit = 1.0

Annual Auto Trips Reduced = 10 trips per week x 52 x 1.0 = 520 trips per year

Annual Auto VMT Reduced = 520 trips per week x 20 miles per trip = 10,400 miles per year

Emission Factors

ROG = 0.273 g/mile

NOx = 0.32 g/mile

PM 10 = 0.220g/mile

Emission reductions

ROG = 0.273 g/mile x 10,400 = 2,839 g/year = 6.3 lbs/year

NOx = 0.32 g/mile x 10,400 = 3,328 g/year = 7.3 lbs/year

PM 10 = 0.220g/mile x 10,400 = 2,288 g/year = 5.0 lbs/year

Total 18.6 lbs/year

Cost effectiveness = \$30,000/18.6 = \$1,613/lb

G. WORK STATEMENT

Task 1 – Request for Proposals (RFP) Process: (January 1 – May 31, 2013)

Staff will prepare bid documents for the purchase and installation of the electric vehicle charging stations. The bid documents will be released to potential bidders to initiate the competitive bid process. This process includes drafting a tentative personal services contract, review of bids and selection of a subcontractor based on cost of services. Once a subcontractor has been selected staff will obtain all necessary contract information and documents, and prepare a Board of Supervisors report requesting approval and execution of the personal services contract between Nevada County and said subcontractor.

Task 2 - Project Construction and Construction Management: (June 1 – August 31, 2013)

Once the subcontractor is on board staff will initiate the purchase and installation of the proposed equipment. This task will be paid for with AB 2766 DMV Surcharge funds.

Task 3 - Monitoring and evaluating the Project: (Ongoing)

Monitoring will be done by recording the number and length of electric vehicle trips.

H. FUNDING REQUEST/BREAKDOWN OF COST

Task 1 - RFQ/RFP Process: AB 2766 DMV Surcharge Funds - \$ 3,000

Task 2 - Project Construction and Construction Management: AB 2766 DMV Surcharge funds - \$26,500

Task 3 - Monitoring and evaluating the Project: AB 2766 DMV Surcharge funds - \$500

The Nevada County Community Development Agency will track the expenditure of grant funds and in kind funds utilizing FHWA/Caltrans approved accounting methods and Cost Accounting Management System software (Cascade Software Systems, Inc.).

I. SCHEDULE OF DELIVERABLES/MONITORING PROGRAMS

2013	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct
Bidding Process										
Prepare Bid Documents	X	X								
Advertise for bids			X							
Open Bids				X						
BOS Contract Approval					X					
Project Construction						X	X			
Monitoring and Evaluation								X	X	X