

## PROJECT SUMMARY

**Applicant:** El Dorado County Transit Authority  
**Contact Person:** Matt Mauk, Transit Services Assistant  
**Address:** 6565 Commerce Way, Diamond Springs, CA 95619  
**Telephone:** (530) 642-5383 ext. 201      **FAX:** (530) 622-2877  
**Email:** [mmauk@eldoradotransit.com](mailto:mmauk@eldoradotransit.com)

**Project Description:**

The El Dorado County Transit Authority (El Dorado Transit) proposes to provide parking shuttle service for the El Dorado County Fair in June 2013. With funding, parking and shuttle service will be provided beginning thirty (30) minutes before opening and ending thirty (30) minutes after closing on all four days of the County Fair's operations. The shuttle will be free to the public and will provide round-trip service from up to three (3) possible parking locations; the Library/Government Center on Fair Lane, Prospector Plaza on Missouri Flat Road north of US Highway 50 and the WalMart parking lot at Forni Road and Missouri Flat Road. Shuttle buses will board and disembark Fair passengers at the Green Gate of the County Fairgrounds located on Placerville Drive. Three (3) to seven (7) transit vehicles will be in simultaneous service during the Fair's hours of operation, according to demand. El Dorado Transit will provide all drivers, support and management personnel necessary for shuttle operations.

<b>Estimated Emission Reductions/Costs-Effectiveness</b>	
Useful Life of Project (years)	<b>1</b>
Total Lifetime Emissions Reduced (lbs. of ROG, NOx, PM-10)	<b>289 lbs.</b>
Annualized Cost-Effectiveness (total project costs)	<b>\$109.31/lb.</b>
Annualized Cost-Effectiveness (AQMD Funded project costs)	<b>\$87.44/lb.</b>

<b>Budget Summary</b>	<b>AB2766 Funds</b>	<b>\$ Matching Funds</b>	<b>In-Kind Match</b>	<b>Total Project Costs</b>
Operations	\$24,539	\$2,900	\$1,535	\$28,974
Marketing/Outreach	\$0	\$500	\$1,000	\$1,500
Other	\$0	\$200	\$0	\$200
<b>TOTAL</b>	<b>\$24,539</b>	<b>\$3,600</b>	<b>\$2,535</b>	<b>\$30,674</b>

## BUDGET ITEMIZATION

### El Dorado County Fair Shuttle 2013

Line Item	Title/Classification	No. of Hours	Rate	Benefit %	Total Costs
2013 Shuttle Operations	Blended cost accounting includes salaries and benefits, vehicle maintenance and fuel, and associated costs for operation of commuter service.	220	*\$128.36	24.6%	\$28,239
Cost Escalator	Projected 2.6% cost increase based on Consumer Price Index (CPI) through January 2012	220	\$3.34	24.6%	\$735
Contracts				n/a	\$ 0
Equipment Rental				n/a	\$ 0
Materials and Supplies					\$200
Other Costs				Advertising, Outreach and Promotions	\$1,500

\* Blended Commuter Operating Cost per Revenue Hour, derived from Fiscal Year 2011/12 Administrative Operations Report, adopted by the El Dorado County Transit Authority on October 6, 2011.

**PROJECT GRAND TOTAL: \$30,674**

# CONTENTS CHECKLIST

Applicant: El Dorado County Transit Authority

Project: El Dorado County Fair Shuttle 2013

<input checked="" type="checkbox"/>	Project Summary Sheet .....	Cover
<input checked="" type="checkbox"/>	Request for Proposal Contents Checklist	
<input checked="" type="checkbox"/>	Authorization Letter/Resolution.....	1
<input checked="" type="checkbox"/>	Project Description.....	4
<input checked="" type="checkbox"/>	Project Organization/Background.....	6
<input checked="" type="checkbox"/>	Emissions Benefits/Cost Effectiveness .....	7
<input checked="" type="checkbox"/>	Work Statement.....	8
<input checked="" type="checkbox"/>	Acknowledgements .....	9
<input checked="" type="checkbox"/>	Funding Request/Cost Breakdown.....	10
<input checked="" type="checkbox"/>	Matching Funds.....	11
<input checked="" type="checkbox"/>	Monitoring Program.....	12
<input checked="" type="checkbox"/>	Local TRPA Review .....	n/a
<input checked="" type="checkbox"/>	Two (2) Copies of Proposal	

## Appendices

- Appendix A Excerpts from Emission Factor Tables, March 2010
- Appendix B Examples of Project Timecard, Trip Sheet and Operations Report
- Appendix C Letters of Commitment/Support
- Appendix D Samples of Advertising and Outreach



# EL DORADO TRANSIT

6565 COMMERCE WAY  
DIAMOND SPRINGS, CA 95619-9454  
(530) 642-5383  
FAX (530) 622-BUSS  
www.eldoradotransit.com

March 23, 2012

Dave Johnston, Air Pollution Control Officer  
El Dorado County Air Quality Management District  
330 Fair Lane  
Placerville, CA 95667

Re: AB2766 Motor Vehicle Emission Reduction Project 2012-2013  
El Dorado County Fair Shuttle 2013

To Whom It May Concern:

The El Dorado County Transit Authority (El Dorado Transit) is submitting an application for AB2766 Motor Vehicle Emission Reduction Project funding for 2012–2013. El Dorado Transit Resolution No. 12-08 (copy attached), authorizes the submission of the application.


Contact person: Matt Mauk, Transit Services Assistant  
El Dorado County Transit Authority  
6565 Commerce Way  
Diamond Springs, CA 95619  
Phone: (530) 642-5383 Extension 201  
Email: [mmauk@eldoradotransit.com](mailto:mmauk@eldoradotransit.com)

The El Dorado County Transit Authority will administer the project.

The El Dorado County Transit Authority will provide a parking shuttle service from up to three (3) off-site parking locations to the El Dorado County Fairgrounds during the County Fair, June 2013. This shuttle will provide an alternative to traveling by automobile and will reduce automobile congestion and the associated emissions.

We appreciate your consideration regarding our proposal and request that this project be approved for funding.

Sincerely,

  
Mindy Jackson  
Executive Director



# EL DORADO TRANSIT

**EL DORADO COUNTY TRANSIT AUTHORITY  
RESOLUTION NO. 12-08**

6565 COMMERCE WAY  
DIAMOND SPRINGS, CA 95619-9454  
(530) 642-5383  
FAX (530) 622-BUSS  
www.eldoradotransit.com

**RESOLUTION OF THE BOARD OF DIRECTORS OF  
THE EL DORADO COUNTY TRANSIT AUTHORITY  
TO SUBMIT A PROPOSAL FOR  
ASSEMBLY BILL 2766 (AB 2766)  
MOTOR VEHICLE EMISSION REDUCTION PROJECTS**

**WHEREAS**, the California Clean Air Act requires local air pollution control districts to reduce emissions from motor vehicles; and

**WHEREAS**, AB 2766, codified in California Health and Safety Code section 44223, authorizes districts to impose a fee of up to four dollars upon certain registered motor vehicles within the district, and the Governing Board of the El Dorado County Air Quality Management District (EDC AQMD) has imposed said fee; and

**WHEREAS**, said legislation requires the EDC AQMD to use said funds for activities related to reducing air pollution from motor vehicles and for related planning, monitoring, enforcement, and technical studies necessary for the implementation of the California Clean Air Act of 1988; and

**WHEREAS**, El Dorado County Transit Authority (EDCTA) is an eligible applicant for AB 2766 projects; and

**WHEREAS**, the EDC AQMD has published a request for proposals for Fiscal Year 2012/13 AB 2766 eligible projects;

**BE IT HEREBY RESOLVED AND ORDERED**, that the Executive Director is hereby authorized and directed to submit proposals for Assembly Bill 2766, Motor Vehicle Emission Reduction Projects, and to execute all documentation resulting from these applications, and to execute all necessary actions to carry out the purpose of this resolution;

**BE IT FURTHER RESOLVED**, that the Transit Services Assistant Matt Mauk be the contact person at the El Dorado County Transit Authority, 6565 Commerce Way, Diamond Springs, California 95619, (530) 642-5383 extension 201;

**BE IT FURTHER RESOLVED**, that El Dorado County Transit Authority will make all reasonable efforts to include matching funds in the proposed project budget for Fiscal Years 2012/13 and 2013/14.

**PASSED AND ADOPTED BY THE GOVERNING BOARD OF THE EL DORADO COUNTY TRANSIT AUTHORITY** at a regular meeting of said Board, held on the 5<sup>th</sup> day of April 2012, by the following vote of said Board:

AYES:

NOES:

ABSTAIN:

ABSENT:

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Wendy Mattson, Chair

ATTEST:

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Barbara McDonald, Secretary to the Board

# PROJECT DESCRIPTION

## Objectives

The El Dorado County Transit Authority (El Dorado Transit) proposes to provide parking shuttle service for the El Dorado County Fair in June 2013. The El Dorado County Fair Shuttle will significantly reduce congestion; lower emissions related to excessive idling and provide a safe comfortable alternative to parking in and around the Fairgrounds. The shuttle will provide a regional mitigation to traffic congestion on Forni Road, Placerville Drive and State Highway 50 in Placerville. By providing the option of convenient off-site parking and shuttle service, pedestrian traffic along Placerville Drive will also be reduced and public safety improved.

El Dorado Transit is an experienced shuttle operator and has provided a County Fair Shuttle since 1990, as well as annual shuttle service for Apple Hill<sup>®</sup>. In June, 2011 the County Fair Shuttle project provided a record 14,356 passenger trips over the four (4) day operation.

## Scope of Work

With funding, parking and shuttle service will be provided beginning thirty (30) minutes before opening and ending thirty (30) minutes after closing on all four days of the County Fair's operations. The shuttle will be free to the public and will provide round-trip service from up to three (3) possible parking locations; the Library/Government Center on Fair Lane, Prospector Plaza on Missouri Flat Road north of US Highway 50 and the WalMart parking lot at Forni Road and Missouri Flat Road. Shuttle buses will board and disembark Fair passengers at the Green Gate of the County Fairgrounds located on Placerville Drive. Three (3) to seven (7) transit vehicles will be in simultaneous service during the Fair's hours of operation, according to demand. El Dorado Transit will provide all drivers, support and management personnel necessary for shuttle operations.

El Dorado Transit will provide the following with grant funding:

- Approximately 220 hours of passenger service with up to seven (7) transit buses with capacity for twenty-seven (27) to forty-five (45) passengers each
- Support staff: Transit Drivers, Transportation Supervisors, dispatchers and project managers
- Outreach and regional marketing; including website notifications, announcements, press releases and advertisements in local newspapers
- Shuttle and Parking signage
- Liaison with County and/or private facilities management for off-site parking
- Public liability insurance coverage
- Associated contract administration costs
- Placards/fare box covers on shuttle buses including acknowledgement of Air Quality Management District (AQMD) funding
- Coordination with partner agencies and local law enforcement

The El Dorado County Fair Association is committed to providing matching funds and in-kind matching funds, as follows:

- Outreach and regional marketing; including website production and maintenance, announcements and advertisements in local newspapers
- Support staff for coordination and support of shuttle operations
- Matching funds totaling at least twenty percent (20%) of the project budget



# PROJECT ORGANIZATION/BACKGROUND

## **Project Organization**

El Dorado Transit will administer the El Dorado County Air Quality Management District (AQMD) contract for the 2013 County Fair Shuttle. With funding, El Dorado Transit will manage off-site parking agreements and provide public liability insurance, vehicle maintenance and support, shuttle vehicles, drivers and appropriate support staff to assure public safety. El Dorado Transit will provide the AQMD with quarterly performance reports, as required, to ensure the project is on schedule and within parameters.

## **Background**

El Dorado Transit has provided public transportation services for the Western Slope of El Dorado County since 1975. Established as a Joint Powers Agency with the County of El Dorado and the City of Placerville, El Dorado Transit provides public transportation to the community in the form of local fixed routes; curb-to-curb Dial-A-Ride; Sac-Med non-emergency medical transportation; complementary paratransit in Placerville; commuter routes from Placerville to downtown Sacramento; commuter routes to the Sacramento Light Rail in Folsom and contracted transportation for social service agencies. El Dorado Transit provided a combined 412,381 passenger trips during Fiscal Year (FY) 2010/2011.

Sixty-six (66) employees provide transportation services fourteen and one-half (14 ½) hours a day, Monday through Friday, and limited weekend hours. All components necessary to provide public transportation are housed within the Transit Operating Base and Maintenance Facility at 6565-67 Commerce Way Diamond Springs, California. El Dorado Transit maintains and schedules a fleet of sixty-one (61) vehicles, including wheelchair accessible mini-vans; lift-equipped buses with capacity ranging from twenty-two (22) up to fifty-seven (57) passengers, one (1) mobile mechanics' truck and seven (7) staff vehicles. In-house services include operations; dispatching and scheduling; trip planning; vehicle maintenance; transit planning; marketing and full administrative support.

El Dorado Transit management, drivers and staff have a distinguished level of commitment and competence in providing efficient public transportation to the residents of the Western Slope of El Dorado County. Twenty-two (22) regular Transit Drivers received safe driving commendations for FY 2010/11. Management and supervisory employees have completed the accredited Paratransit and Transit Management Program.

El Dorado Transit is an experienced shuttle operator. The agency has provided annual shuttle service for the El Dorado County Fair since 1990. In June 2011 the County Fair Shuttle project provided 14,356 passenger trips, averaging nearly 3,600 boardings per day over the four day operation. El Dorado Transit has also provided an Apple Hill<sup>®</sup> Shuttle each year from 1988 through 2000 and 2003 through 2011.

# VANPOOLS AND SHUTTLES

Subcategory: (4c) Transit Operations (new service, shuttles, fuel subsidies)

**Air District Name:** El Dorado County APCD

**Local Government Name:** Not Applicable

**Project Name:** El Dorado County Fair Shuttle 2013

**Description:** Parking Shuttle Service to the 2013 El Dorado County Fair  
(Issues/Comments)

**Implementing Agency:**

**Private Agency:** No

**FUNDING:**

<b>MVFees Funding:</b>	\$24,539	<b>MSRC Funding:</b>	\$0
<b>Moyer Funding:</b>	\$0	<b>CMAQ Funding:</b>	\$0
<b>Other CoFunding:</b>	\$6,135		

**Capital Recovery Factor:** 1.03      **Annual Auto Trips Reduced:** 3,513

**Project Analysis Period:** 1 years      **Annual Auto VMT Reduced:** 172,142

**Annual Operating Days (D):** 4 days

**Daily Ridership (R):** 3,698 trips (riders)/day

**Annual Van VMT:** 2,677 annual miles traveled

**Adjustment (A):** 0.95 *This factor equals the portion of riders who are NOT vanpool-dependent.*

**Replaced Auto Trip Length (L):** 16.00 miles in one direction of trip

**Adjustment (AA):** 0.75 *This factor equals the portion of riders who drive to the vanpool service.*

**Auto Access Trip Length (LL):** 5.00 miles in one direction of trip

<b>EMISSION FACTORS:</b>	<b>Auto Trip End Factors</b>	<b>Auto VMT Factors</b>	<b>VanVMT Factors</b>
<b>ROG :</b>	0.756 <i>grams</i>	0.273 <i>grams</i>	0.25 <i>grams</i>
<b>NOx :</b>	0.444 <i>per trip</i>	0.320 <i>per mile</i>	4.60 <i>per mile</i>
<b>PM10 :</b>	0.009	0.221	0.06

<b>EMISSION REDUCTIONS:</b>	<b>Pounds per Year</b>	<b>Tons per Year</b>
<b>ROG:</b>	108	0.05
<b>NOx:</b>	98	0.05
<b>PM10:</b>	84	0.04
<b>Total:</b>	<b>289</b>	<b>0.14</b>

**COST-EFFECTIVENESS OF:**

<b>Motor Vehicle Fees and/or Moyer Funds:</b>	\$87.44 per pound	\$174,887 per ton
<b>CMAQ Funds:</b>	\$0.00 per pound	\$0 per ton
<b>All Funding Sources:</b>	\$109.31 per pound	\$218,611 per ton

## WORK STATEMENT

The following table outlines basic work elements required for the provision of the El Dorado County Fair Shuttle 2013:

Phase/Task	Timeline	Description	Deliverables
Planning and Preparation	July 2012 – May 2013	Notice to Proceed/Contract Execution	Executed Contract
		Preparation of informational/promotional/advertising materials for print and website publication	Copy/Artwork for print publication and Copy/Artwork for website production including acknowledgement of AQMD funding
		Press release and email preparation and distribution	Copy of Press Releases and emails including acknowledgement of AQMD funding
		Design and production of signage for shuttle operations	Operational Signs and Placards including acknowledgement of AQMD funding
		Route planning, scheduling and staff training	Meeting Agendas/Notes, Schedules, Staff Training Materials and Sign-In Sheets
		Procurement of materials and supplies	Account Listing(s)
		Acquisition of Insurance Certificates	Certificates of Insurance
		Collaboration with transportation partners and local law enforcement	Meeting Agendas/Notes
		Vehicle/parking site/shuttle stop preparation	Copies of Project Checklists/*Project Timecards, Work Orders
		Reporting	Quarterly Reports and Invoices as required
Shuttle Operations	June 2013	Parking shuttle service	*Trip Sheets, *Project Timecards
		Vehicle Maintenance	Work Orders
		Site breakdown	n/a
		Reporting	Quarterly Reports and Invoices as required
Project Closeout	July 2013 – September 2013	After Action Meeting(s) with staff and partner agencies	Meeting Agendas/Notes
		Preparation of Final Report	Final Project Report, Final Invoice

\*Examples of the Project Timecard and Trip Sheet are included in Appendix B.

## ACKNOWLEDGEMENTS

### **Print Advertising and Promotional Materials**

An important element in the success of the El Dorado County Fair Shuttle project will be marketing and advertising the service both in print and on the web. El Dorado Transit will collaborate with the El Dorado County Fair Association to include an acknowledgement of Air Quality Management District (AQMD) grant program funding in all feature articles, press releases and print advertisements promoting the shuttle service. Examples of print advertising include the following:

- El Dorado Transit and the El Dorado County Fair Association will develop and distribute press releases to local news outlets promoting the shuttle service and emphasizing AQMD sponsorship. An El Dorado Transit Press Release is included in Appendix D.
- The El Dorado County Fair Association will purchase advertising space in local print publications with distribution in the region. All references to the shuttle service will include an acknowledgement of AQMD funding.

### **Websites and Email Distribution**

El Dorado Transit and the El Dorado County Fair Association maintain websites in-house as a vital communications link to their respective customers. Information on the shuttle service, including AQMD funding, will be prominently featured on both websites before and during Shuttle operations. In addition, El Dorado Transit will send shuttle related email "blasts" to subscribers before and during shuttle operations. An acknowledgment of AQMD funding will be included in all web-based shuttle promotions.

### **Vehicle Placards and Shuttle Signage**

Vehicle placards and shuttle signs are important, highly visible tools to help visitors negotiate the use of shuttle services. Temporary bus stop signs will be installed at parking sites and at the fair gate. These signs will feature shuttle branding and the phrase "Funding for the Apple Hill Shuttle is provided by the El Dorado County Air Quality Management District, the El Dorado County Fair Association and El Dorado Transit." Fare box covers will also be placed in all the vehicles while in shuttle service informing passengers of AQMD sponsorship.

## FUNDING REQUEST/BREAKDOWN

The El Dorado County Transit Authority (El Dorado Transit) proposes to operate a parking shuttle service for the 2013 El Dorado County Fair. The following table illustrates the projected project costs, by work element, the proportion of costs to be paid with AB 2766 DMV surcharge fees and matching funds:

	<b>AB2766 Funds</b>	<b>Matching Funds</b>	<b>In-Kind Match</b>	<b>Total Project Costs</b>
Shuttle Operations	\$24,539	\$2,900	\$1,535	\$28,974
Marketing and Outreach	\$0	\$500	\$1,000	\$1,500
Material and Supplies	\$0	\$200	\$0	\$200
<b>TOTAL</b>	<b>\$24,539</b>	<b>\$3,600</b>	<b>\$2,535</b>	<b>\$30,674</b>

El Dorado Transit is requesting allocation of \$24,539 in AB2766 DMV Surcharge funds for eligible expenditures directly related to the provision of this one (1) year project. This funding will provide for a portion of shuttle operations.

## MATCHING FUNDS

Source	Matching Funds	In-Kind Match	Purpose	Total Match
El Dorado County Fair Association	\$2,900		Shuttle Operations	\$4,435
El Dorado Transit		\$1,535		
El Dorado County Fair Association	\$500	\$1,000	Marketing and Outreach	\$1,500
El Dorado County Fair Association	\$200		Materials and Supplies	\$200
<b>Total</b>	<b>\$3,600</b>	<b>\$2,535</b>		<b>\$6,135</b>

The El Dorado County Fair Association will make a monetary contribution to the cost of the shuttle in the amount of \$3,600 to offset cost related to shuttle operations, marketing and supplies.

The El Dorado County Fair Association and El Dorado Transit will develop, produce and distribute print advertising and promotional materials, email promotions, and maintain websites for marketing and outreach, valued at a minimum of \$1,000. In addition, El Dorado Transit will develop and produce vehicle placards, shuttle signage and fare box covers to promote the Fair Shuttle. A letter of support from the El Dorado County Fair Association, including a commitment of matching funds, is included in Appendix C.

El Dorado Transit will commit an in-kind contribution sufficient to offset operations costs, directly associated with the project, in the amount of at least \$1,535 for the life of the project. El Dorado Transit will include sufficient funds in its 2012/13 Operating Budgets to offset the above costs. El Dorado Transit Resolution No. 12-08 (pgs. 2-3) and a Letter of Commitment (pg.1) are provided herein.

## MONITORING PROGRAM

The El Dorado County Transit Authority (El Dorado Transit) proposes to provide parking shuttle service for the El Dorado County Fair in June 2013. The El Dorado County Fair Shuttle will significantly reduce congestion; lower emissions related to excessive idling and provide a safe comfortable alternative to parking in and around the Fairgrounds. The shuttle will provide a regional mitigation to traffic congestion on Forni Road, Placerville Drive and State Highway 50 in Placerville. By providing the option of convenient off-site parking and shuttle service, pedestrian traffic along Placerville Drive will also be reduced and public safety improved.

AB 2766 grants are performance based. For the El Dorado County Fair Shuttle, ridership will be the primary performance measure as it relates to the cost effectiveness of the project as a whole. Being a cooperative, customer service project; planning, preparation, collaboration and marketing are all vital to the success of the project. These activities must take place well in advance, during and after June 2013 when the shuttles are running. The effectiveness of all of these, however, is ultimately measured by the numbers of passengers who ride the shuttle. Ridership will be tracked by the driver, while shuttles are in service, utilizing standard trip sheets. Trip sheets include names, service times, vehicle numbers, miles traveled and passenger boardings. An example Trip Sheet is provided in Appendix B. All shuttle trip sheets will be collected at shift end, compiled and verified by the on-duty dispatcher or supervisor. Upon completion of shuttle operations, ridership and mileage data will be consolidated into a single Operations Report and provided to AQMD, as required. An example Operations Report is provided in Appendix B.

Accurately judging the cost effectiveness of the El Dorado County Fair Shuttle requires close monitoring of expenditures, tracking of project related activities and timely, detailed cost accounting. As a public transportation provider under a joint powers agreement with the County of El Dorado and City of Placerville, El Dorado Transit has extensive experience in reporting such performance measures and accounting to Federal, State and local government agencies as well as internally to its publicly elected Board of Directors. El Dorado Transit has sufficient staff to operate, market, manage, track and report on the performance of the El Dorado County Fair Shuttle. The Transit Services Assistant (TSA) will act as Project Manager and Agency Liaison for the shuttle. The TSA will be responsible for working with internal staff in the Operations, Maintenance and Accounting departments and with partner organizations and contractors to track project activities and expenditures. Documentation of all project related activities and expenditures will be maintained on file and made available for review to the AQMD, El Dorado County Auditor, California Air Resources Board, Bureau of State Audits, or their designated representatives for a minimum of three (3) years after final payment, unless otherwise required. Documentation may include but is not limited to the following: copies of project timecards, account listings, bank records, work orders, employee timecards, trip sheets, invoices, promotional materials and advertising, certificates of insurance, meeting agendas, sign-in sheets, and notes. El Dorado Transit will grant designated representatives access to such records during regular business hours at its offices, 6565 Commerce Way, Diamond Springs, CA 95619.

El Dorado Transit will provide the AQMD with quarterly performance reports, as required, to ensure the project is on schedule and within parameters. Reports may include but are not limited to; transaction details, account listings, project timecards, invoices and operations reports.



# APPENDIX A

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**Excerpts from:**

Methods to Find Cost-Effectiveness of Funding Air Quality Projects, Emission Factor Tables, March 2010

# **Methods to Find the Cost-Effectiveness of Funding Air Quality Projects**

***For Evaluating  
Motor Vehicle Registration Fee Projects  
and  
Congestion Mitigation and  
Air Quality Improvement (CMAQ) Projects***

***Emission Factor Tables  
March 2010***

**California Air Resources Board**

**Table 1 Diesel Bus Emission Factors**

(through Model Year 2010)

Pollutant	Model Year	Emission Factor (g/mi)	
		Average	45 MPH
<b>ROG</b>	Entire Fleet	0.73	0.43
	1973-83	0.83	0.49
	1984-90	0.85	0.49
	1991-93	0.80	0.48
	1994-95	0.87	0.48
	1996-2001	0.81	0.47
	2002	0.86	0.47
	2003 - 2006	0.25	0.14
	2007 - 2009	0.03	0.02
	2010	0.03	0.02
<b>CO</b>	Entire Fleet	3.74	1.97
	1973-83	6.48	3.43
	1984-90	6.03	3.18
	1991-93	3.48	1.83
	1994-95	2.27	1.23
	1996-2001	1.83	0.96
	2002	1.87	0.96
	2003 - 2006	1.31	0.70
	2007 - 2009	1.04	0.55
	2010	0.99	0.53
<b>NOx</b>	Entire Fleet	19.35	17.32
	1973-83	28.73	25.77
	1984-90	26.21	23.43
	1991-93	15.93	14.22
	1994-95	18.51	16.65
	1996-2001	18.40	16.48
	2002	12.68	11.38
	2003 - 2006	4.60	4.13
	2007 - 2009	0.59	0.53
	2010	0.56	0.51
<b>PM10 - Exhaust</b>	Entire Fleet	0.33	0.19
	1973-83	0.39	0.24
	1984-90	0.39	0.23
	1991-93	0.40	0.22
	1994-95	0.52	0.27
	1996-2001	0.35	0.21
	2002	0.14	0.11
	2003 - 2006	0.06	0.02
	2007 - 2009	0.04	0.02
	2010	0.03	0.02
PM10 - Tire Wear	All Years	0.008	Not Speed Dependent
PM10 - Brake Wear	All Years	0.013	Not Speed Dependent
PM10 - Road Dust	All Years	0.184	Not Speed Dependent

Source: EMFAC2007, V2.3 (Nov 1 2006), average annual emissions, statewide urban diesel bus fleet, running exhaust emissions only, humidity 50%, temperature 75 degrees F.

PM10 Road Dust (paved) emission factor of 0.184 is based on US EPA's Compilation of Air Pollutant Emission Factors (AP-42, January 1995).

March 2010

### Table 3 Average Auto Emission Factors

(Fleet of Light-Duty Passenger Vehicles, Light-Duty Trucks and Motor Cycles)

<b>ROG</b>				
VMT (g/mile)	0.277	0.231	0.200	0.180
commute trip ends (g/trip end)	1.023	0.860	0.738	0.646
average trip ends (g/trip end)	0.762	0.644	0.555	0.488
<b>NOx</b>				
VMT (g/mile)	0.324	0.263	0.220	0.189
commute trip ends (g/trip end)	0.462	0.380	0.315	0.267
average trip ends (g/trip end)	0.444	0.368	0.307	0.260
<b>PM10</b>				
VMT (g/mile)	0.221	0.221	0.221	0.222
running exhaust only (g/mile)	0.016	0.017	0.017	0.017
tire and brake wear (g/mile)	0.020	0.020	0.020	0.020
road dust (g/mile)	0.184	0.184	0.184	0.184
commute trip ends (g/trip end)	0.016	0.017	0.017	0.017
average trip ends (g/trip end)	0.009	0.009	0.009	0.009
<b>CO</b>				
VMT (g/mile)	3.365	2.758	2.338	2.044
commute trip ends (g/trip end)	8.784	7.381	6.274	5.427
average trip ends (g/trip end)	6.289	5.270	4.472	3.862

Source: EMFAC2007, V2.3 (Nov 1 2006), statewide average annual emissions

RTS runs use humidity 50%, temperature 75 degrees F.

PM10 Road Dust (paved) emission factor of 0.184 is based on US EPA's Compilation of Air Pollutant Emission Factors

(AP-42, January 1995).

March 2010

## Table 3A Average Auto Emission Factors

(Fleet of Light-Duty Passenger Vehicles, Light-Duty Trucks and Motor Cycles)

Analysis Period or Project Life	1 Year 2008	1 Year 2009	1 Year 2010
<b>ROG</b>			
VMT (g/mile)	0.332	0.302	0.273
commute trip ends (g/trip end)	1.189	1.100	1.016
average trip ends (g/trip end)	0.885	0.819	0.756
<b>NOx</b>			
VMT (g/mile)	0.391	0.354	0.320
commute trip ends (g/trip end)	0.535	0.498	0.461
average trip ends (g/trip end)	0.511	0.477	0.444
<b>PM10</b>			
VMT (g/mile)	0.220	0.220	0.221
running exhaust only (g/mile)	0.016	0.016	0.016
tire and brake wear (g/mile)	0.020	0.020	0.020
road dust (g/mile)	0.184	0.184	0.184
commute trip ends (g/trip end)	0.015	0.016	0.016
average trip ends (g/trip end)	0.008	0.008	0.009
<b>CO</b>			
VMT (g/mile)	4.032	3.668	3.325
commute trip ends (g/trip end)	10.113	9.422	8.747
average trip ends (g/trip end)	7.259	6.753	6.261

Source: EMFAC2007, V2.3 (Nov 1 2006), statewide average annual emissions

RTS runs use humidity 50%, temperature 75 degrees F.

PM10 Road Dust (paved) emission factor of 0.184 is based on US EPA's Compilation of Air Pollutant Emission Factors (AP-42, January 1995).

March 2010

# APPENDIX B

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**Examples of:**

Project Timecard

Trip Sheet

Proposed Statistical Operations Report



EL DORADO TRANSIT TRIP SHEET

Revised: 6/13/11

DATE: \_\_\_\_\_

FAIR SHUTTLE

THURSDAY    FRIDAY    SATURDAY    SUNDAY

BUS # \_\_\_\_\_

DRIVER: \_\_\_\_\_

CHECK-IN TIME: \_\_\_\_\_

CHECK-OUT TIME: \_\_\_\_\_

IN SERVICE TIME: \_\_\_\_\_

LUNCH BREAK: \_\_\_\_\_

PRE-TRIP BUS #: \_\_\_\_\_

\_\_\_\_ EMPTY TRASH

PRE-TRIP BACKUP BUS #: \_\_\_\_\_

\_\_\_\_ CLEAN & SWEEP VEHICLE

\*\*\*\*\*

BUS # \_\_\_\_\_

ROUTE: \_\_\_\_\_

MILEAGE:  
STARTING: \_\_\_\_\_  
ENDING: \_\_\_\_\_

HOURS:  
OUT OF SERVICE: \_\_\_\_\_  
IN SERVICE: \_\_\_\_\_  
TOTAL HOURS: \_\_\_\_\_

PASSENGER COUNT: \_\_\_\_\_

BUS # \_\_\_\_\_

ROUTE: \_\_\_\_\_

MILEAGE:  
STARTING: \_\_\_\_\_  
ENDING: \_\_\_\_\_

HOURS:  
OUT OF SERVICE: \_\_\_\_\_  
IN SERVICE: \_\_\_\_\_  
TOTAL HOURS: \_\_\_\_\_

PASSENGER COUNT: \_\_\_\_\_

BUS # \_\_\_\_\_

ROUTE: \_\_\_\_\_

MILEAGE:  
STARTING: \_\_\_\_\_  
ENDING: \_\_\_\_\_

HOURS:  
OUT OF SERVICE: \_\_\_\_\_  
IN SERVICE: \_\_\_\_\_  
TOTAL HOURS: \_\_\_\_\_

PASSENGER COUNT: \_\_\_\_\_



Side 2

DRIVER: \_\_\_\_\_

DATE: \_\_\_\_\_

### FAIR SHUTTLE

\*\*\*\*\*

BUS # \_\_\_\_\_ ROUTE: \_\_\_\_\_

MILEAGE:  
STARTING: \_\_\_\_\_  
ENDING: \_\_\_\_\_

HOURS:  
OUT OF SERVICE: \_\_\_\_\_  
IN SERVICE: \_\_\_\_\_  
TOTAL HOURS: \_\_\_\_\_

PASSENGER COUNT: \_\_\_\_\_

---

BUS # \_\_\_\_\_ ROUTE: \_\_\_\_\_

MILEAGE:  
STARTING: \_\_\_\_\_  
ENDING: \_\_\_\_\_

HOURS:  
OUT OF SERVICE: \_\_\_\_\_  
IN SERVICE: \_\_\_\_\_  
TOTAL HOURS: \_\_\_\_\_

PASSENGER COUNT: \_\_\_\_\_

---

BUS # \_\_\_\_\_ ROUTE: \_\_\_\_\_

MILEAGE:  
STARTING: \_\_\_\_\_  
ENDING: \_\_\_\_\_

HOURS:  
OUT OF SERVICE: \_\_\_\_\_  
IN SERVICE: \_\_\_\_\_  
TOTAL HOURS: \_\_\_\_\_

PASSENGER COUNT: \_\_\_\_\_

---

BUS # \_\_\_\_\_ ROUTE: \_\_\_\_\_

MILEAGE:  
STARTING: \_\_\_\_\_  
ENDING: \_\_\_\_\_

HOURS:  
OUT OF SERVICE: \_\_\_\_\_  
IN SERVICE: \_\_\_\_\_  
TOTAL HOURS: \_\_\_\_\_

PASSENGER COUNT: \_\_\_\_\_

**STATISTICAL OPERATIONS REPORT**

Project Name: El Dorado County Fair Shuttle 2013  
 EDCAQMD Contract Number: 000-DMV-12/13-BOS  
 Reporting Period Ending: June 30, 2013

<b>DAYS/DATES</b>	<b>No. of Vehicles</b>	<b>Passenger Boardings</b>	<b>Vehicle Service Hours</b>	<b>Vehicle Service Miles</b>
Thursday, June 13, 2013				
Friday, June 14, 2013				
Saturday, June 15, 2013				
Sunday, June 16, 2013				
<b>TOTAL</b>				

Average Daily Trips 3,589  
 MAX Day 4,830  
 MIN Day 2,703  
 Trips per Hour 68  
 Avg. Service Hours per Day 53

**Personnel Hours**

<u>Title/Classification</u>	<u>Hours</u>	<u>Rate</u>	<u>Total</u>
Reg. FT Driver	000	00.00	000
Reg. PT Driver	-	-	-
Dispatcher	-	-	-
Transit Services Assistant	-	-	-
Trans. Supervisor	-	-	-
Title/classification	-	-	-
Title/classification	-	-	-
Title/classification	-	-	-
Title/classification	-	-	-
Title/classification	-	-	-

Verified By: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

# APPENDIX C

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## **Letters of Commitment/Support**

El Dorado Transit  
El Dorado County Fair Association  
El Dorado County Transportation Commission  
El Dorado County Chamber of Commerce

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# EL DORADO TRANSIT

6565 COMMERCE WAY  
DIAMOND SPRINGS, CA 95619-9454  
(530) 642-5383  
FAX (530) 622-BUSS  
www.eldoradotransit.com

March 19, 2012

Dave Johnston, Air Pollution Control Officer  
El Dorado County Air Quality Management District  
330 Fair Lane  
Placerville, CA 95667

Mr. Johnston,

The El Dorado County Transit Authority (El Dorado Transit), as the grantee of Assembly Bill 2766 funds, under the administration of the El Dorado County Air Quality Management District, understands that matching funds (either monetary and/or in-kind) must be available when entering into the contract to perform the proposed project. El Dorado Transit will make all reasonable efforts to include matching funds, totaling at least twenty percent (20%) of the total project as proposed, in the adopted operating budget for Fiscal Years 2012/13 and 2013/14.

Sincerely,

Mindy Jackson  
Executive Director

Cc: Mindy Jackson, Executive Director  
El Dorado County Transit Authority

# El Dorado County Fair

Association, Inc.

A 501 (C) 3 Non-Profit Corporation  
P.O. Box 1537 Placerville, CA 95667

530-621-5860 fax 530-295-2566

March 13, 2012

Dave Johnston, Air Pollution Control Officer  
El Dorado County Air Quality Management District  
330 Fair Lane  
Placerville, CA 95667

To Whom It May Concern,

The El Dorado County Fair supports the El Dorado County Transit Authority (EDCTA) request for AB 2766 grant program funds to operate a shuttle for the El Dorado County Fair in June 2013. El Dorado Transit has operated annual shuttle service for the Fair since 1990. In June, 2011 the shuttle project provided 14,356 passenger trips over the four days of the Fair. This represented an approximate 12% increase in ridership over the previous year, establishing a new annual record.

The Fair shuttle offers passengers the convenience of reduced drive times subsequently reducing congestion and lowering emissions related to excessive idling. By providing alternative transportation, the shuttle reduces traffic congestion on Forni Road and Placerville Drive and congestion relief to State Highway 50 west of Placerville.

Recognizing that the projected costs of the shuttle for 2013 total approximately \$28,975, our organization is committed to matching at least 20% of the requested funding amount for the project.

We strongly recommend that the El Dorado County Air Quality Management District approve the EDCTA grant for the implementation of this project. The shuttle meets the objectives of the grant program and will greatly enhance travel to the County Fair.

Sincerely,



Jody Gray  
CEO, El Dorado County Fair Association

fair@eldoradocountyfair.org  
www.eldoradocountyfair.org

*The Fairgrounds in Placerville - Providing Services to our Community*

11-1429 3G 29 of 34



2828 Easy Street Suite 1, Placerville, CA 95667 | 530.642.5260 | www.edctc.org

March 20, 2012

Dave Johnston, Air Pollution Control Officer  
El Dorado County Air Quality Management District  
330 Fair Lane  
Placerville, CA 95667

Mr. Johnston, *Dave*

The El Dorado County Transportation Commission (EDCTC) supports the El Dorado County Transit Authority (EDCTA) request for AB 2766 grant program funds to operate a shuttle for the El Dorado County Fair in June 2013. El Dorado Transit has operated annual shuttle service for the Fair since 1990. In June, 2011 the shuttle project provided 14,356 passenger trips over the four days of the Fair. This represented an approximate 12% increase in ridership over the previous year, establishing a new annual record.

As the Regional Transportation Planning Agency for El Dorado County, EDCTC strives to improve transportation options for area travelers. One of the overall goals identified in the EDCTC Regional Transportation Plan is to provide effective, convenient, coordinated transit service that serves employment centers, activity centers and facilities, and offers a viable option to single occupant vehicle travel.

The Fair shuttle offers passengers the convenience of reduced drive times subsequently reducing congestion and lowering emissions related to excessive idling. By providing alternative transportation, the shuttle reduces traffic congestion on Forni Road and Placerville Drive and congestion relief to State Highway 50 west of Placerville.

We strongly recommend that the El Dorado County Air Quality Management District approve the EDCTA grant for the implementation of this project. The shuttle meets the objectives of the grant program and will greatly enhance travel to the County Fair.

Sincerely,

*Sharon Scherzinger*  
Sharon Scherzinger  
Executive Director

Cc: Mindy Jackson, Executive Director  
El Dorado County Transit Authority



*Still Finding Gold In El Dorado County*

March 16<sup>th</sup>, 2012

Dave Johnston, Air Pollution Control Officer  
El Dorado County Air Quality Management District  
330 Fair Lane  
Placerville, CA 95667

Mr. Johnston,

The El Dorado County Chamber of Commerce fully supports the El Dorado County Transit Authority (EDCTA) request for AB 2766 grant program funds to operate a shuttle for the El Dorado County Fair in June 2013. El Dorado Transit has operated annual shuttle service for the Fair since 1990. In June 2011 the shuttle project provided 14,356 passenger trips over the four days of the Fair. This represents an approximate 12% increase in ridership over the previous year and a new annual record.

The El Dorado County Chamber of Commerce is an organization of businesses and individuals devoted to preserving the quality of life in El Dorado County by advocating and promoting a strong, healthy and diverse business community. With programs designed to expand our existing business base and to attract new, clean industry, the Chamber helps to ensure that the business opportunities and quality of life we know today may be sustained through future generations.

The Fair shuttle offers passengers the convenience of off-site parking, reducing traffic congestion and lowering emissions related to excessive idling. By providing alternative transportation, the shuttle reduces traffic congestion and pedestrian traffic on Forni Road and Placerville Drive while relieving congestion on State Highway 50 west of Placerville.

We strongly recommend that the El Dorado County Air Quality Management District approve the EDCTA grant for the implementation of this project. The shuttle meets the objectives of the grant program and will greatly enhance travel to the County Fair.

Sincerely,

Laurel Brent-Bumb  
Chief Executive Officer

***EL DORADO COUNTY CHAMBER OF COMMERCE***

542 Main Street, Placerville, California 95667  
(530) 621-5885 (800) 457-6279 Fax (530) 642-1624

# APPENDIX D

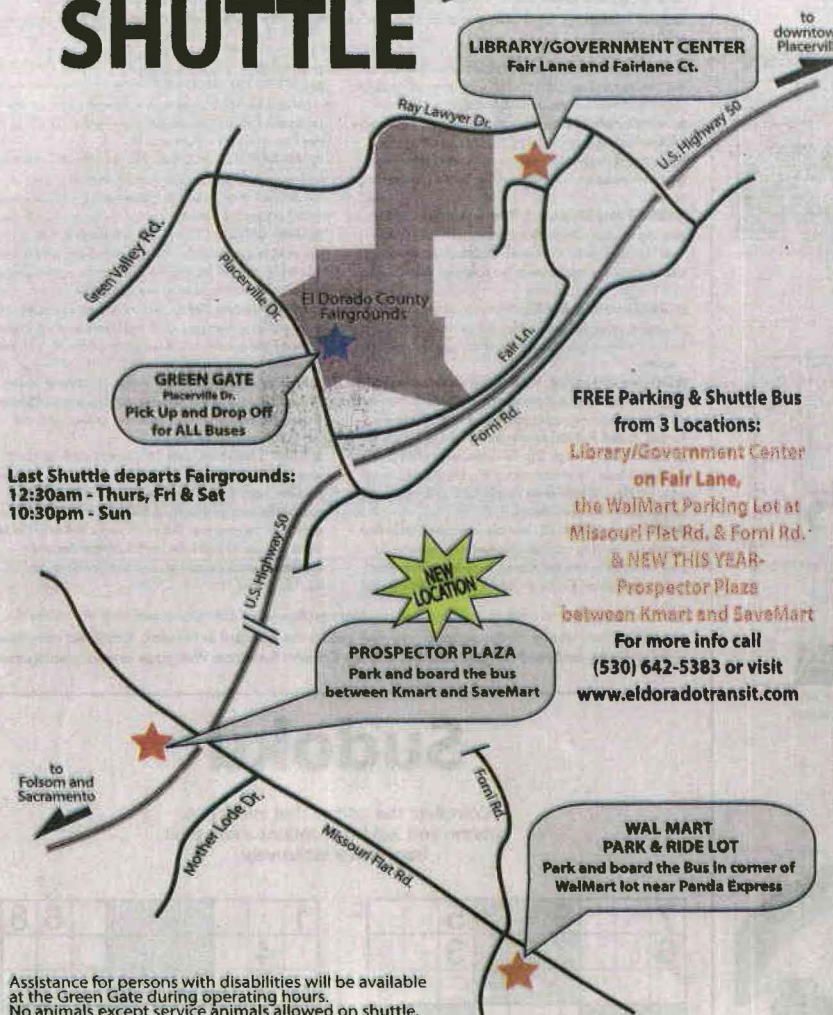
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## **Samples of Advertising and Outreach:**

2011 Fair Shuttle Advertisement  
El Dorado Transit Press Release, June 2011



# THE 2011 El Dorado County Fair SHUTTLE



Last Shuttle departs Fairgrounds:  
12:30am - Thurs, Fri & Sat  
10:30pm - Sun

**FREE Parking & Shuttle Bus  
from 3 Locations:**  
Library/Government Center  
on Fair Lane,  
the WalMart Parking Lot at  
Missouri Flat Rd. & Forni Rd.  
& **NEW THIS YEAR-**  
Prospector Plaza  
between Kmart and SaveMart  
For more info call  
(530) 642-5383 or visit  
[www.eldoradotransit.com](http://www.eldoradotransit.com)

Assistance for persons with disabilities will be available  
at the Green Gate during operating hours.  
No animals except service animals allowed on shuttle.

# JUNE 16th-19th 2011

Thurs. - 11:30am to Midnight  
Friday - 11:30am to Midnight  
Sat. - 9:30am to Midnight  
Sunday - 11:30am to 10:30pm



Sponsored by the El Dorado County Air Quality Management District,  
El Dorado County Fair Association and El Dorado Transit



## PRESS RELEASE

### For Immediate Release

Date: Thursday, June 9, 2011

From: El Dorado County Transit Authority  
Matt Mauk, Transit Services Assistant  
(530) 642-5383, Extension 201

### **El Dorado Transit to Provide Free Parking and Shuttle Service for the 2011 El Dorado County Fair**

Placerville, CA, June 9, 2011 – El Dorado Transit will provide free parking and shuttle service for the 2011 El Dorado County Fair, Thursday, June 16<sup>th</sup> through Sunday, June 19<sup>th</sup>. The shuttles will operate from 11:30 a.m. to midnight on Thursday and Friday; 9:30 a.m. to midnight on Saturday and from 11:30 a.m. to 10:30 p.m. on Sunday. Free parking and shuttle service will be available from the following locations:

- The El Dorado County Library and Government Center Parking Lots on Fair Lane in Placerville
- WalMart® on Missouri Flat Road and Forni Road
- **New Location\* Prospector Plaza** (park and catch the bus between Kmart® and SaveMart®; look for the signs)

This free Fair shuttle service is sponsored by a grant from the El Dorado County Air Quality Management District with support from the El Dorado County Fair Association and El Dorado Transit. El Dorado Transit would also like to acknowledge our community partners WalMart®, Weingarten Realty - Prospector Plaza, Kmart® and SaveMart® for their support in providing parking spaces for shuttle riders.

Due to the staging and breakdown of the Fair, the Fairgrounds Park and Ride on Armory Drive will be closed from Monday, June 13, 2011 through Friday, June 24, 2011. El Dorado Transit local route passengers should use the Raley's bus stop as an alternate. Commuter route passengers are requested to use one of the following available Park and Rides as an alternate: Placerville Station on Mosquito Road in Placerville, the Central Transit facility on Commerce Way in Diamond Springs or the Ponderosa Park and Ride on Wild Chaparral at Ponderosa Road in Shingle Springs. **Morning Commuter Route #7 will add a 7:55 a.m. departure from the Central Transit Facility during the two (2) week Fairgrounds Park and Ride closure.**

For more information see the attached map of the shuttle parking locations (also available on our website at [www.eldoradotransit.com](http://www.eldoradotransit.com)) or call El Dorado Transit at (530) 642-5383. # # #