

EXHIBIT SUMMARY SHEET

Proposing Entity (include other participating entities): Tahoe Truckee Unified School District

Contact Person: Tony Lavezzo

Address: 12485 Joerger Dr., Truckee, CA 96161

Phone #: (530) 550-0776

FAX #: (530) 550-0739

EMAIL: tlavezzo@ttusd.org

Total Project Budget:

	AB 2766 Funds	Co-Funding	Total Project Costs
Capital Costs	\$ <u>120,000.00</u>	\$ <u>25,770.90</u>	\$ <u>142,769.13</u>
Operating Costs	\$ <u>0</u>	\$ <u>0</u>	\$ <u>0</u>
TOTAL	\$ <u>120,000.00</u>	\$ <u>25,770.90</u>	\$ <u>142,769.13</u>

Type of Project: (check one)

- Quantifiable Project
- Reduced Emission Vehicles Project

Implementation Area for Project: Check if District-wide

Describe the Implementation Area for the Project (e.g. city, county, region): Bus will be operated in the Town of Truckee, Nevada County and the surrounding area.

Estimated Emission Reductions:

- A. Emission Reductions (lbs. /yr.)
 - Reactive Organic Gases 83.55 Nitrogen Oxides 812.59 PM₁₀ 42.87
- B. Vehicle Miles Traveled (VMT) Reduced 0
 - Single Occupancy Vehicle Trips Reduced 0
- C. Number of people reached per day through public education _____

Cost-effectiveness: \$ 10.22 per pound (AB 2766 Funds Only)

Brief Project Description:

Replace one older school bus with a new bus that employs a NOx and PM emission control system.

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JUL 12 2019

REQUEST FOR PROPOSAL CONTENTS CHECKLIST

Applicant: Tahoe Truckee Unified School District

Please complete and attach this checklist with your application.

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All Pages Numbered

Three Copies Of Proposal Plus One Original

(CHECK ONE ONLY)

Quantifiable Project

- OR -

Reduced Emission Vehicles Project



PATHWAYS TO POSSIBILITIES AND STUDENT SUCCESS

- District Office**
Robert J. Leni, Ed.D.
- 11603 Donner Pass Rd**
Truckee, CA 96161
4963
P (530) 582-2511
F (530) 582-2510
www.tusd.org
- Board of Trustees**
Kim Mazzoni
Kristen Lebek
Orinda Hannonsey
Cyril Larson
Manna Diller
- Elementary Schools**
Donner Pass
Charmelle
Charmelle Elementary
Kings Beach
Charmelle
Donner Lake Elementary
Truckee Elementary
- Middle Schools**
Abbe Creek Middle
North Tahoe Middle
- High Schools**
Cold Stream Alternative
North Tahoe High
Bear Flats
Tahoe Truckee High

June 20, 2019

Northern Sierra Air Quality Management District
PO Box 2509
Crown Valley, CA 95945

Dear Northern Sierra Air Quality Management District,
The following individual(s) are authorized to a proposal on behalf of Tahoe Truckee Unified School District

Project Managers for the Proposal:
Nanette Rondeau
Director of Transportation
12485 Joerger Rd
Truckee, CA 96161
1530) 550-0745 or nrondeau@tusd.org

Tommy Lavezza
Fleet Manager
12485 Joerger Rd
Truckee, CA 96161
(530) 550-0761 or (530) 550-0745 or tlavezza@tusd.org

Authorized Signees of the Proposal:
Todd Rivera
Executive Director of Fiscal Services
11603 Donner Pass Rd
Truckee, CA 96161
(530) 582-2511 or trivera@tusd.org

Robert J. Leni, Ed.D.
Superintendent / Chief Learning Officer
11603 Donner Pass Rd
Truckee, CA 96161
(530) 582-2510 or rlen@tusd.org

Signature:  Date: JUN 25 2019
Robert J. Leni, Ed.D.
Superintendent / Chief Learning Officer



Project Description

The objective of the Low NOx Special Needs School Bus Replacement project is to replace an older diesel vehicle with a newer vehicle that has a NOx and PM emission control device. The older diesel vehicle, like the one outlined in the project, can only be retrofitted for the control of PM emissions not NOx. NOx is harmful atmospheric pollutant known for contributing to smog and acid rain. The only way to reduce the NOx created by the vehicle in question is to replace it with a new vehicle that will employ NOx controlling technology.

This project would take a 1993 diesel special needs school bus off the road and replace it with a 2019 diesel special needs school bus that would employ the latest NOx and PM control strategies. The new 42 passenger diesel special needs school bus will exceed 2010 NOx control requirements for heavy duty diesel vehicles. With the replacement of the older school bus it would lower the NOx and PM emissions created in the region. This would ensure less exposure to children at school sites and less exposure to residents throughout the community.

Project Organization/Background

Tahoe Truckee Unified School District (TTUSD):

The Tahoe Truckee Unified School District Transportation Department provides transportation to 3,000 students covering over 400,000 miles a year. The fleet of over 30 school buses operates from Kingvale on Donner Summit to Hirschdale on Highway 80 towards Reno, from Tahoma on the Westshore of Lake Tahoe to Prosser on the North end of Highway 89.

The District is actively working towards reducing the impact of diesel emissions within the Tahoe Truckee School District community. Buses are replaced with the newest, cleanest, diesel technology when district funds are available, or the district applies for grants when funds are not available. In the past, TTUSD has been awarded funding for the replacement of old buses with new clean school buses. For the buses that did not qualify for replacement, TTUSD has been awarded funding for PM controlling retrofits that do not control NOx. The next step for a cleaner fleet is to replace the older buses with new buses that employ NOx controlling SCR technology.

This proposal is to replace one school bus with a new school bus that will employ the latest NOx and PM emissions control technology. TTUSD will purchase the bus through Buswest. Below is information on Buswest, the company we have selected.

Buswest:

Buswest is a transportation dealer-distributor serving the education, government, public sector, commercial and private fleet markets with a broad portfolio of bus solutions. Buswest specializes in Thomas Built Buses (TBB) and offer a full range of new and used buses. From the largest to the smallest, wheelchair access/ADA compliant and more. All Buswest school buses are rigorously tested to make sure they meet or exceed all Federal and State safety standards. Buswest is part of the Velocity Vehicle Group and has multiple sales and service locations serving California, Arizona, Nevada, and Hawaii.

ACCOUNTING:

Buswest will provide a single invoice for the vehicle, taxes, and any other fees or options. The invoice will be recorded through the normal Tahoe Truckee Unified School District accounting management system, as required. Grant funds will be received by TTUSD in a onetime lump sum payment and put towards the total cost of the purchase. The remaining balance will be paid by TTUSD.

Emissions Benefits/Cost Effectiveness

Under this proposal, one school bus will be replaced with a new diesel school bus that will employ the latest NOx and PM control strategies. This system will provide a very substantial drop in NOx emissions. The calculations for these reductions are listed below. In addition to NOx reductions, the system on the new buses will lower PM emissions by over 85 percent. This is critical to the drivers, students, and communities in which the buses operate because currently no NOx emission control strategy available for the bus must be replaced.

Due to the lower speeds of school bus routes the *Methods to Find the Cost-Effectiveness of Funding Air Quality Projects – 2005 Edition table 1: Diesel Bus Emissions Factors* do not give accurate emissions factors. The following calculations will be based on the California Executive Order for the vehicle to be replaced and the new vehicle. The information below includes both engines and the Executive Order will be attached in the technical appendices:

1993 International/Bluebird
EO: A-4-149
EPA Engine Family: PNV0466FPC4
Horsepower: 210 bhp
PM: 0.10 g/bhp-hr
NMHC (ROG): 1.3 g/bhp-hr
NOx: 4.0 g/bhp-hr

2019 Thomas C2
EO: G-14-012
EPA Engine Family: KCEXH0408BAT
Horsepower: 260 bhp
PM: 0.001 g/bhp-hr
NMHC (ROG): .03 g/bhp-hr
NOx: .15 g/bhp-hr

Engine hours:

Engine hours are captured from our Zonar GPS tracking system that is installed on all TTUSD's vehicles. This vehicle has been used as a spare and has swapped routes. To collect useable data a 4-year average of 388 hours were used in calculations.

47	11/20/2014 5:58am	11/20/2018 11:38am	5063.2	1548.7
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Emissions Benefits/Cost Effectiveness (continued)

Vehicle to be Replaced Emissions Calculation

Annual NMHC (ROG) in Grams = (NMHC x Annual Hours) x Horsepower

$40,740g = (.5 \times 388) \times 210$

Annual NMHC (ROG) in Grams : Grams to Lbs. conversion factor = Annual NMHC in lbs.

$40,740g \div 454 = 83.55 \text{ lbs.}$

Annual NOx in Grams = (NOx x Annual Hours) x Horsepower

$382,956g = (4.7 \times 388) \times 210$

Annual NOx in Grams : Grams to Lbs conversion factor = Annual NOx in Lbs.

$382,956g \div 454 = 812.59 \text{ lbs.}$

Annual PM in Grams = (PM x Annual Hours) x Horsepower

$19,555g = (.24 \times 388) \times 210$

Annual PM in Grams : Grams to Lbs. conversion factor = Annual PM in Lbs.

$19,555g \div 454 = 42.87 \text{ lbs.}$

ROG:	83.55 lbs.
NOx:	812.59 lbs.
PM:	42.87 lbs.
Total Emissions:	976.32 lbs.

New Vehicle Emissions Calculation

Annual NMHC (ROG) in Grams = (NMHC x Annual Hours) x Horsepower

$2,444.4g = (.03 \times 388) \times 260$

Annual NMHC (ROG) in Grams - Grams to Lbs. conversion factor = Annual NMHC in lbs.

$2,444g \div 454 = 6.19 \text{ lbs.}$

Annual NOx in Grams = (NOx x Annual Hours) x Horsepower

$12,222g = (.15 \times 388) \times 260$

Annual NOx in Grams : Grams to Lbs. conversion factor = Annual NOx in lbs.

$12,222g \div 454 = 30.93 \text{ lbs.}$

Annual PM in Grams = (PM x Annual Hours) x Horsepower

$81.48g = (.001 \times 388) \times 260$

Annual PM in Grams : Grams to Lbs. conversion factor = Annual PM in lbs.

$81.48g \div 454 = .21 \text{ lbs.}$

ROG:	6.19 lbs.
NOx:	30.93 lbs.
PM:	.21 lbs.
Total Emissions:	37.32 lbs.

Emissions Benefits/Cost Effectiveness (continued)

Total Emissions Reduction (Per Year)	
ROG:	83.55 lbs.
NOx:	812.59 lbs.
PM:	42.87 lbs.
Total Emissions Reduction:	939.01 lbs.

Cost Effectiveness/ Capitol Recovery

Funds (\$)	
AB 2766 Funds:	\$120,000.00
TTUSD Contribution:	\$25,770.90
Total cost of Project:	\$145,770.90

To calculate the cost effectiveness of this project the amount of funds requested will be multiplied by the capitol recovery factor of .08 and then divided by the total amount of pollutants reduced. The capitol recovery factor of .08 is used because the minimum useful life of the vehicle to be purchased is 15 years.

$$(AB\ 2766\ Funds \times\ Capitol\ recovery\ Factor) \div Total\ emission\ reduction = Cost\ per\ Pound$$

$$(120,000.00 \times .08) \div 939.01 = 10.22$$

Totals

AB Funds Requested:	\$120,000.00
Emissions Reduced:	939.01 lbs.
Cost Per Pound Reduced:	\$10.22

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Work Statement

January 2020 Upon grant execution, TTUSD will begin the process to have the purchase of a new bus approved by TTUSD school board.

February 2020 Place order with Buswest for one new school bus.

July 2020 On or before July 2020, take delivery of one new school bus. Once delivered TTUSD will invite NSAQMD to inspect the bus and a decal stating the funding source for the bus will be applied at this time.

Funding Request/Breakdown of Cost

Tahoe Truckee Unified School District is requesting \$120,000.00 in AB 2766 funds to purchase a new 2019 school bus. The specifications and quote are attached in the technical appendices. This project does not have any administrative costs. The following table shows a breakdown of cost and cofunding sources.

Project Costs	
AB 2766 Funds:	\$120,000.00
TTUSD Contribution:	\$25,770.90
Total cost of Project:	\$145,770.90

Schedule of Deliverables/Monitoring Program

Vehicle Delivery

On or before July 2020 TTUSD will take delivery of one new school bus. Once delivered TTUSD will invite NSAQMD to inspect the bus and a decal stating the funding source for the bus will be applied at this time. Any delay in delivery of the new school bus will be communicated to NSAQMD via email.

Monitoring Program

Upon delivery of the new bus TTUSD will start to track the annual operating hours and mileage. TTUSD will report the mileage, hours and overall performance of the unit after the first, fifth and seventh year of operation. TTUSD will operate the new vehicle, at minimum, the same number of hours and miles as the vehicle it was intended to replace. Reports of operating data will be available at the request of the NSAQMD.

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Technical Appendices

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Annual hour meter report for bus to be replaced

6/21/2019

Zunar Systems © GPS Engine Hours Report

GPS Engine Hours Summary Report - From: 11/20/2014 To: 11/20/2018

Note: This Report Requires GPS Firmware Version 2.04 or Newer

ASSET	FIRST POWER ON	LAST POWER OFF	ZONE	ENDING HOUR METER	ELAPSED HOURS
47	11/20/2014 05:50:09	11/20/2018 11:38:03	Combined Totals	10032	1548.7

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Tahoe Truckee Unified School District

Low NOx Special Needs
School Bus Replacement

Bus West Sales Quote



Bid Form

June 21, 2019

Customer Order No.: SBBC 07519

Honorable Board of Trustees
Tahoe Truckee Unified School District
12485 Joerger Dr
Truckee, Ca 96161

BusWest respectfully submits for your consideration our bid to supply 1 complete 42/6 var passenger school bus as follows:

Chassis Make: Freightliner	Model: B2 106	Model Year: 2019
Wheelbase: 219'	Engine: Cummins ISB	Horsepower: 260
Body Make: Thomas	Model: Saf-T-Liner C2	Capacity: 42/6 var

Transmission: Allison 2500 PTS

Delivery Date: 180-210 Days after receipt of order

Subject to Prior Sale: No

Cash Purchase Price (each)	\$ 136,239.00	Tax Exempt: \$ 21,681.00
Doc Fee:	\$ 65.00	Taxable: \$ 114,623.00
Sales Tax @ 8.250%:	\$ 9,456.40	
CA. Tire Tax: \$1.75 ea. tire	\$ 10.50	
Total	\$ 145,770.90	

We have examined the detailed minimum specifications established by the school board and guarantee this bid to be in accordance thereto. Above price includes all dealer prep, pre-delivery service, necessary lettering, F.O.B. school district and documentation fee.

Brian Hedman, Sales Representative


Quote is good for thirty (30) days

Quote No. 545163

Carson - Main Headquarters
21107 South Chase St. Carson, CA. 90745
Sales Toll Free (800) 458-9199 Main: (310) 994-3990 Fax: (310) 994-3996
Parts Toll Free: (866) 707-7800 Fax: (310) 994-3994
www.buswest.com

Secramento
210 North East St., Woodland, CA. 95776
Main: (424) 210-3020
Fresno
4337 North Goldenstate St #101, Fresno, CA. 93609
Main: (559) 277-0118

New Vehicle Engine Executive Order

 CALIFORNIA AIR RESOURCES BOARD	CUMMINS INC.	EXECUTIVE ORDER G-14-012 Cummins Inc. School Bus Replacement Page 1 of 2 Pages
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Pursuant to the authority vested in the Air Resources Board by Health and Safety Code Division 20, Part 6, Chapter 2 and pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-14-012:

IT IS ORDERED AND RESOLVED: The engine and emission control systems produced by the manufacturer are certified as described below for use in on-road motor vehicles with a manufacturer's GVWR over 14,000 pounds. Production engines shall be in all material respects the same as those for which certification is granted.

YEAR	ENGINE FAMILY	Rated Power (kW)	FUEL TYPE ¹	STANDARD Emissions CLASS	EMissions CLASS	CCO SPECIAL FEATURES ²	DIAGNOSTIC ³
2014	ISX15	15	Diesel	04	04	DEF, YC, EGR, EGR, EGR, CR, PTO, EGR, EGR, EGR	08000
ADDITIONAL EMISSION CONTROLS ⁴							
DEF							
Emissions Labels / Codes (and codes in list) (as prescribed by engine models and ratings)							
07							

Following are: 1) the FTP exhaust emission standards, or family emission limits as applicable, under 13 CCR 1805.2; 2) the BEET and NTE limits under the applicable California exhaust emission standards and test procedures for heavy-duty diesel engines and vehicles (Test Procedures); and 3) the corresponding certification levels, for this engine family. "Diesel" CO, BEET and NTE certification compliance may have been demonstrated by the manufacturer as provided under the applicable Test Procedures in lieu of testing. (For turbo- and dual-fuel engines, the COBEET values in brackets [] are those when tested on conventional test fuel. For multi-fuel engines, the BEET and COBEET values for default operation permitted in 13 CCR 1805.5 are in parentheses.)


In Group	NOx		CO		HC+NO		PM		MSR0	
	FTP	BEET	FTP	BEET	FTP	BEET	FTP	BEET	FTP	BEET
010	0.10	0.10	0.25	0.25	13.0	13.0	0.01	0.01	-	-
020	0.03	0.02	0.15	0.15	0.05	0.01	0.001	0.001	-	-
030	0.21	0.21	0.30	0.30	17.4	17.4	0.02	0.02	-	-

BE IT FURTHER RESOLVED: The manufacturer has demonstrated compliance with the Greenhouse Gas Emission Standards as specified in Title 13 CCR 1805.8 and the incorporated "California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy Duty Diesel Engines and Vehicles" (HDEE Test Procedures) adopted December 12, 2002, as last amended September 1, 2017 using the 2014 model year National Heavy-Duty Engine and Vehicle Greenhouse Gas Program as specified in Section 1038.103 of the HDEE Test Procedures. The manufacturer has submitted the required information and therefore has met the criteria necessary to receive a California Executive Order based on the Environmental Protection Agency's Certificate of Conformity for the above listed engine family.

In Group	EPA CERTIFICATE OF CONFORMITY COMPLIANCE LIMIT			GREENHOUSE GAS EMISSION CLASS	
	CO	CH4	N2O	CO2e	CO2e
010	120	120	40	0.19	1
020	40	40	10	0.10	0.0
030	120	120	40	0.09	0.0

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New Vehicle Engine Executive Order

	CUMMINS INC.	EXECUTIVE ORDER A-021-001 Motor Vehicle Heavy-Duty Engines Page 2 of 8 Pages
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BE IT FURTHER RESOLVED: Certification to the FEL(n) / FCL(n) listed above, as applicable, is subject to the following terms, conditions and conditions. The FEL(n) / FCL(n) is the emission level declared by the manufacturer and serves in lieu of an emission standard for certification purposes in any averaging, banking, or trading (ABT) programs. It will be used for determining compliance of any engine in this family and compliance with such ABT programs.

BE IT FURTHER RESOLVED: Except in vehicle applications exempted per 13 CCR 1056.6(e)(9)(B), engines in this engine family certified under 13 CCR 1968 6(a)(6)(C) (30 g/hr NOx) and section 36.8.4 of the incorporated "California Exhaust Emissions Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles" (HDEE Test Procedures) adopted December 12, 2002, as last amended September 1, 2017, shall be provided with an approved "Certified Clean Idle" label that shall be affixed to the vehicle into which the engine is installed.

BE IT FURTHER RESOLVED: For the listed engine models the manufacturer has submitted the materials to demonstrate certification compliance with 13 CCR 1966 (emission control labels), 13 CCR 1971.1 (on board diagnostic, full or partial compliance) and 13 CCR 2035 et seq. (emission control warranty).

BE IT FURTHER RESOLVED: That the manufacturer has elected to include engine models in this engine family which are identified for "emergency vehicle use only". Those "emergency vehicle use only" engines are exempt from requirements imposed pursuant to California law and the regulations adopted pursuant thereto for motor vehicle pollution control devices per California Vehicle Code Section 27160.2. The manufacturer must clearly label these engines for "emergency vehicle use only" on the engine's emission control label.

BE IT FURTHER RESOLVED: The listed engine models are conditionally certified in accordance with 13 CCR Section 1971.1(k) (deficiency and fines provisions for certification of malfunction and diagnostic system) because the heavy-duty on-board diagnostic (HD OBD) system of the listed engine models has been determined to have ten deficiencies. The listed engine models are approved subject to the manufacturer paying a fine of \$275 per engine for the third through tenth deficiencies in the listed engine family that is produced and delivered for sale in California. On a quarterly basis, the manufacturer shall submit to California Air Resources Board reports of the number of engines produced and delivered for sale in California and pay the full fine owed for that quarter pursuant to this conditional certification. Payment shall be made payable to the State Treasurer for deposit in the Air Pollution Control Fund no later than thirty (30) days after the end of each calendar quarter during the 2016 model-year production period. Failure to pay the quarterly fine, in full, in the time provided, may be cause for the Executive Order to rescind this conditional certification, effective from the start of the quarter in question, in which case all engines covered under this conditional certification for that quarter and all future quarters would be deemed uncertified and subject to a civil penalty of up to \$37,500 per engine pursuant to HSC Section 43154.

BE IT FURTHER RESOLVED: Per Cummins' request for conditional Executive Order (EO) approval (Cummins' Request) dated December 17, 2016, the listed engine models are certified conditionally on Cummins' compliance with the agreed upon testing and submission of a test report by February 11, 2016. Cummins agrees to cooperate with CARB on any potential remedies identified through the agreed upon 2016 HW engine testing including, if necessary, the need for a service campaign for in-use vehicles, and running changes to engines still in production. If a service campaign (voluntary recall) is needed, a year after the implementation of the service campaign, Cummins shall report to CARB the Vehicle Identification Numbers (VINs) of those vehicles that do not have the improvements provided in the CARB-approved running change. Cummins understands that failure to submit the test data in the allowed time, or failure of the submitted test data or information to demonstrate compliance with the emission standards, or Heavy Duty On-Board Diagnostics (HD OBD) requirements, shall be cause for the Executive Order to revoke the conditional EO as fully. Engines sold or introduced into commerce under the revoked conditional EO shall be deemed uncertified and subject to a civil penalty of up to \$37,500 per violation per vehicle pursuant to HSC Section 43154.

Engines certified under this Executive Order must conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this Executive Order.

Executed at El Monte, California on this 18th day of December 2016

M. Hobart
 FOR Annette Hobart, Chief
 Emissions Compliance, Automotive Regulations and Science Division

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Old Vehicle Engine Executive Order

(Page 1 of 2)

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-4-149

Relating to Certification of New Heavy-Duty Motor Vehicle Engines

HAVISTAR INTERNATIONAL TRANSPORTATION CORPORATION

Pursuant to the authority vested in the Air Resources Board by Sections 43100, 43102 and 43103 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 30515 and 30516 of the Health and Safety Code and Executive Order B-46-3;

IT IS ORDERED AND RESOLVED: That the following Havistar International Transportation Corporation 1993 model diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 8,000 pounds:

Engine Type: Diesel

<u>Engine Family</u>	<u>Displacement (Liters, (Cubic Inches))</u>	<u>Exhaust Emission Control Systems and Special Features</u>
PHV0466FPC4	7.6 (466)	Turbocharger Smoke Puff Limiter Charge Air Cooler

Engine models and codes are listed on attachments.

The following are the certification emission standards for this engine family in grams per brake-horsepower-hour:

<u>Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulates</u>
1.3	15.6	6.0	0.25

The following are the certification emission values for this engine family in grams per brake-horsepower-hour, except that compliance with the carbon monoxide emission standard has been demonstrated pursuant to Title 68, Code of Federal Regulations, Part 68, Subpart A, Section 68.600-23(e)(2)(1):

<u>Engine Family</u>	<u>Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulates</u>
PHV0466FPC4	0.5	1.6	4.7	0.24

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 19, California Code of Regulations, Section 2035 et seq.).

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Tahoe Truckee Unified School District

Low NOx Special Needs
School Bus Replacement

Old Vehicle Engine Executive Order

NAVISTAR INTERNATIONAL TRANSPORTATION CORP.

EXECUTIVE ORDER A-4-140
(Page 2 of 2)

Engines certified under this Executive Order must conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this order and attachments.

Executed at El Monte, California this 1st day of September, 2002.



R. D. Summerfield
Assistant Division Chief
Mobile Source Division

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EXHIBIT SUMMARY SHEET

Proposing Entity (include other participating entities):

Incorporated Senior Citizens of Sierra County

Contact Person: Debra DeVenzio, Transportation Director

Address: 302 First Street, Lovelton, CA 96118

Phone #: (530) 993-4770

FAX #: (530) 993-0742

EMAIL: transdir@att.net

Total Project Budget:

	AB 2766 Funds	Co-Funding	Total Project Costs
Capital Costs	\$ _____	\$ _____	\$ _____
Operating Costs	\$ <u>5,721</u>	\$ <u>49,000</u>	\$ <u>54,721</u>
TOTAL	\$ <u>5,721</u>	\$ <u>49,000</u>	\$ <u>54,721</u>

Type of Project: (check one)

Quantifiable Project

Reduced Emission Vehicles Project

Implementation Area for Project: Check if District-wide

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

Estimated Emission Reductions:

A. Emission Reductions (lbs/yr)

Reactive Organic Gases 70 Nitrogen Oxides 78 PM₁₀ 29

B. Vehicle Miles Traveled (VMT) Reduced 117,000

Single Occupancy Vehicle Trips Reduced 2,800

C. Number of people reached per day through public education 12

Cost-effectiveness: \$ 30.93 per round (AB 2766 Funds Only)

Brief Project Description:

To support the operations of the Senior Vanpool Services Program which provides group transit services for disabled and/or senior residents in Sierra County.

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**Incorporated Senior Citizens of Sierra County
P. O. Box 675, 308 First Street
Loyalton, CA 96118**

September 1, 2019

**Northern Sierra Air Quality Management District
Northern Field Office
P. O. Box 2509
Grass Valley, CA 95945**

Attention: Joe Fish

Re: AB2766 DMV Surcharge Fund

Dear Joe:

On behalf of the Incorporated Senior Citizens of Sierra County, I am enclosing a grant packet for application and consideration to the AB2766 DMV Surcharge Fund.

We are requesting the sum of \$5,721 to support the operations of the Senior Vanpool Services Program in Sierra County.

Please let me know if you need anything further. Thanks so much!

Sincerely,

Cathy Rahmeyer

**Cathy Rahmeyer
Fund Development Consultant**

Enclosures

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REQUEST FOR PROPOSAL CONTENTS CHECKLIST

Applicant: Incorporated Senior Citizens of Sierra County

Please complete and attach this checklist with your application.

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All Pages Numbered

3 Copies of Proposal, One Original

(CHECK ONE ONLY)
Quantifiable Project

- OR -

Reduced Emission Vehicles Project

Authorization Letter

Section C



Incorporated Senior Citizens of Sierra County
P. O. Box 675, 306 First Street
Loyalton, CA 96118

August 28, 2019

Northern Sierra Air Quality Management District
Northern Field Office
P. O. Box 2509
Grass Valley, CA 95945

Attention: Joe Fish

2019-20

Re: AB2766 DMV Surcharge Fund ~~2009-10~~

Dear Mr. Fish:

On behalf of Incorporated Senior Citizens of Sierra County, I am authorized to submit our application for funding through the AB2766 DMV Surcharge Fund. We are requesting the sum of \$5,721 to support the operations of the Senior Vanpool Services Program which provides group transit services for disabled and/or senior residents in Sierra County.

The contact person with respect to questions for this project is Debra Davenzio, Transportation Director. She may be contacted directly at (530) 993-4770. Her e-mail address is trandir@att.net. Please let me know if there is anything further information I can provide you. Thank you for your consideration and review of this request.

Sincerely,

Donna May, Secretary
Board of Directors

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Section D. - Project Description

This request to the Northern Sierra Air Quality Management District under the AB2766 DMV Surcharge Fund will provide Inc. Senior Citizens of Sierra County with the funding needed to help sustain vanpool services approximately 276 days per year providing approximately 12 trips per day, both in and out of Sierra County. The program will serve approximately 300 unduplicated riders annually with estimated one-way vehicle trip reductions totaling 2,100 or 90,550 miles. Funding provided herein will assist in covering the costs of vehicle operations and maintenance for two existing vehicles annually. This program funding will help to sustain the transportation operations of the ISCSC which are currently at-risk as Cal Trans grants and Area 4 on Aging funding continues to decline. This request to the Northern Sierra Air Quality District is also reduced from the amounts available over the last five years. Without the grant support provided herein, ISCSC will be forced to cut and/or significantly reduce vanpool services for the coming year. This reduction combined with the continued challenges of the economic downturn in California, and particularly in rural communities, would further isolate rural seniors and disabled participants in seeking and securing transportation services needed to access health, wellness, food supplies, and medicine and social service programs within the region. The program also provides vanpool services to community members at large as needed.

ISCSC with this funding, will continue to provide outreach services to new unserved and underserved riders to assist with increasing rider membership by 2% in the coming year. The program will provide riders with educational information on vanpooling and its related emissions reductions to encourage additional use of vanpool services in Sierra County. The program currently maintains daily statistics on the number of people served, trips provided, and miles driven for all transportation services. Eight years ago, ISCSC designed a new data collection Excel Spreadsheet specific to Northern Sierra Air Quality Management District reporting so drivers may track and monitor the number of trips reduced from participants who would otherwise have driven their own cars or had someone drive for them had vanpool services been nonexistent. A confidential numbered tracking system is utilized to protect the confidentiality of riders.

The Transportation Program Director is responsible for the record keeping and progress reports associated with all transportation funding sources. ISCSC will utilize all appropriate data collection

tools and reporting forms required by the Northern Sierra Air Quality Management District. ISCSC has experience in the management and tracking of grant funding from multiple sources, supervising budgets and completing required reporting timely. The Scope of Work for this project is outlined as follows:

December 2019	Sign Contract on grant award
January 2020	Commencement of Funding
January - Dec 2020	Conduct Monthly/Quarterly Financial Reports/Monitoring Reports
January - Dec 2020	Provide vanpool services to existing riders
January - Dec 2020	Conduct outreach to increase ridership by 10% to underserved residents
January - Dec 2020	Log Fuel Miles / Perform required maintenance
January - Dec 2020	Conduct data gathering / monitoring
December 2020	Submit final report

Section E. – Project Organization/Background

Sierra County is a mountainous rural region covering an area of approximately 985 square miles. The population of Sierra County includes 2,987 people (and continues to decline), designating it as the second smallest county in the state, and a frontier community. Between 2009 and 2013, the number of residents living below poverty level rose to 19.4% (from 11.3% in prior years). The current poverty level stands at 14.4%. Residents over the age of 65 represent 31.6% (up from 28.8.1% in 2018) of the population in Sierra County, versus 14.3% (up from 8.7% in 2017) of the senior population in California. Additionally, persons with disabilities aged 18-64 represent 15.5% of the population and persons with disabilities over the age of 65 represent 38.5% of the senior population. Veterans represent 11% of the population. There are several health status indicators that support the rate of poverty figures in Sierra County. Cancer (Breast Cancer and Lung Cancer), Coronary Heart Disease, Diabetes, and Cerebrovascular Disease are the major causes of death.

Incorporated Senior Citizens of Sierra County (ISCSC) is a grassroots non-profit corporation developed in 1978 that strives to serve the unmet needs of a growing and vulnerable number of rural seniors. The mission of the agency is to present an environment that encourages and accepts the uniqueness of each individual; provides social supports; offers nutritious well-balanced noontime meals; provides safety information and assessments, access to adequate transportation; and delivers necessary health and resource and referral information for seniors aged 60 and over, their spouses and the disabled. In addition, ISCSC provides access to early and regular health screening, outreach prevention and

intervention activities, education and presentation of home and medication safety and nutritional information, and opportunities to participate in regularly structured nutrition and physical activities that serve to reduce chronic diseases and their associated health care costs while improving the quality of life for many senior citizens.

Emission reductions for this project will result from the decrease in emissions associated with auto trips replaced by senior vanpool services after adjusting for the increase emissions associated with the shuttle vehicle itself and auto access trips. IS CSC provides vanpool services to residents for the following purposes: medical appointments, nutrition site services, socialization activities, shopping trips, personal errands and recreation. The program also transports seniors placed in long-term care at Eastern Plumas Healthcare facility to medical and social activities. On occasion, vehicles are utilized to transport home-delivered meals in partnership with the agency's nutrition program. Seniors are picked up and delivered to their homes, including nursing home residents as part of the service delivery of this program, providing further reduced emissions as residents do not have to drive vehicles to a vanpool lot or shuttle parking site.

IS CSC has experience and been a recipient of transportation dollars to operate Sierra County vanpool services for seniors and disabled residents for many years.

Section F. – Emission Benefits/Cost Effectiveness

The costs and emission benefits are calculated in the following chart:

IS CSC	Total Program Costs	Weighted CE/\$ per Ton	CE Per lb	AB2766 Cost
Senior Vanpool Services Program	\$54,721	\$54,721	\$30.93	\$5,721
Totals	\$54,721	\$54,721	\$30.93	\$5,721

The annual emissions reduction is calculated at 78 lbs/year or 0.04 tons/year. The cost effectiveness of this project is \$30.93 per pound and \$61,854 per ton. IS CSC will provide a cash match from Cal Trans in the estimated sum of \$49,000 to complete the costs for this sustainability project. A detailed emission benefits/cost effectiveness sheet is attached.

Section G. – Work Statement

The Work Statement will follow the Scope of Work as outlined in Section D of this proposal. Direct program activities will begin on January 1st, 2020 and end with the Final Report on December 31st, 2020. The Transportation Director will be responsible for assuring that each sequence of work activities is completed and documented appropriately, and all data collection, maintenance and reporting requirements are met timely. Project technical assistance will be utilized from the Northern Sierra Air Quality Management District as needed. Public acknowledgement for funding provided by the Northern Sierra AQMD will include a press release in the local newspaper and a placard placed on-site at the ISCSC offices based at the Loyalton Senior Center.

Section H. – Funding Request/Breakdown of Cost

The following chart reflects a breakdown of the costs associated with this project and their respective funding sources:

Project Tasks	Cost	AB2766 Funding	ISCSC Cal Trans Match	ISCSC In-Kind Match \$/yrs
Sustain Existing Vanpool Services	50,000	5,000	45,000	
Expand Outreach to New Riders	4,721	721	4,000	
Conduct Annual Maintenance				✓
Conduct data collection				✓
Prepare monthly/quarterly/year-end reports – Collaborate with partners				✓
Total Costs	\$54,721	5,721	\$49,000	0

No equipment will be purchased in association with this project. Should the Northern Sierra AQMD be unable to fund this project at the amount requested, ISCSC will be happy to accept any amount determined by the board to assist in the ongoing delivery and sustainability of vanpool services for Sierra County. Any reductions in service will be determined according to the amount of the award.

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Section I - Schedule of Deliverables/Monitoring Program
Legis Model of ESCSC - AB2766 DMV Savings Fund Project - Senior Vanpool Services Program

Inputs	Activities	Outputs	Participation	Short Term	Outcomes - Impact Medium Term	Long Term
<ul style="list-style-type: none"> Staff Time - In-Kind Match 	<ul style="list-style-type: none"> Contract - Supervise Monitor - Data Collection - Report 	<ul style="list-style-type: none"> Transportation Director / Drivers 		<ul style="list-style-type: none"> Sustain existing vanpool services 	<ul style="list-style-type: none"> Expand outreach to unserved residents 	<ul style="list-style-type: none"> Provide access to transportation services for seniors & disabled residents
<ul style="list-style-type: none"> AB2766 Funding 	<ul style="list-style-type: none"> Cash Grant 	<ul style="list-style-type: none"> Northern Sierra Air Quality Mgmt. 		<ul style="list-style-type: none"> Delivery of vanpool services - sustainability of program Access to Funding 	<ul style="list-style-type: none"> Reduced emissions of 78 lbs. per year Reduced health risks and cancer rates to children - Improved Air Quality Improved Air Quality 	<ul style="list-style-type: none"> Reduced emissions of 885 lbs/over five-year life of grant Reduced health risks and cancer rates to children - Improved Air Quality Improved Air Quality
<ul style="list-style-type: none"> Cash Match 	<ul style="list-style-type: none"> Cash Grant 	<ul style="list-style-type: none"> Cal Trans 		<ul style="list-style-type: none"> Access to Funding 	<ul style="list-style-type: none"> Reduced health risks and cancer rates to children - Improved Air Quality Improved Air Quality 	<ul style="list-style-type: none"> Reduced health risks and cancer rates to children - Improved Air Quality Improved Air Quality

Timelines outlined in Section D - Scope of Work Project Objectives will be reported monthly, quarterly and annually to Northern Sierra AQMD

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VANPOOLS AND SHUTTLES

Subcategory:

Air District Name: Northern Sierra AQMD

Local Government Name: Not Applicable

Project Name: Incarcerated Senior Citizens of Sierra County

<p>Description (Local Government)</p> <p>Implementing Agency:</p>	<p>Private Agency:</p>	
FUNDING:		
MVPM Funding: \$5,300	MSRC Funding: \$0	
Moyer Funding: \$0	CMAQ Funding: \$0	
Other CoFunding: \$0		
Capital Recovery Factor: 1.03	Annual Auto Trips Reduced: 3,003	
Project Analysis Period: 1 year	Annual Auto VMT Reduced: 105,105	
Annual Operating Days (D): 273 days		
Daily Ridership (R): 11 trips (riders/day)		
Annual Van VMT: -14,000 round miles traveled		
Adjustment (A): 1.00 This factor equals the portion of riders who are NOT airport dependent.		
Replaced Auto Trip Length (Lr): 35.00 miles in one direction of trip		
Adjustment (AA): 0.00 This factor equals the portion of riders who drive to the request service.		
Auto Access Trip Length (LL): 0.00 miles in one direction of trip		
EMISSION FACTORS:		
Auto Trip End Factors	Auto VMT Factors	VanVMT Factors
COG: 1.109 grams	0.332 grams	0.15 grams
NOx: 0.335 per trip	0.391 per mile	0.17 per mile
PM10: 0.015	0.220	0.23
EMISSION REDUCTIONS:	Pounds per Year	Tons per Year
COG: 70		0.04
NOx: 78		0.04
PM10: 29		0.01
Total: 177		0.09
COST-EFFECTIVENESS OF:		
Motor Vehicle Fees and/or Moyer Funds: \$30.93 per pound	\$61.54	per ton
CMAQ Funds: \$0.00 per pound	\$0	per ton
All Funding Sources: \$30.93 per pound	\$61.54	per ton

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EXHIBIT SUMMARY SHEET

Sierra Commons Business-Critical Response Center

Proposing Entity: Sierra Commons

Contact Person: Robert X Trent

Address: 792 A Searls Ave., Nevada City, CA 95959

Phone #: (530) 265-8443 **FAX #:** NA **EMAIL:** info@sierracommons.org

Total Project Budget:

	AB 2766 Funds	Co-Funding	Total Project Costs
Capital Costs	\$26,000	\$7,090	\$33,090
Operating Costs	\$0	\$2,150	\$2,150
TOTAL	\$26,000	\$9,240	\$35,240

Type of Project: (check one)

- Quantifiable Project
 Reduced Emission Vehicles Project



Implementation Area for Project: Check if District-wide

Describe the Implementation Area for the Project (e.g. city, county, region): The greater Nevada City and Grass Valley areas

Estimated Emission Reductions:

A. Emission Reductions (lbs/yr)

Reactive Organic Gases 21.66 Nitrogen Oxides 23.60 PM10 9.14

B. Vehicle Miles Traveled (VMT) Reduced 47,652

Single Occupancy Vehicle Trips Reduced 627

C. Number of people reached per day through public education 0

Cost-effectiveness: \$ 57.35 per pound (AB 2766 Funds Only)

Brief Project Description: Business center featuring a gas-powered generator, redundant Internet connectivity, and office environment that serves the Nevada City and Grass Valley business community during emergencies, and power and Internet outages.

REQUEST FOR PROPOSAL CONTENTS CHECKLIST

Applicant: Sierra Commons

Please complete and attach this checklist with your application.

- ✓ Exhibit Summary Sheet - page 1
- ✓ Request for Proposal Contents Checklist - page 2
- ✓ Authorization Letter/Resolution - page 3
- ✓ Project Description – page 4
- ✓ Project Organization/Background – page 5
- ✓ Emissions Benefits/Cost-Effectiveness - page 6
- ✓ Work Statement - page 7
- ✓ Funding Request/Breakdown of Cost - page 8
- ✓ Schedule of Deliverables/Monitoring - page 10
- ✓ All Pages Numbered
- ✓ Proposal, One Original
- ✓ (CHECK ONE ONLY) Quantifiable Project

- OR -

Reduced Emission Vehicles Project



AB 27766 Authorization Letter

Sierra Commons
792 A Searls Ave.
Nevada City, CA
95959
(530) 265-8443
info@sierracommons.org

To whom it may concern,

This authorization letter serves as consent and approval from the Sierra Commons board of directors to submit grant applications for the AB 2766 DMV Surcharge Fund Program - grant year 2020.

If you have any questions, please do not hesitate to contact Robert Trent or Sierra Commons' Board Treasurer, Joshua Robinson.

Best regards,

Joshua Robinson
Treasurer
Sierra Commons Board of Directors
JoshuaRobinson@tcbk.com
(530) 478-6001

Project Manager Contact: Robert Trent

Project Description

With an emergency capacity of 40+ workstations, Sierra Commons is preparing to support our local small businesses by creating the *Business-Critical Response Center* where local enterprises and media professionals can rely on an instant-on office environment, consistent Internet connectivity, and power.

For the past decade, Sierra Commons has been serving Western Nevada County's small businesses with office infrastructure, education, and mentoring. Our community relies on us for dependable Internet connectivity and a productive work environment. Beginning with the 2019 wildfire season, PG&E predicts regular 3 to 5-day power outages at elevated (Tier 2) or extreme (Tier 3) risk for wildfire zones. Nevada City and Grass Valley are both in Tier 3 zones.

During intentional and unexpected power and Internet outages, as well as emergencies, area businesses, including Sierra Commons members, that rely on Internet and power for mission-critical operations will have limited choices for maintaining business continuity. They will either have to travel an estimated thirty-eight miles each way to non-affected areas, operate generators at locations throughout Western Nevada County, or stay local and quickly get up and running at Sierra Commons.

During Internet and power outage situations, Sierra Commons will also provide access to local news organizations, such as YubaNet, local journalists, and out of the area reporters covering breaking news, so they can continue updating the community about critical information.

The key components of the Response Center are:

- A natural gas-powered generator
- Reliable and redundant Internet connections that are least likely to go down due to power outages
- A functional shared working environment
- Public awareness campaign
- And data tracking and reporting

In addition to the key components listed above, the project will require project management, planning, training, testing, and evaluation.

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Project Organization/Background

Founded in 2009, Sierra Commons is a 501(c)(3) business education center, located in Nevada City, providing a platform for local businesses to start, grow and thrive. Sierra Commons has been instrumental in launching and reigniting over 150 local businesses and our partnership with the Sierra Small Business Development Center is extending this positive impact by providing free one-to-one business consulting with local entrepreneurs and small businesses.

Our ADA accessible campus includes a 1,700 square foot main building that features coworking spaces, meeting rooms, and office administration. The secondary building holds up to thirty people and serves as a classroom, coworking space, and meeting space. Surrounding these buildings are a large patio, shaded lawns, and 12 parking spaces. Typically, approximately 30 on-street parking spaces are also available on Searls Avenue.

Successful execution of this project involves collaboration between Sierra Commons' leadership team, 20+ members, and professional contractors. Sierra Commons' Board and select coworking members, including an experienced architect and Building Information Modeler (BIM) contractor will support the project. We will contract with A+ Accredited Better Business Bureau company ABT Plumbing to complete the major components of the *Building* phase of this project (see Work Statement page 7). Additional contractors will be selected based on competitive pricing, experience, licensing, insurance, availability and reputation.

Robert Trent, Sierra Commons Executive Director, will fill the roles of Project Manager and Outreach Coordinator. Robert and Joe Fish of the Northern Sierra Air Quality Management District (District) have worked together to validate the methodology for generating emissions reductions estimates for this proposal and how to prepare accurate reporting as part of the requirements of this project. Sierra Commons will use our existing project accounting systems and professional bookkeeping service, Accountability Pro Inc., to track expenses and funding sources, as well as completing project financial reports.

Emissions Benefits/Cost-Effectiveness

As of 2016, 10.4 % (4,181 people) of Nevada County's workforce work at home. If 5% use Sierra Commons' Business-Critical Response Center during emergency/power outage/Internet outage situations (209 people), three times per year, with an average one-way trip savings of 38 miles, this project saves 56,430 miles traveled for a one-year period.

Additional emission reductions could be realized from additional workforce sectors using the facility, less miles traveled due to timely emergency news broadcasts out of the facility, and reducing the number of personal generators individuals would purchase and run if the Response Center was not available to them.

Estimated one-way vehicle trip reductions: 627 one-way trips per year

Estimated reductions in vehicle miles traveled: 47,652 Miles

Estimated emission reductions and cost-effectiveness:

Nitrogen Oxides (NOx)	<u>23.60</u>	Pounds/year
Reactive Organic gases (ROG)	<u>21.66</u>	Pounds/year
Particulate Matter (PM10)	<u>9.14</u>	Pounds/year
Cost-Effectiveness:	<u>57.35</u>	Cost/pound

Work Statement

The scope of work falls under five categories: Planning, Building, Connecting, Outreach, and Evaluation. Once funding is secured and planning is complete, installation of the generator will quickly take place and secondary Internet infrastructure will be set up. The power supply to the main Sierra Commons building, as well as the detached classroom, will be completed and all Internet services will be turned on. Using well-established communication channels, Sierra Commons will develop and execute an outreach plan that raises awareness about the availability of our Response Center. Use of the center will be tracked continually and effectiveness will be monitored through surveys and interviews.

Project Phases

Planning

1. End-user needs analysis including interviews and surveys
2. Usage scenarios identified
3. Technology analysis with emphasis on Internet connectivity
4. Safety and security plan
5. Permitting
6. Detailed build-out schedule
7. Integrated outreach plan
8. Data tracking and evaluation plan
9. Emergency/Internet outage/power outage activation plans
10. End-user policies and agreements
11. Contractor and supplies bidding
12. Contractor agreements secured

Building

1. Building supplies and technology purchases
2. Generator install
3. Building modifications as needed
4. Testing equipment
5. Staff training

Connecting

1. Connect Internet service
2. Configure network and security

3. Test connections under different usage scenarios
4. Staff training
5. Business-Critical Response Center soft launch

Outreach

1. Execute Integrated Outreach Plan including:
 - a. Social/Broadcast/Print media
 - b. 211 and calendar listings
 - c. Speaking opportunities
 - d. Email newsletters
 - e. Signage including DMV logo
2. Create and publish user documentation and policies
3. Update sierracommons.org website
4. Project Launch/public demonstration event/project funding acknowledgement

5. Evaluation

1. Track usage data
2. Track emissions reduction data
3. Generate and publish reports
4. Maintain and improve systems as necessary

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Funding Request/Breakdown of Cost

AB 2766 funds will be used to purchase and install a natural gas-powered generator, one year of Internet service and equipment purchases, and fees related to a public awareness campaign. Sierra Commons will cover all operational costs for this project.

BUDGET	Matching Funds				
	AB 2766	Sierra Commons Co-Funding	In-Kind	Administration	Cost
PLANNING					
Project Management	\$1,500	\$500	\$1,000		\$3,000
Legal			\$1,000		\$1,000
printing		\$100		\$35	\$135
Planning Subtotal	\$1,500	\$600	\$2,000	\$35	\$4,135
BUILDING					
Project Management	\$500		\$250		\$750
Generator and Installation	\$17,800				\$17,800
Contingency	\$500				\$500
Building Subtotal	\$18,800	\$0	\$250	\$0	\$19,050
CONNECTING					
Project Management	\$600				\$600
Primary Internet connection		\$1,440			\$1,440
Secondary Internet connection	\$1,400				\$1,400
Equipment	\$550				\$550
IT Contractor		\$250	\$250		\$500
Contingency	\$250				\$250
Connecting Subtotal	\$2,800	\$1,690	\$250	\$0	\$4,740
OUTREACH					
Outreach Coordinator	\$2,250		\$1,500		\$3,750
Singage	\$250		\$200	\$35	\$485
Public demonstration event		\$200		\$200	\$400
Outreach Subtotal	\$2,500	\$200	\$1,700	\$235	\$4,635
EVALUATION					
Project Management	\$350				\$350
Bookkeeping		\$400		\$300	\$700
Printing	\$50			\$35	\$85
Evaluation Subtotal	\$400	\$400	\$0	\$335	\$1,135
BUDGET TOTAL	\$26,000	\$2,890	\$4,200	\$605	\$33,695

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EQUIPMENT COSTS	AB 2766	Matching Funds			Cost
		Sierra Commons Co- Funding	In- Kind	Administration	
GENERATOR					
Ultra Elite Power Generation System Installation					
Whole house comfort and illumination package					
Automated monitoring system renovation					
Power protection system installation					
Electrical fire protection safety system upgrade					
Fuel delivery system upgrade and calibration service					
Code and safety upgrades					
Break in maintenance service package					
5 year maintenance and service package					
2 year warranty. 20 kw kohler generator and transfer switch					
Run gas line, pour concrete pad, run all electrical needed					
Drawings of sight plan and electrical					
Generator Subtotal	\$17,800				\$17,800
INTERNET/NETWORKING					
Modem	\$150				\$150
Networking	\$400				\$400
Internet/Networking Subtotal	\$550				\$550
Equipment Total	\$18,350	\$0	\$0	\$0	\$18,350
OPERATING COSTS		Matching Funds			
	AB 2766	Sierra Commons Co- Funding	In- Kind	Administration	Cost
Staffing During Outages	\$0		\$1,500	\$200	\$1,700
Added utilities costs	\$0	\$400		\$50	\$450
Operating Costs Total	\$0	\$400	\$1,500	\$250	\$2,150

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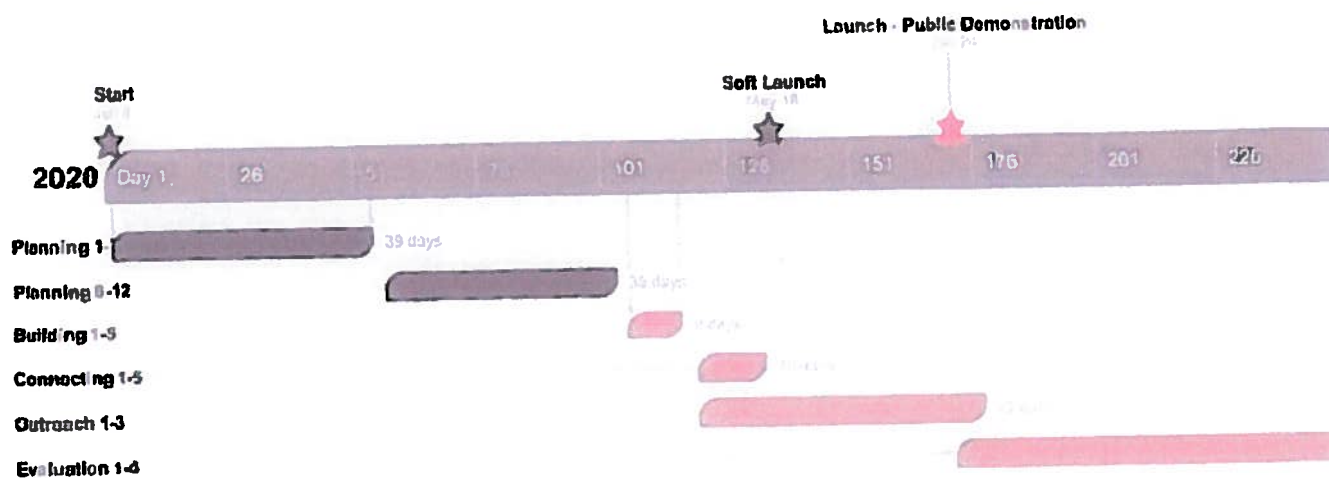
Schedule of Deliverables/Monitoring

Schedule of Deliverables

Please reference Work Statement on Page 7 for a listing of project tasks and subtasks.



Sierra Commons Business-Critical Response Center



Sierra Commons

8/27/2019

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Monitoring

Data will be consistently collected from all participants using the Business-Critical Response Center throughout the funding period. As a general practice, Sierra Commons tracks all facility use, so long-term use of the workstations will be tracked indefinitely.

All individuals using the Response Center will be required to sign-in to the facility, provide contact information, and fill out a brief online survey. The survey will include, but is not limited to, the following questions:

- 1. How many miles did you travel to Sierra Commons?**
- 2. Which mode of transportation did you use to get here?**
- 3. Did you travel here by yourself?**
- 4. Approximately how many miles would you have driven to if the Business-Critical Response Center was not available to you?**
- 5. What is the primary business purpose you are using this facility for?**
- 6. Are you a journalist reporting on an emergency situation? If so, which organization are you affiliated with?**

Survey data will automatically become entered into our data analysis software to ensure accurate tracking and reporting.

A follow up survey will solicit user feedback on the Response Center's ability to provide business-critical services.

ATTACHMENT 1

Sierra Commons Board of Directors

The Board of Directors at Sierra Commons includes dedicated individuals from a wide variety of business backgrounds and skills.

Chair - Evelyn Fasset

SBDC Business Consultant and Technology Specialist

Secretary - Erika Kosina

Media and Communication Specialist

Treasurer - Joshua Robinson

Tri Counties Bank Branch Manager - Nevada City

Director- Adam Dunn

Community Builder/Social Innovation Educator/Impact Investment Consultant

Executive Director - Robert X Trent

Business Consultant and Serial Entrepreneur

Exhibit Summary Sheet

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

Contact Person: Eric Braswell (Equipment Maintenance Supervisor)
Address: 1834 East Main Street
Quincy, Ca. 95971

Phone #: 530-283-6496 **FAX#:** 530-283-6017 **EMAIL:** pcwshop@countyofplumas.com

Total Project Budget:

	AB2766 Funds	Co-Funding	Total Project Costs
Capital Costs	<u>\$3,622.55</u>	<u>\$37,285.65</u>	<u>\$40,908.20</u>
Operating Costs	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>
Total	<u>\$3,622.55</u>	<u>\$37,285.65</u>	<u>\$40,908.20</u>

Type of Project: (check one)

- Quantifiable Project
 Reduced Emission Vehicles Project

Implementation Area for Project: Check if District-wide

Describe the Implementation Area for the Project (e.g. city, county, region):
Two Ten-Wheeler Trucks (#117 & #119) will be used throughout Plumas County.

Estimated Emission Reductions:

- A. Emission Reductions (lbs/yr)
Reactive Organic Gases N/A Nitrogen Oxides N/A PM₁₀ 5.06339
- B. Vehicle Miles Traveled (VMT) Reduced N/A
Single Occupancy Vehicle Trips Reduced N/A
- C. Number of people reached per day through public education N/A

Cost-effectiveness: \$99.99 per pound (AB 2766 Funds Only)

Brief Project Description:

Apply emission control devices to two 1996 Freightliner Ten-Wheelers with Cat 3406E engines.

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REQUEST FOR PROPOSAL CONTENTS CHECKLIST

Applicant: Plumas County Department of Public Works

Please complete and attach this checklist with your application.

- Exhibit Summary Sheet - page 1
- Request for Proposal Contents Checklist - page 2
- Authorization Letter/Resolution - page 3
- Project Description - page 4
- Project Organization/Background - page 5
- Emissions Benefits/Cost-Effectiveness - page 6-7
- Work Statement - page 8
- Funding Request/Breakdown of Cost - page 9
- Schedule of Deliverables Monitoring - page 10
- All Pages Numbered
- Three Copies Of Proposal Plus One Original
- (CHECK ONE ONLY)
- Quantifiable Project
- OR -
- Reduced Emission Vehicles Project

Authorization Letter / Resolution

Proposing Entity:

Plumas County Department of Public Works
1834 East Main St.
Quincy, Ca. 95971
(530) 283-6268

Eric Braswell 8-29-19

Contact Person: Eric Braswell
(530) 283-6496

Plumas County Department of Public Works will be the project manager throughout the life of this project.

Signing Authority:

The Director of Public Works for Plumas County will be the sole authorized signing authority responsible for signing the contract and claims for payment.

Director of Public Works
Robert A. Perreault

Signature:

Robert A. Perreault

Date: AUGUST 23, 2019

Project Description

This project consists of installing Diesel Particulate Filters on two (2) 1996 Freightliner Ten-Wheelers with Cat 3406E engines.

Our objectives are to improve the exhaust emissions of our fleet throughout Plumas County. By acquiring this Grant and providing necessary funding for this project, Plumas County Public Works will be closer to achieving goals for cleaner emissions.

If awarded funding for this project, Diesel Emissions Service in Redding, Ca. will install DPF's on two of Public Works Freightliners Unit # 117 (vin # 1FVNFSYB6VP674131) and Unit # 119 (vin # 1FVNFSYBXVP674133).

The DPF's that will be installed are a HUG MOBICLEAN R40 design CARB LEVEL 3+ VERIFIED SYSTEM WITH HIGHER THAN 85% PM REDUCTION.

Project Organization/Background

I am the Project Manager for requesting AB2766 DMV Surcharge Program Funds for the 2019-2020 Project Cycle. I have been employed with Plumas County Public Works since 1991 and I have 29 years' experience with the operation, maintenance and record keeping of equipment. As the Equipment Maintenance Supervisor I've been successful with assisting and preparing grant proposals.

My duties for Plumas County include but is not limited to prepare reports, cost projections, track equipment maintenance, data entry for computerized fleet analysis and manage a fleet with more than 300 pieces of equipment.

Public Works experienced success in the past from granted AB2766 DMV Funds. Over the previous years we have applied the funds towards seven Diesel Particulate Filters. The Filters were installed on Graders, Loaders and a Freightliner Truck. With the funds Public Works also retired (scrapped) a 1974 Low-Bed truck and 1990 Plow truck and replaced them with new trucks including the Best Available Controlled Technology.

If awarded AB 2766 DMV funds, Public Works will have Diesel Emissions Service (DES) in Redding perform the installation of emission control devices (DPF's) on two 1996 Freightliner Ten-Wheelers. DES has a great deal of knowledge and experience regarding C.A.R.B. regulations and the equipment that is required to meet compliance. DES began its operations in 2006 as the emissions division of parent company North State Truck Equipment, Inc., which has been serving the heavy duty truck market since 1978. DES was established to help California businesses meet and exceed the strict C.A.R.B. and E.P.A. emissions regulations placed on diesel trucks. Since 2006, DES has sold and/or installed over 15,000 emission control devices, and is now an industry leader in diesel emissions on the west coast and beyond.

As a Municipality, Plumas County Public Works is audited twice annually, once by the State Controller's Office and the County also hires an independent auditor. Both audits track funding sources by project tasks and is imperative that we track these costs accurately.

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USER: PLEASE only enter data into the shaded cells. DO NOT do any copying and pasting within the spreadsheet

DPF Emission Worksheet

Capitol Recover Factors

1 year	1.03
3 years	0.35
5 years	0.22
7 years	0.16
10 years	0.12
12 years	0.10
15 years	0.08
20 years	0.07

DPF Mfr: Hug Filtersystems Mobiclean R

DPF Control Efficiency: 85%

Cost per DPF: \$ 20,454.10

Total DPFs Purchased: 2
Project Life: 10 years

Capitol Recovery Factor: 0.12

Total Project Funding amount: 40,908.20

In-Kind Funding amount: \$ 37,285.65

Grant Funding Amount: \$ 3,622.55

Cost-Effectiveness of Funding Dollars (\$\$/lb): \$ 99.99

	Annual Mileage	PM EmFac (g/mile) **	Grants per year of PM	lbs per year of PM
Truck #1:	4000	0.27	1080	2.38
Truck #2:	4600	0.27	1242	2.74
Truck #3:	0	0	0	0
Truck #4:	0	0	0	0
Totals:	8600		2322	5.11454

Pounds per year of PM reduced:

4.34736

**Emfac obtained from Table 5D of CARB 2013 Emission Factors (Heavy Duty)

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Table 5 Statewide Calendar Year 2017 On-Road Emission Factors for Heavy-Duty Cleaner Vehicle Projects

BEFORE PROJECT Baseline Emission Factors
New Diesel Vehicles

Vehicle Type	Gross Vehicle Weight Rating (lbs)	Model Year	Emission Factors (g/mi)				Conversion Factors	Emission Factors (g/bhp-hr)			
			ROG	CO	NOx	PM2.5		ROG	CO	NOx	PM2.5
Urban Transit Buses	> 33,000	2007-2009	0.02	5.44	1.09	0.0044	4.2	0.004	1.598	0.258	1.291
		2010-2012	0.02	5.05	1.12	0.0038	4.2	0.004	1.547	0.282	0.9012
		2013-	0.02	4.29	0.81	0.0021	4.2	0.005	1.565	0.232	0.6925
Transit Buses ¹ , School Buses, and Trucks ²	14,001 - 33,000	2007-2009	0.2	6.6	6.4	0.104	1.8	0.122	0.344	2.528	0.041
		2010-2012	0.08	3.2	2.8	0.005	1.8	0.018	0.094	0.328	0.021
		2013-	0.20	0.2	1.1	0.002	1.8	0.011	0.052	0.180	0.022
Class 8 Trucks ³	> 33,000	2007-2009	0.4	1.1	12.0	0.088	2.9	0.041	0.218	1.314	0.003
		2010-2012	0.1	0.8	3.6	0.010	2.9	0.022	0.181	0.528	0.001
		2013-	0.1	0.8	1.6	0.004	2.9	0.022	0.181	0.528	0.001

Rebuilt Class Vehicles

Vehicle Type	Gross Vehicle Weight Rating (lbs)	Model Year	Emission Factors (g/mi)				Conversion Factors	Emission Factors (g/bhp-hr)			
			ROG	CO	NOx	PM2.5		ROG	CO	NOx	PM2.5
Urban Transit Buses	> 33,000	1994-1997	1.69	11.43	20.23	0.69	4.2	0.401	2.842	7.355	2.158
		1998-2002	1.38	14.37	20.21	0.25	4.2	0.384	2.580	4.554	0.063
Transit Buses ¹ , School Buses, and Trucks ²	14,001 - 33,000	1994-1997	0.50	1.1	15.33	0.19	1.8	0.280	0.729	6.518	0.105
		1998-2002	0.91	2.2	14.2	0.35	1.8	0.604	1.309	8.329	0.192
Class 8 Trucks ³	> 33,000	1994-1997	0.7	1.1	11.4	0.27	2.9	0.289	0.580	7.348	0.022
		1998-2002	0.91	1.88	11.4	0.18	2.9	0.211	0.648	6.274	0.044

AFTER PROJECT Emission Factors

New Cleaner Vehicle Purchases or Repowers

Vehicle Type	Gross Vehicle Weight Rating (lbs)	Model Year	Emission Factors (g/mi)				Conversion Factors	Emission Factors (g/bhp-hr)			
			ROG	CO	NOx	PM2.5		ROG	CO	NOx	PM2.5
Urban Transit Buses	> 33,000	2012-2014	0.02	5.44	1.09	0.0044	4.2	0.004	1.598	0.258	0.0007
		2015-	0.02	4.29	0.81	0.0021	4.2	0.004	1.571	0.232	0.0003
Transit Buses ¹ , School Buses, and Trucks ²	14,001 - 33,000	2012-2014	0.04	0.2	1.6	0.000	1.8	0.008	0.115	0.901	0.002
		2015-	0.03	0.2	1.0	0.002	1.8	0.017	0.088	0.545	0.001
Class 8 Trucks ³	> 33,000	2012-2014	0.1	0.8	2.8	0.009	2.9	0.030	0.189	1.3951	0.002
		2015-	0.1	0.8	1.2	0.002	2.9	0.021	0.174	0.428	0.001

Source: EPA 40 CFR 101.07 (Diesel), Annual Emission

1 - Other Buses 2 - Medium Heavy-Duty Trucks 3 - Heavy Heavy Duty Trucks

On-board filters could be Low sulfur natural gas (LSNG), liquefied natural gas (LNG), or diesel die-el with after-treatment technology to reduce NOx and PM. The "After Project" emission factors are based on typical CNG vehicles, however, after-treatment applied to CNG vehicles has been shown to reduce even more PM and also NOx emissions.

Work Statement

Plumas County Department of Public Works budgeted for our Co-Funding commitment for the 2019/2020 Fiscal Budget Year. The project starting date will be no sooner than January 1, 2020 and will be completed by December 31, 2020 if the AB2766 DMV Surcharge Funds are awarded for this project.

The sequence of work activities will be as follows:

1. All necessary paper work including contract agreement signed between NSAQMD and Plumas County Department of Public Works and any authorizations from NSAQMD necessary to begin work on the project.
2. In accordance with Plumas County's Purchasing Policy a purchase order will be issued to Diesel Emissions Service (DES) in Redding, Ca. for the installation of two DPF's on two 1996 Freightliner trucks.
3. We will deliver both trucks to DES for installation to begin.
4. Once completed we will place the trucks back into service.
5. Our shop personnel will monitor the onboard emissions computer and perform opacity tests as required. The miles traveled will be tracked with the Drivers Daily Report and the data will be input to the shops Computerized Fleet Analysis Program.
6. Plumas County has a proven successful maintenance program in place that will ensure equipment longevity beyond the Project Analysis Period of 10 years.
7. Plumas County Department of Public Works will place an article in the local newspaper acknowledging the AB2766 DMV funds were provided by NSAQMD and the success of the program.

Installer Information:

Diesel Emissions Service
17011 Clear Creek Road
Redding, Ca. 96001
PH: 530-241-2851
FAX: 530-2451-0870

Contact person: Jerry Baker

Funding Request/Breakdown of Costs

Task	AB2766 DMV Funds	In-Kind Contributions Plumas County	Qty.	Co-Funding	Cost
Deliver and pickup trucks from DES in Redding, CA. (Includes Equipment & employee rates)		\$1,137.06	2		\$2,274.12
Hug Mobileclean R40 DPF, muffler, brackets, bands, enclosure, piping, etc.	(\$3,622.55) x 1		2	\$16,140.42	\$32,280.84 (\$3,622.55)
Administrative Costs		\$500.00	2		\$1,000.00
Labor			2	\$2,500.00	\$5,000.00
Misc. Supplies			2	100.00	\$200.00
Freight (Incoming)			2	\$500.00	\$1,000.00
Sales Tax			2	\$1,213.68	\$2,427.36
TOTAL (Complete with installation of 2 DPF's on 2 Trucks)					\$44,182.32
AB 2766 Funds					(\$3,622.55)
Total w/AB2766 Funds					\$40,559.77

Above is a general breakdown of estimated costs. This is an estimate based on a quote from Diesel Emission Services in Redding, Ca. and using the DPF Emission worksheet to calculate possible AB2766 DMV Funding.

Plumas County Department of Public Works will not change or adjust the amount of requested AB2766 Funds. Public Works will increase the Co-Funding if the total cost of the project is higher than estimated.

Amount of AB 2766 Funding Requested:	\$ 3,622.55
Amount of Co-Funding & In-Kind Contributions Expected:	<u>\$40,559.77</u>
<i>(Complete with installation of 2 DPF's on 2 class 8 trucks)</i>	Total Project Cost: \$44,182.32

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Schedule of Deliverables/Monitoring

If the AB2766 DMV Surcharge Funds are awarded for this project, the starting date will be no sooner than January 1, 2020 and will be completed by December 31, 2020. When all necessary paper work is completed with NSAQMD, Plumas County Department of Public Works will make an appointment with Diesel Emission Services (DES).

Public Works will deliver 2 (two) 1996 Freightliners to DES in Redding for the DPF exhaust retrofit. Once complete we will put the Trucks back into service and monitor the emission control system as necessary.

Our shop personnel will monitor the onboard emissions computer and perform opacity tests as required. The miles traveled will be tracked with the Drivers Daily Report and the data will be input to the shops Computerized Fleet Analysis Program.

Plumas County has a proven successful maintenance program in place that will ensure equipment longevity beyond the Project Analysis Period of 10 years.

Exhibit Summary Sheet

Proposing Entity: Sierra Senior Services
Contact Person: Sharon Romack, Executive Director
Address: PO Box 4152
Truckee, CA 96160
Phone: 530-550-7600 **FAX:** 530-587-0408

Total Project Budget:

	AB2766 Funds	Co-Funding	Total Project Costs
Capital Costs	<u>\$37,800</u>	<u>\$15,000</u>	<u>\$52,800</u>
Operating Costs	0	0	0
TOTAL	<u>\$37,800</u>	<u>\$15,000</u>	<u>\$52,800</u>

Type of Project: Reduced Emission Vehicles Project

Implementation Area for Project: Eastern Nevada County

A. Estimated Emission Reductions:

Reactive Organic Gases: 16.75 Nitrogen Oxides: 20.13 PM: 8.65

B. Vehicle Miles Traveled (VMT) Reduced: 18,000

Single Occupancy Vehicle Trips Reduced: 520

C. Number of people reached per day through public education: 10,000 – 15,000

Cost-effectiveness: \$99.63 per pound

Brief Project Description:

Replace a 2004 Honda Pilot with an all-wheel drive Electric Vehicle to deliver Meals on Wheels to food insecure seniors in Eastern Nevada County each weekday. The vehicle will have enough cargo capacity to carry our hot packs and coolers needed to deliver the food at the correct temperatures. The vehicle will have signage on the sides that says "This Zero Emission Electric Vehicle provided by a grant from Northern Sierra Air Quality Management District" or wording of your suggestion.

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REQUEST FOR PROPOSAL CONTENTS CHECKLIST

Application: SUSTAINABLE SERVICE

Please complete and attach this checklist with your application

- Exhibit Summary Sheet - page 1
- Request for Proposal Contents Checklist - page 2
- Authorization Letter/Resolution - page 3
- Project Description - page 4
- Project Organization/Background - page 5
- Emissions Benefits/Cost-Effectiveness - page 5/6
- Work Statement - page 7
- Funding Request/Allocation of Cost - page 8
- Schedule of Deliverables/Milestones - page 9/10
- All Pages Numbered
- Proposal, (the Original)
- (CHECK ONE ONLY)
Quantifiable Project
- OR -
- Reduced Emissions Vehicles Project

Attachment 2 - 1



Local Meals on Wheels Provider

August 8, 2019

The Northern Sierra Air Quality Management District has invited Sierra Senior Services to submit a grant proposal for the purchase of an electric vehicle for our Meals on Wheels delivery fleet. Sierra Senior Services is a private, non-profit 501 (C) 3 entity (Tax ID Number 68-0484075) who is willing to submit the application and if chosen, to accept the grant for the above purpose.

The Board of Directors of Sierra Senior Services hereby authorizes our Executive Director, Sharon Romack, to act on its behalf in this matter, to apply for and accept the grant, to sign all necessary grant applications, contracts, amendments and other required documents and to perform any and all responsibilities in relationship to the contract.

Sharon I Romack August 8, 2019
Authorized Representative Name Date

Signature

Iann Melrose August 8, 2019
Chairman/President of the Board of Directors Name Date

Signature

Mary Anderson August 8, 2019
Secretary of the Board of Directors Name Date

Signature

Sierra Senior Services - 10040 Estero Drive - P.O. Box 4152 - Truckee, CA - 96160
Fed ID# 68-0484075 (530) 550-7600 • www.sierraseniors.org

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D. Project Description

Sierra Senior Services is a nonprofit 501 (c) 3 organization established in 2001 to provide meals to seniors through the Meals on Wheels program. We provide 32,000 meals annually on a daily basis with approximately 30% of the meals going to residents of Nevada County (almost 10,000 meals). Our agency assists seniors to remain independent and in their own homes by providing them with a hot nutritious meal as well as a safety check for participants living alone since someone is seeing them regularly. Our fleet of 6 gas powered vehicles travel close to 200 miles per day, 5 days a week and are older – from a 2004 Honda Pilot to a recent grant-funded purchase of a 2016 Ford Escape. The need to replace the older vehicles with cleaner air vehicles is imperative. This grant would allow us to purchase an electric vehicle which would be the beginning of a transformation of our fleet to electric powered vehicles.

Going from a gas-powered vehicle to an electric vehicle would save 100% of the emissions emitted now by the 2004 Honda Pilot that the electric vehicle would replace. Between the age of the vehicle and that start and stop nature of our driving, this car currently gets less than 12 miles per gallon. The route in Eastern Nevada County covers about 35 miles each day so the Honda Pilot burns at least 3 to 4 gallons of gas each day. To go from using gas and creating emissions to a vehicle with NO EMISSIONS would help the quality of the air for all. See the chart in section F for complete details. An electric vehicle would also save us money since we would not have to purchase gas for the vehicle or worry about oil changes.

Charging stations are available throughout the town of Truckee which is where our offices are located and where the vehicle would be housed. In preliminary conversations, I have already gained tentative permission to use these charging stations for our needs. Since we lease the area where we house the cars, it would not be practical to install a charging station there but we could certainly talk with the building's owners about installing one later to be used by us and other tenants, too. There are rebates and incentives offered for buildings to install charging stations and this might be attractive to the building owners, too.

Sierra Senior Services is a well-known organization in the community and could serve as a model to other organizations who may be considering electric vehicles for their own use. The vehicle would proudly say "This Zero Emission Electric Vehicle provided by a grant from Northern Sierra Air Quality Management District" on both sides of the car and would be seen as we drive the vehicle as well as when it is parked in front of clients' homes.

E: Project Organization Background

Sierra Senior Services is a 501(c)(3) non-profit organization that was established in 2001 to provide daily meals to at-risk seniors 60 years of age or older living in the Truckee and North Lake Tahoe Area who are unable to shop for or prepare their own meals. This service is unduplicated in the community and provides more than a meal to isolated seniors who are often alone. The volunteer who delivers the meal also brings a warm smile and a daily wellness check to these at-risk seniors. No one is turned down for this program and as of today we have no waiting list. We are able to accommodate all who need this hot nutritious meal and friendship. We ask for contributions from participants but they provide a very small percentage of our revenue. Grants, government funding and fundraising are our major sources of revenue.

We provide 32,000 meals annually on a daily basis with approximately 30% of the meals going to residents of Nevada County (almost 10,000 meals). Community volunteer drivers deliver these meals driving close to 200 miles each day on 6 different routes. Because of our tight budget we depend on automobile donations from the community or grants from other organizations to fill our fleet. Our most recently acquired vehicle is a 2016 Ford Escape which was purchased this year with funds from the Lahontan Community Foundation. As we would do with a Northern Sierra AQMD grant, we received the contract for the funds, shopped for an appropriate vehicle and purchased the vehicle with the funds we received. Updates and reports are provided to Lahontan as they requested. This same process would be followed for a grant from Northern Sierra AQMD for an electric vehicle.

Because some of our funding comes from the state of California Agency on Aging, we must keep complete records of what funding was received from the state, how it was spent and what county it was allocated to. This same record keeping would be done for funds received from the Northern Sierra AQMD. Because we would be going from higher emissions to NO EMISSIONS, it should be very easy to prepare the report on the decrease of emissions from the new vehicle!

F. Emission Benefits/Cost Effectiveness

The proposed Electric Vehicle would drive about 35 miles per day, five days per week. There would be 260 trips out and 260 trips back for the year for a total of 18,000 per year. These numbers are based on actual mileage of the Nevada County route that is currently covered by the 2004 Honda Pilot. As our program grows, more clients may be added which would increase the number of miles driven each day but not the number of trip ends.

Because we are a rural area our cost-effectiveness is greater than \$10 a pound. An electric vehicle would totally cut out gas emissions for at least 18,000 miles in 2020.

Please see the following table which was completed with the help of The District.

Old Gasoline or Diesel Engine			
NOx			
Miles per year	g/mile	g/year	lbs/year
18,000	0.491	8838	19.47
Average Trip Ends	g/trip end	g/year	lbs/year
520	0.577	300.04	0.66
Totals:		9138	20.13
PM			
Miles per year	g/mile	g/year	lbs/year
18000	0.218	3924	8.64
Average Trip Ends	g/trip end	g/year	lbs/year
520	0.008	4.16	0.02
Totals:		3928	8.65
ROG			
Miles per year	g/mile	g/year	lbs/year
18000	0.392	7056	15.542
Average Trip Ends	g/trip end	g/year	lbs/year
520	1.054	548.08	1.207
Totals:		7604	16.75

Electric Vehicle			
NOx			
Miles per year	g/mile	g/year	lbs/year
0	0	0	0.00
Average Trip Ends	g/trip end	g/year	lbs/year
0	0	0	0.00
Totals:		0	0.00
NOx savings:		9138	20.13
PM			
Miles per year	g/mile	g/year	lbs/year
0	0	0	0.00
Average Trip Ends	g/trip end	g/year	lbs/year
0	0	0	0.00
Totals:		0	0.00
PM savings:		3928	8.65
ROG			
Miles per year	g/mile	g/year	lbs/year
0	0	0	0.00
Average Trip Ends	g/trip end	g/year	lbs/year
0	0	0	0.00
Totals:		0	0.00
ROG savings:		7604	16.75

Total Savings: g/year 20670 lbs/year 46
Grant Award Requested: \$ 37,800.00
Capital Recovery Factor: 0.12 for 10 years

Cost Effectiveness: \$ 99.63 per pound

Notes:
 Old Engine EmFacs obtained from Table 3, Methods to Find the Cost-Effectiveness of Funding Air Quality Projects, May, 2013 - CARB

It should be noted that the NMOG-NOx EmFac was split as 76% NOx and 24% ROG

Capital Recover Factors	
1 year	1.03
3 years	0.35
5 years	0.22
7 years	0.16
10 years	0.12
12 years	0.10
15 years	0.08
20 years	0.07

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G. Work Statement

- Task 1 - January 6, 2020** **Acknowledge grant award through press release, website and eblast to supporters.**
- Task 2 – January 6, 2020** **Research electric vehicles equipped to drive in the mountains and snow. Equipment must include Four Wheel/All-Wheel Drive and have a cargo capacity of 34 cubic feet or more.**
- Task 3 – January 6, 202** **Reach out to other organizations or do a fund drive for additional funding (if needed)**
- Task 4 - February 15, 2020** **Identify preferred makes and models. Determine availability of makes and models and price to assure there are sufficient funds available. Solicit additional funds if needed**
- Task 5 - March 15, 2020** **Identify charging station that will be used and make arrangements with property owner to charge vehicle several times during the week at that location**
- Task 6 - March 20, 2020** **Negotiate with dealer to purchase car**
- Task 7 - March 25, 2020** **Register car with DMV**
- Task 8 - March 28, 2020** **Order decals for back and sides of vehicle acknowledging how we acquired the vehicle.**
- Task 9 – March 30, 2020** **Release press information to all local media acknowledging grant(s) that made purchase possible, introducing the new vehicle and discussing benefits of an electric vehicle over gas powered vehicle.**
- Task 10 – March 30, 2020** **Add information to website about "Going Electric" with the vehicle and send email blast to all supporters acknowledging the grant and purchase of the vehicle.**
- Task 11 - April 6, 2020** **Have decals installed on vehicle**
- Task 12 - April 13, 2020** **First run with the electric vehicle**

H. Funding Request/Breakdown of Cost

Task	Total Funds Needed	Funder	\$ requested from AQMD	\$ of matching funds	Type of expenditure
Task 1	\$200	In-kind – Volunteer	0	\$200	Admin
Task 2	\$500	Area 4 Grant covers Admin costs	0	\$500	Admin
Task 3	\$300	Area 4 Grant covers Admin costs	0	\$300	Admin
Task 4	\$500	Area 4 Grant covers Admin costs	0	\$500	Admin
Task 5	\$100	Area 4 Grant covers Admin costs	0	\$100	Admin
Task 6	\$35,500	NSAQMD	\$36,300	0	Equipment
Task 7	\$1000	NSAQMD	\$1000	0	Equipment
Task 8	\$400	NSAQMD	\$400	0	Equipment
Task 9	\$200	In-kind - Volunteer	0	\$200	Admin
Task 10	\$200	In-kind – Volunteer	0	\$200	Admin
Task 11	\$100	NSAQMD	\$100	0	Equipment
Task 12	\$100	In-kind – volunteer	0	\$100	Operating
TOTALS	\$39,100		\$37,800 (94.5%)	\$2,100 (5.5%)	

The only equipment that will be purchased is the Four-Wheel or All-Wheel drive vehicle and the identifying decals for the sides of the car. 100% of the cost of these items will be covered by the AB 2766 DMV Surcharge funds. Until we know what the grant will be and the cost of getting a vehicle that meets our specifications, we will not be able to identify another grantor to provide the remaining funds needed for the purchase. At this time, we are estimating the cost of the vehicle to be \$35,500 with \$1000 for the registration and \$500 for the identifying decal. The grant of AB2766 funds will cover almost 95% of the cost of this project with the remaining covered by an Area 4 Agency on Aging grant and in-kind

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donations. If the grant from AB 2766 funds is less than \$20,000, we may not be able to purchase the vehicle on our timeline since another grant would have to be found for a larger portion of the cost.

I. Schedule of Deliverables/Monitoring Program

Task 1 -	Acknowledgment of grant award through press release, website and eblast to supporters.	Due January 10, 2020
Task 2 -	Research electric vehicles equipped to drive in the mountains and snow. Equipment must include Four Wheel/All-Wheel Drive and have a cargo capacity of 34 cubic feet or more.	Due January 30, 2020
Task 3 -	Reach out to other organizations or do a fund drive for additional funding (if needed)	Due February 15, 2020
Task 4	Identify preferred makes and models. Determine availability of makes and models and price to assure there are sufficient funds available. Solicit additional funds if needed	Due February 28, 2020
Task 5	Identify charging station that will be used and make arrangements with property owner to charge vehicle several times during the week at that location	Due March 15
Task 6	Negotiate with dealer to purchase car	Due March 25, 2020
Task 7	Register car with DMV	Due March 28, 2020
Task 8	Order decals for back and sides of vehicle acknowledging how we acquired the vehicle.	Due April 1, 2020
Task 9	Release press information to all local media acknowledging grant(s) that made purchase possible, introducing the new vehicle and discussing benefits of an electric vehicle over gas powered vehicle.	Due April 1, 2020
Task 10	Add information to website about "Going Electric" with the vehicle and send	Due April 1, 2020

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email blast to all supporters acknowledging the grant and purchase of the vehicle.

Task 11	Have decals installed on vehicle	Due April 6, 2020
Task 12	First run with the electric vehicle	Due April 13, 2020

This timeline is based on AB2766 funds being granted for \$37,800 total.

The project objectives will be measured by totaling the mileage used each quarter and determining the gas emissions eliminated for those miles. At the end of the year we will be able to see the total amount saved.

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Received via
email on
Aug 22, 2019

Local Meals on Wheels Provider

August 22, 2019

Northern Sierra Air Quality Management District
200 Litton Drive, Suite 320
Grass Valley, CA 95945
Attention: Joe Fish

Dear Mr. Fish:

Following is the proposal for a grant from the AB2766 DMV Surcharge funds for the Grant Year 2020. Our proposal is for the purchase of a Zero Emissions Vehicle to replace a gas powered 2004 Honda Pilot that is used to deliver Meals on Wheels to homebound seniors in Eastern Nevada County each weekday.

Sierra Senior Services is a nonprofit 501 (c) 3 organization (Tax ID Number 68-0484075) that was established in 2001 to provide meals to seniors through the Meals on Wheels program. Our fleet of six vehicles, which are all gas powered, provides transportation for this very important service but also produces emissions that could be zeroed out through the use of electric vehicles. We are requesting a grant to begin the process of transforming our fleet with the purchase of our first Zero Emissions Vehicle.

Thank you for considering this grant proposal. I look forward to answering any questions and working with you.

Sincerely,

A handwritten signature in blue ink that reads "Sharon Romack".

Sharon Romack
Executive Director

Sierra Senior Services • 10040 Estates Drive • P.O. Box 4152 • Truckee, CA • 96160
Fed ID# 68-0484075 (530) 550-7600 • www.sierraseniors.org

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Local Meals are Wholes Provided

A. EXHIBIT SUMMARY SHEET

Proposing Entity (include other participating entities): Fire Safe Council of Nevada County

Contact Person: Jamie Jones, Executive Director
Address: 143 B Spring Hill Dr., Suite 13
 Grass Valley, CA 95945
Phone #: (530) 272-1122 **FAX #:** (530) 272-3232 **EMAIL:** jamie@areyoufiresafe.com

Total Project Budget:	AB 2766 Funds	Co-Funding	Total Project Costs
Capital Costs	<u>\$45,000.00</u>	<u>10,000</u>	<u>55,000</u>
Operating Costs	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
TOTAL	<u>\$45,000.00</u>	<u>10,000.00</u>	<u>55,000.00</u>

Type of Project: (check one)

- Quantifiable Project
 Reduced Emission Vehicles Project



Implementation Area for Project: Nevada County

Check if District-wide

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

Estimated Emission Reductions:

A. Emission Reductions (lbs/yr)

Reactive Organic Gases 10,348 Nitrogen Oxides 12,575 PM₁₀ 5454

B. Vehicle Miles Traveled (VMT) Reduced 0

Single Occupancy Vehicle Trips Reduced 0

C. Number of people reached per day through public education 0

Cost-effectiveness: \$ 86.39 per pound (AB 2766 Funds Only)

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B. REQUEST FOR PROPOSAL CONTENTS CHECKLIST

Applicant: Fire Safe Council of Nevada County

Please complete and attach this checklist with your application.

Exhibit Summary Sheet - page 1

Request for Proposal Contents Checklist - page 2

Authorization Letter/Resolution - page 3

Project Description - page 4

Project Organization/Background - page 5

Emissions Benefits/Cost-Effectiveness - page 6

Work Statement - page 6

Funding Request/Breakdown of Cost - page 6

Schedule of Deliverables/Monitoring - page 6

All Pages Numbered

Proposal, One Original

(CHECK ONE ONLY)
Quantifiable Project

- OR -

Reduced Emission Vehicles Project

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C. AUTHORIZATION RESOLUTION

**FIRE SAFE COUNCIL OF NEVADA COUNTY, INC.
BOARD ACTION / RESOLUTION 1819-27**

BEFORE THE BOARD OF DIRECTORS OF THE FIRE SAFE COUNCIL OF NEVADA COUNTY, INC., COUNTY OF NEVADA, STATE OF CALIFORNIA.

APPROVING THE NORTHERN SIERRA AIR QUALITY MANAGEMENT DISTRICT - AB 2766 DMV SURCHARGE FUND PROPOSAL SUBMISSION FOR ZERO EMISSION VEHICLE FUNDING REQUEST.

BE IT RESOLVED by the Board of Directors of the FIRE SAFE COUNCIL OF NEVADA COUNTY, INC., that said Board does hereby approve the proposal request with the Northern Sierra Air Quality Management District dated June 27th, 2019.

This agreement provides for funding requested for purchase of a Zero Emission Vehicle, Tesla Model S, Long Range, Dual Motor All Wheel Drive in fiscal year 2018-19.

BE IT FURTHER RESOLVED that the Chairman of said Board be and hereby is authorized to sign and execute said agreement on behalf of the FIRE SAFE COUNCIL OF NEVADA COUNTY, INC.

The foregoing resolution was duly passed and adopted by the Board of Directors of the FIRE SAFE COUNCIL OF NEVADA COUNTY, INC. at a regular meeting thereof, held on the 27th day of June 2019 by the following vote:

AYES: 11 NOES: 0 ABSENT: 0

I, Donn Thane, Board Secretary of the FIRE SAFE COUNCIL OF NEVADA COUNTY, INC., California does hereby certify that this is a true and correct copy of the original.



Signature

NOTARY SEAL CERTIFICATON

- C. **Project Description** - The Fire Safe Council of Nevada County will utilize Northern Sierra Air Quality Management District AB2766 funds continue to purchase a Zero Emissions Vehicle (ZEV) for the Fire Safe Council of Nevada County, to replace an older hybrid vehicle previously awarded through Northern Sierra Air Quality Management District in 2006. Currently, FSCNC staff travels approximately 2,000 miles per month, equaling a total of nearly 25,000 miles per year. Vehicle miles are accumulated while traveling to and from projects, meetings and other FSCNC obligations. With the overwhelming response to creating a fire adaptive community, The Fire Safe Council has seen an increase in meeting, speaking and additional commitments. On average our office now has about 3 commitments a day outside the office, more than exceeding the 520 trip ends calculated. The 2006 Toyota Highlander, our current hybrid vehicle, has over 180,000 miles on it currently and experiencing regular mechanical issues due to age.

Research by FSCNC staff has concluded that there is currently one ZEV on the market that meets the needs of the FSCNC. The Tesla Model S, Long Range, Dual Motor AU Wheel Drive, which features the available all-wheel drive option, which is necessary for field work involving fuels reduction projects in remote locations and elevations in Nevada County that receive several inches of snow in the winter months.

Traveling approximately 300 miles on a nightly charge will save approximately an additional \$1000 a year in fuel alone, over the estimated \$2,500 per year we currently save by utilizing a hybrid vehicle, in addition to meeting the zero emission vehicle emission standards. If grant funding is received, the FSCNC will purchase the best suited zero emission vehicle with available all-wheel drive, thus eliminating both the current Toyota Highlander hybrid vehicle and any AB2766 non-compliant older vehicles from the FSCNC fleet and leaving the organization with an environmentally friendly, economically viable vehicle. Additionally, upon purchase of the vehicle, the FSCNC will hold a press/media event, thanking the Northern Sierra Air Quality Management District for providing grant funds allowing the purchase of the vehicle. The vehicle will also be labeled with the FSCNC logo and marked as being a Zero Emission Vehicle purchased through funds from the NSAQMD.

Co-Funding will be provided in part by Tesla. They have agreed to provide fleet pricing to our organization as a 501c3 non-profit. The fleet pricing may be considered up to a \$10,000 dependent

upon model, options, date and completion of purchase. In addition to the fleet pricing discount, a federal tax credit of \$1,875 and a state tax credit of \$2,500 are available upon completion of a purchase of a zero emissions vehicle. The FSCNC Executive Director will administer funds and ensure that the project is managed to completion. The purchased vehicle will receive routine maintenance, including lubrication and filter maintenance, tire rotations and suspension checks on an approximate 5,000-mile basis as recommended by the vehicle manufacturer, paid for by FSCNC.

Data collection that will be conducted to quantify or qualify motor vehicle emissions reductions and/or vehicle miles traveled reductions: Mileage collection data will be provided by FSCNC through GPS monitoring and logging. FSCNC will reconcile mileage log monthly with both the internal grant accountant and voluntary auditing provided by an outside firm.

The project details have been factored using the *Methods to Find the Cost-Effectiveness of Funding Air Quality Projects – Emissions Factors Tables 2018 Edition, Zero Emissions light-duty to medium-duty ZEV milligrams per mile.*

- D. **Project Organization/Background** -To provide Firewise education and programs to enhance emergency preparedness for catastrophic wildfire to all citizens in Nevada County in order to reduce the loss of life, property and natural resources and to promote Firewise Communities/USA® to network with other Fire Safe Councils, Firewise Communities/USA®, governmental agencies and foundations for the benefit of the citizens of Nevada County.

The goals of the Fire Safe Council of Nevada County are:

1. Promote a healthy forest.
2. Improve air and water quality.
3. Reduce the potential for fire loss damage.
4. Improve fire safety by reducing dangerous fuel loads.
5. Educate the public about fire threat and fire prevention measures.
6. Reduce vegetation waste stream to landfills.
7. Coordinate a countywide Fire Plan, with the cooperation of local fire agencies.
8. Improve circulation for evacuation.
9. Serve community and neighborhood fire safety needs.
10. Operate through in-kind donations and financial contributions

- E. **Emission Benefits/Cost Effectiveness** - According to the attached calculations below (based on *Methods to Find the Cost-Effectiveness of Funding Air Quality Projects* - 2018 Emission Factors Table for ZEV and the appropriate tables for the model year 2006 emission outputs). The funding and purchase of a Zero Emission vehicle will provide a cost effectiveness rate of \$86.39 per pound. This is calculated with the assumption of the anticipated 25,000 miles per year and a capital recovery rate of 0.12 at 10 years. The new ZEV saves 12,575(NOx) + 5,454(PM) + 10,348(ROG) = 28,377(Total Savings).
- F. **Work Statement** - This will be a simple purchase. All documentation and records will be verified by the executive director and grant accountant on staff. All internal accounting protocols and policies will be followed. Additionally, vehicle mileage may be tracked with the attached GPS unit and reviewed by Executive Director. Upon approval of funding, the Executive Director will be charged with the purchase of the ZEV vehicle no sooner than January 1st, 2020. The Fire Safe Council will acknowledge receipt of funding through a press release to the local media outlets and announcements at upcoming Board of Director meetings and events. Said vehicle will acknowledge the Northern Sierra Air Quality Management District with an affixed logo or signage.
- G. **Funding Request/Breakdown of Cost** - AB 2766 funding request is \$45,000. Co-Funding to be provided by Fire Safe Council (admin costs), Tesla fleet pricing and ZEV incentives through the state of California, \$10,000. Total project funding \$55,000.

Total Project Budget:

	AB 2766 Funds	Co-Funding	Total Project Costs
Capital-ZEV Purchase	\$45,000.00	\$6,625	\$51,625
Operating Costs	\$0	\$0	\$0
Administrative Costs	\$0	\$1,500	\$1,500
ZEV Incentives	\$0	\$1,875	\$1,875
TOTAL	\$45,000.00	\$10,000.00	\$55,000.00

- H. **Schedule of Deliverables/Monitoring Program** - Upon completion of approved contract, the vehicle will be purchased by 3/31/2020. Logo or signage will be affixed by 6/30/2020. GPS monitoring will be ongoing.

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Old Engine			
NOx			
Miles per year	g/mile	g/year	lbs/year
25,000	0.491	12275	27.04
Average Trip Ends	g/trip end	g/year	lbs/year
520	0.577	300.04	0.66
Totals:		12575	27.70
PM			
Miles per year	g/mile	g/year	lbs/year
25000	0.218	5450	12.00
Average Trip Ends	g/trip end	g/year	lbs/year
520	0.008	4.16	0.01
Totals:		5454	12.01
ROG			
Miles per year	g/mile	g/year	lbs/year
25000	0.392	9800	21.586
Average Trip Ends	g/trip end	g/year	lbs/year
520	1.054	548.08	1.207
Totals:		10348	22.79

New Engine			
NOx			
Miles per year	g/mile	g/year	lbs/year
25000	0	0	0.00
Average Trip Ends	g/trip end	g/year	lbs/year
520	0	0	0.00
Totals:		0	0.00
NOx savings:		12575	27.70
PM			
Miles per year	g/mile	g/year	lbs/year
25000	0	0	0.00
Average Trip Ends	g/trip end	g/year	lbs/year
520	0	0	0.00
Totals:		0	0.00
PM savings:		5454	12.01
ROG			
Miles per year	g/mile	g/year	lbs/year
25000	0	0	0.00
Average Trip Ends	g/trip end	g/year	lbs/year
520	0	0	0.00
Totals:		0	0.00
ROG savings:		10348	22.79

Total Savings: **g/year** 28377 **lbs/year** 63
 Grant Award Requested: \$ 45,000.00
 Capital Recovery Factor: 0.12 for 10 years

Cost Effectiveness: \$ 86.39 per pound

Notes:

Old Engine EmFacs obtained from Table 3, Methods to Find the Cost-Effectiveness of Funding Air Quality Projects, May, 2013 - CARB
 New Engine Emission Factors obtained from CARB Executive Order A-010-2044, Exhaust Emission Standards and Certification Levels
 It should be noted that the NMOG+NOx EmFac was split as 76% NOx and 24% ROG

Capital Recover Factors

1 year	1.03
3 years	0.35
5 years	0.22
7 years	0.16
10 years	0.12
12 years	0.10
15 years	0.08
20 years	0.07

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EXHIBIT SUMMARY SHEET

Proposing Entity (include other participating entities):
BEAR YUBA LAND TRUST



Contact Person: Erika Seward

Address: P.O. Box 1004, Grass Valley, CA 95945
Office at 12183 Auburn Rd, Grass Valley, CA 95945

Phone #: 530-272-5994

FAX #: 530-272-5997

EMAIL: erika@bylt.org

Total Project Budget:

	AB 2766 Funds	Co-Funding	Total Project Costs
Capital Costs	\$ 15,000	\$ 2,300	\$35,110
Operating Costs	\$ n/a	\$ n/a	\$ n/a
TOTAL	\$ 15,000	\$ 2,300	\$ 35,110

Type of Project: (check one)

- Quantifiable Project
- Reduced Emission Vehicles Project

Implementation Area for Project: Check if District-wide

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

Estimated Emission Reductions:

A. Emission Reductions (lbs/yr)

Reactive Organic Gases 13.42 Nitrogen Oxides 9.61 PM_{2.5} 2.06

B. Vehicle Miles Traveled (VMT) Reduced 10,500

Single Occupancy Vehicle Trips Reduced n/a

C. Number of people reached per day through public education n/a

Cost-effectiveness: \$ 41.84 per pound (AB 2766 Funds Only)

Brief Project Description: Bear Yuba Land Trust seeks to build a short trail that will provide a link between two Grass Valley neighborhoods and allow for and facilitate travel by means other than the motor vehicle, thus improving connectivity between places where people live and places where they go for recreation, school, work and other activities.

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REQUEST FOR PROPOSAL CONTENTS CHECKLIST

Applicant: Bear Yuba Land Trust

Please complete and attach this checklist with your application.

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 - Work Statement - page 6
 - Funding Request/Breakdown of Cost - page 7
 - Schedule of Deliverables/Monitoring - page 8
 - All Pages Numbered
 - Three Copies Of Proposal Plus One Original
- (CHECK ONE ONLY)
- Quantifiable Project
 - OR -
 - Reduced Emission Vehicles Project

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September 4, 2019

Members of Directors

Robert Smith
President
Kathryn McCannott
VP
Fred Holden
VP/Secretary
Fran Cole
Treasurer

Andy Cassano
Terry Hundemer
Letsy Lichfield
Robin Milam
Trent Pridemore
Tim Ackerman

Erika Seward
Co-Executive Director

Erin Tan
Co-Executive Director

Joseph Fish
Deputy Air Pollution Control Officer
Northern Sierra Air Quality Management District
200 Litton Drive, Suite 320
Grass Valley, CA 95945

Dear Joe,

On behalf of Bear Yuba Land Trust, I'd like to thank you for the opportunity to apply for the AB 2766 DMV Surcharge Program. Our proposed project is authorized by our leadership team for your review:

BYLT Community Trail Project: Connecting Neighborhoods in Grass Valley

The contents of this packet outlines our project description, proposal, costs and benefits that would support the overall health of the air quality of Nevada County by reducing emissions.

Please feel free to contact me with any questions or if additional information is needed.

Sincerely,

Erika Seward
Co-Executive Director



Bear Yuba Land Trust Application

P.O. Box 1004, Grass Valley, CA 95945 • phone: (530) 272-5994 • fax: (530) 272-5997 • www.BYLT.org
12183 Auburn Rd., Grass Valley, CA 95949

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**Northern Sierra Air Quality Management District
AB 2766 DMV Surcharge Fund Grant Program**

Project Description

The objective of this project is to build a short trail that will provide a link between two Grass Valley neighborhoods and allow for and facilitate travel by means other than the motor vehicle. In addition, this trail linkage connects more distant sites by facilitating travel over other existing trails that enable the user to extend their non-motorized travel far beyond the two neighborhoods.

Bear Yuba Land Trust (BYLT) has been working with local government, other non-profits, and private property owners to develop Community Trails that serve not only as a health and recreation asset, but also provide a non-motorized travel alternative within its service area. We are requesting \$15,000 to support these efforts with the proposed *BYLT Community Trail Project: Connecting Neighborhoods In Grass Valley (Doris-Bragg)*.

The proposed connector trail between Bragg Avenue and Carol & Doris Drives first came to the attention of the BYLT in 2008. Since that time some of the property has changed hands. Four properties must be crossed to connect the two public streets and the neighborhoods they serve. All four property owners have signed agreements stating that they intend to grant a public trail easement over their properties when a trail alignment is agreed to.

Bragg Avenue serves the Alta Hill neighborhood and provides access to Dee Mautino Park, a Grass Valley City Park. From Dee Mautino Park one can also access Lyman Gilmore and Scotten Schools via Alta Hill Mine Road, the Bailey Trail and the Cemeteries located on West Main Street across from the Schools. Carol and Doris Drives provide access to Downtown Grass Valley, Cypress Hill neighborhoods, the Litton Trail, Sierra College and Nevada Union High School. The existing public travel ways require a person in one neighborhood to travel as much as two miles along a circular route that often lacks any sidewalks, trails, or bike lanes to reach a point that would be less than a mile away if the trail is completed (see map, Appendix A). Furthermore, the travel routes that are used to get to the trail site are quiet residential streets, rather than major thoroughfares.

The trail will be constructed for non-motorized use and allow for use by pedestrians, bicycles, and devices used by mobility impaired. The trail surface will generally be native earth, however where the trail must be constructed at a steep grade, grid pavers will be installed to provide a stable surface. Boardwalks, puncheon, and bridges will also be constructed to provide for safe travel over ravines and areas that become very wet during the rainy season. Rock retaining walls will also be constructed where the trail must be routed up steep side slopes.

The trail width will be 3 to 4 feet with some wider areas to provide for safe passage. Privacy screening may also be installed where the trail passes close by one of the residences. Upon completion of the project, signing will be installed posting the rules and regulations for use.

Trail construction will be accomplished primarily by volunteers managed by BYLT. BYLT has constructed more than 20 miles of trails using volunteers as the major source of labor over the past ten years. AB 2766 funds will be used to hire equipment with operators, purchase grid pavers, lumber, hardware, stone, and signs for the project, as well as to supervise the construction.

Project Organization/Background

Bear Yuba Land Trust was established in 1990 to preserve land and to build and maintain trails. Since 1990, the trail program has developed over 40 miles of public trails in co-operation with other trail organizations, local, State, and Federal government, and private landowners. In the past year, BYLT completed five trails. The trail along Wolf Creek, on City of Grass Valley property, was entirely constructed by volunteers with BYLT supervision. The Snowdrop Trail, on BYLT property on the Yuba River, was also constructed by volunteers, and three other trails on the same property were built by a trail contractor supervised by BYLT personnel. BYLT is currently working with the City of Nevada City to design and construct a trail from the City streets to the top of Sugarloaf Mountain.

Providing connectivity between places where people live and places where they go for recreation, school, work, or other activities by trail rather than driving has been a goal of BYLT from the beginning. The first trail project was the Litton Trail, a trail that connects businesses, homes, medical care, and schools. This trail, when completed, will enable people to travel safely by foot or bicycle between home and parks, schools and businesses, and work and play.

BYLT has experience in tracking expenses and meeting the accounting requirements of granting agencies. BYLT has completed numerous projects using grant funds. Two Licensed Building Contractors will provide in-kind services to oversee construction of structures. Other volunteers will provide both skilled and unskilled labor necessary to build the trail. All in-kind labor will be tracked with hours worked by each volunteer recorded on a daily basis. Tracking other expenses for this project will be relatively simple as the funding is to be used to purchase supplies, materials, and services needed to construct the trail, and to supervise trail construction.

Success of the project will be measured by doing use counts on the trail and through interviews of trail users over a period of time. A trail counter may also be set up to get a count of users on the trail over a period of time. This data will be utilized to arrive at an estimate of the miles of automobile travel eliminated by use of the trail over a year.

Emission Benefits/Cost Effectiveness

The estimated emission reduction was calculated through a series of quantifiable measures. The present situation isolates two areas of Grass Valley from one another, while they physically abut one another. For example, to travel from an Alta Hill residence to a Cypress Hill residence, one must travel on Alta Street to Ridge Road, then to Hughes Road, then on to Lidster Street. The trail would allow a person to travel directly between the two neighborhoods. Providing a shorter travel distance is only one factor to be considered. If a more direct, safe, and pleasant non-motorized travel experience is provided many residents will choose to walk or ride a bicycle rather than get in an automobile to make the trip. The current situation is anything but direct, safe, or pleasant.

Travel distance between points in the two neighborhoods and destinations such as the City Park, Downtown Shopping, schools, other trails, and other residences were measured using the existing road system, and then using the route that would become available when the trail is built and ready for use. Travel from point to point within the two neighborhoods, or to access Dee Mautino Park generally saves $\frac{1}{4}$ to $\frac{1}{2}$ mile in travel distance (Appendix C). Travel by automobile between those same points is about 1.5 mile. Using a very conservative estimate, 10 one-way auto trips per day eliminated over 50 weeks per year, and an average trip distance of 1.5 mile would result in an annual automobile trip reduction of 10,500 miles per year. Using

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the spreadsheet calculation provided by NSAQMD (Appendix B) emission reduction would be 25.09 lbs/year. Total cost effectiveness per pound measures at \$41.84.

Work Statement

Preparation for construction of the trail was initiated in early 2019. Meetings with property owners, scouting the trail route, securing permission to enter the properties and clear vines and mark the proposed mark with location stakes has since been accomplished. Following are the elements that are yet to be completed.

1. Currently - Secure easements for the construction and maintenance of a public trail across four private parcels. This phase is under way and will not be funded by this grant. Easements must be secured prior to any trail construction or obligation of public funds. Target date to have all easements is November 1, 2019.
2. January 2020 - Secure permits from Local and State government agencies. Applications will be made in early January 2020. An encroachment permit will be required by the City of Grass Valley to connect the trail with Carol/Doris Drive. A stream alteration permit will be required by the California Department of Fish and Wildlife to construct the trail across the creek. A building permit may be required by the City of Grass Valley for boardwalks, bridges, causeways, or other structures. Target date for all permits is March 1, 2020.
3. February 2020 - Clear vines and brush from the trail easement area to expose the soil and make the site ready for construction of the trail tread, boardwalks, bridges, etc. Target date for completion of clearing is March 31, 2020.
4. March 2020 - Start construction of the trail. Much of the trail can be constructed by volunteers using hand tools. Several licensed contractors are included in the volunteer work force and they will organize and supervise the construction of the structures that must be built to complete the trail. A licensed contractor with a mini excavator will be engaged to construct a portion of the trail where a larger amount of soil must be removed and placed to build the trail through steep areas modified by past mining activity. Target date for completion is October 31, 2020.
5. September 2020 - Construct privacy screen/fence if the residence occupant deems it necessary. Target date is October 31, 2020.
6. September 2020 - Design and fabricate information and regulatory signs in coordination with the County of Nevada and City of Grass Valley. Install signs. Signing will include recognition that the trail was made possible through grant funding by NSAQMD using DMV Surcharge Funds. Target date is October 31, 2020.
7. November 2020, or earlier if the project is completed earlier - Press release announcing the opening of the trail with recognition of all the volunteers, Local Government, donors, and grant funding (AB 2786) who assisted and participated in making the trail possible.

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Funding Request/Breakdown of Cost

Bear Yuba Land Trust respectfully requests \$15,000 in funding to cover one-half of the cost of constructing the trail. Funds will be used to purchase materials that will be used to construct structural improvements necessary to complete the trail, for the purchase the services of equipment with operator, to pay fees for required permits, and to supervise the work of volunteers engaged in constructing the trail.

Task	Grant Amt. AB2766	Co-funding Amt. BYLT Funds	Volunteer Hrs.	In-Kind Amt.	Total
Secure Easements		\$1,500	40*	\$2,000	(\$3,500) See Note
Secure Permits	\$2,000	\$200	10*	\$500	\$2,700
Brushing, Clearing Trail Corridor	\$2,000	\$200	10* 80**	\$500 \$2,400	\$5,100
Trail Tread Construction			100**	\$3,000	\$3,000
Contractor Trail Tread Const.	\$2,000	\$200			\$2,200
Structural Lumber, Concrete	\$5,500 \$1,000				\$6,500
Concrete Trail Pavers	\$1,500				\$1,500
Bridge, Boardwalk, etc. Construction		\$200	30*** 160**	\$2,400 \$4,800	\$7,400
Paver Installation			5* 30**	\$250 \$900	\$1,150
Privacy Screen Materials	\$500				\$500
Privacy Screen Construction			4*** 10**	\$320 \$300	\$620
Purchase Signs, Posts, etc.	\$500				\$500
Install Signs			4* 8**	\$200 \$240	\$440
TOTAL	\$15,000	\$2,300	491	\$17,810	\$35,110

Notes: Line 1, Secure Easements, is under way and will not require grant funding, however it is critical to secure the easements before incurring any additional expenses. It is our intention to secure the easements well before January 1, 2020.

Volunteer Hours are given "in kind value" as follows:

Trail Specialist is valued at \$50.00/hr. and is denoted by a single asterisk (*).
 Laborer is valued at \$30.00/hr. and is denoted by double asterisk (**). Licensed building contractor is valued at \$80.00/hr. and denoted by triple asterisk (***).

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No equipment will be purchased with AB 2766 funds. BYLT has the tools and equipment necessary to construct trails and/or is experienced in hiring and supervising trail construction contractors. No AB 2677 funds will be used for operating costs. Trail operations are ongoing on BYLT trails and operations for this trail will be incorporated into the BYLT annual work plan.

Schedule of Deliverables/Monitoring Program

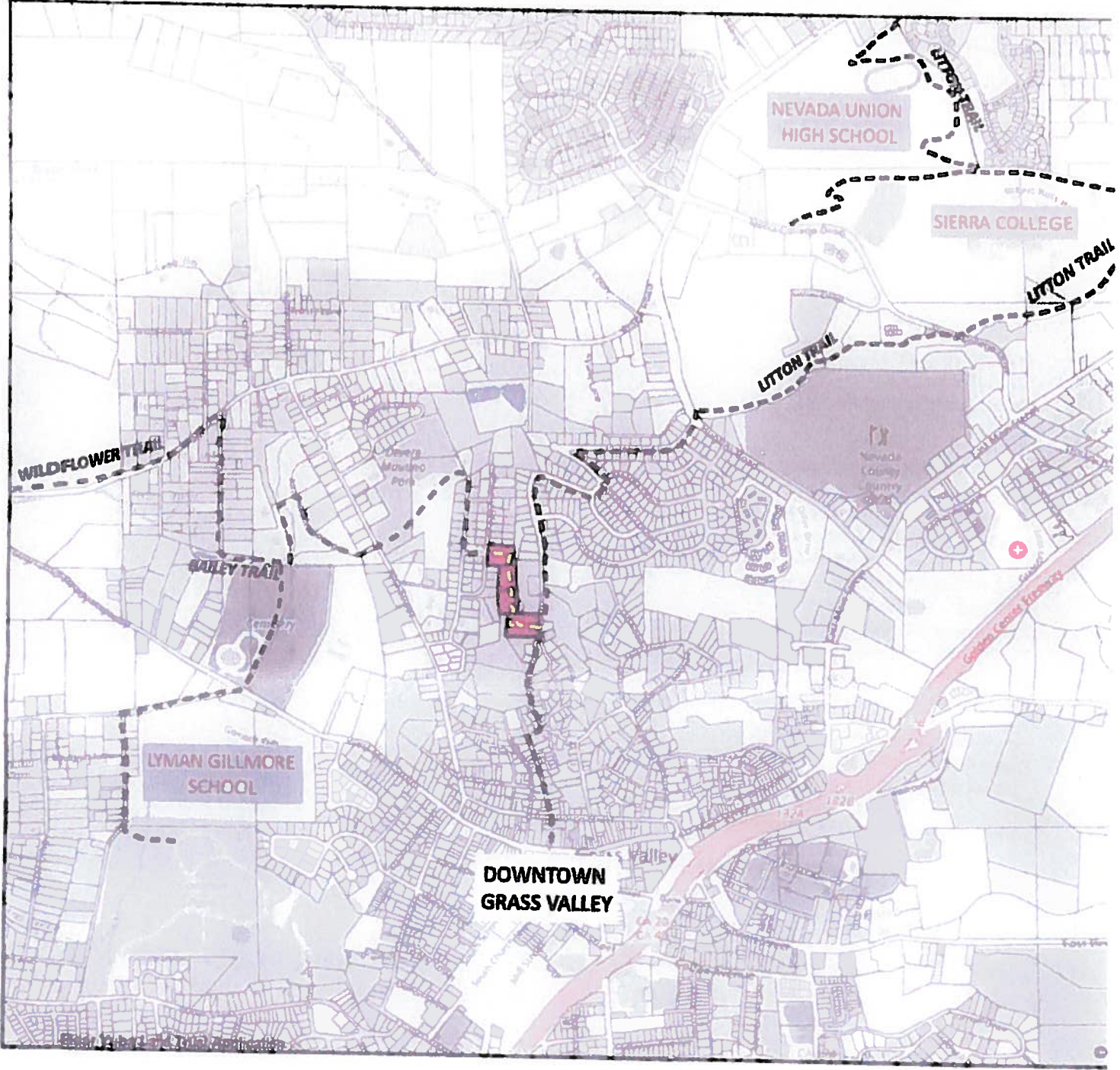
If AB 2677 funds are secured in the amount requested, BYLT will construct a trail approximately 1,000 feet long connecting Bragg Avenue and Carol/Doris Drive. Completion of the trail will be accomplished by or before December 31, 2020 and serve the community for decades to follow. The trail will be open from dawn to dusk for non-motorized use.

Monitoring of trail use will begin after the trail is completed. Interviews of trail users will be the primary means of determining level of use and miles of vehicle travel replaced by the trail user. A trail counter will be installed on the trail periodically to collect use numbers at various times of the year.



APPENDIX A:

DORIS DRIVE CONNECTOR TRAIL



Appendix B

NSAQMD AB 2766 Grant

Grant Year: 2020
 Department Name: Bear Yuba Land Trust
 Grant Name: Bike-Ped Trail

Please only insert text or values in the blue shaded cells. Non-shaded cells are formulas that should not be altered.

Grant Funding Amount	\$15,000
In-Kind Funding amount	\$15,000
Total Project Funding amount	\$30,000
Effectiveness Period (LIFE)	20.00
Capital recovery factor	0.07
Average Miles per trip (one-way)	1.50
One Way Vehicle Trip Reductions per year	3,500
Annual Miles travelled, round trips	10,500.00
Average Auto Emissions Factors (ARB 2013 from table 3)	
ROG - Average Trip ends (g/trip end)	0.584
ROG - Auto VMT factor (grams/mile)	0.191
NOx - Average Trip ends (g/trip end)	0.298
NOx - Auto VMT factor (grams/mile)	0.217
PM2.5 - Average Trip ends (g/trip end)	0.003
PM2.5 - VMT factor (grams/mile)	0.087
Annual Emission Reduction - ROG (lbs/year)	13.42
Annual Emission Reduction - Nox (lbs/year)	9.61
Annual Emission Reduction - PM2.5 (lbs/year)	2.06
Total Emissions reduction (All) (lbs/year)	25.09
Cost-Effectiveness of Funding Dollars (\$/lb)	\$41.84

Capital Recover Factor	
1 year	1.03
3 years	0.35
5 years	0.22
7 years	0.16
10 years	0.12
12 years	0.10
15 years	0.08
20 years	0.07

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Appendix C

Distance Comparisons, Doris - Bragg Trail

Cypress Hill neighborhood to Dee Mautino Park

End points:

- North-west intersection of Arcadia Dr. and Cypress Hill Dr.
- Dee Mautino Park, approx. 50' north of restrooms on road connecting the parking areas

Distance via trail and through the SE gate at the end of Alta Vista Ave: 1.20 miles
Distance via Hughes, Ridge, and Alta Streets: 1.75 miles

Alta Vista neighborhood to Litton Trailhead

End Points:

- Intersection of Alta Vista Ave and Engles Ave.
- Intersection of Hughes Rd and Lidster Ave.

Distance via trail: 1.20 miles
Distance via Alta, Ridge, and Hughes: 1.83 miles

North Church St neighborhood to Dee Mautino Park

End points:

- Intersection of Doris Drive and Carol Dr. (south end)
- Dee Mautino Park, approx. 50' north of restrooms on road connecting the parking areas

Distance via trail and through the SE gate at the end of Alta Vista Ave: 0.84 miles
Distance via N Church, Richardson, and Alta Streets: 1.07 miles

Alta Vista neighborhood to downtown

End Points:

- Intersection of Alta Vista Ave and Engles Ave.
- Intersection of Main St and Mill St.

Distance via trail and N Church: 0.85 miles
Distance via Alta, Ridge, and Hughes: 0.78 miles

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To: Northern Sierra Air Quality Management District Board of Directors

From: Gretchen Bennett, Air Pollution Control Officer

Date: September 23, 2019

Agenda Item: V.A

Agenda Description: Status on Portola PM2.5 Nonattainment Area

Issues:

Staff will be available to answer questions and update on latest developments at the meeting.

Requested Action: None, informational only

Attachment: none

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To: Northern Sierra Air Quality Management District Board of Directors

From: Gretchen Bennitt, Air Pollution Control Officer

Date: September 23, 2019

Agenda Item: V.B

Agenda Description: Green Waste Disposal

Issues: Staff will update the Board on any new developments.

Requested Action: None, informational only

Attachments:

1. Handout available during meeting

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