


Monterey Bay Unified Air Pollution Control District

24580 Silver Cloud Court, Monterey, CA 93940

MEETING DATE:	September 21, 2011	REGULAR AGENDA
TO:	The Air Pollution Control Board	
FROM:	Richard A. Stedman, Air Pollution Control Officer	
SUBJECT:	Consider Adoption of a Resolution Approving Staff AB2766 Grant Award Recommendations Regarding the \$1.34 Million 2011-12 AB2766 Emissions Reduction Grant Program	

RECOMMENDATION

Adopt a resolution approving staff AB2766 grant award recommendations regarding the \$1.34 million 2011-12 AB2766 Emissions Reduction Grant Program.

DISCUSSION

Attached, for the convenience of the Board, is the FY12 AB2766 Application Summary Report.

Staff is requesting that the Board approve allocation of \$1,341,454 to the staff recommended and/or selected grant applicants for FY12 AB2766 funds.

ATTACHMENTS

- Draft Resolution
- FY 12 AB2766 Application Summary

RESOLUTION 11-XXX

**BEFORE THE AIR POLLUTION CONTROL BOARD OF THE
MONTEREY BAY UNIFIED AIR POLLUTION CONTROL DISTRICT**

Approve AB2766 Grant Award Recommendations)
Regarding the \$1.34 Million 2011-12 AB2766)
Emissions Reduction Grant Program.....)

WHEREAS, the District annually receives and budgets revenues generated by a \$4.00 surcharge on fees collected by the Department of Motor Vehicles (DMV) for registration of motor vehicles in Monterey, San Benito and Santa Cruz counties, pursuant to AB2766 legislation and corresponding state regulations (AB2766 revenues); and

WHEREAS, said AB2766 revenues may only be used to reduce air pollution from motor vehicles and for related planning, monitoring, enforcement, and technical studies necessary for the implementation of the California Clean Air Act (California Health & Safety Code 44220(b)).

NOW, THEREFORE, BE IT RESOLVED That the Board hereby approves allocation of the \$1.34 million FY2011-12 AB2766 Emissions Reduction Grant Program and authorizes the Air Pollution Control Officer of the Monterey Bay Unified Air Pollution Control District to apply up to \$1,340,000 of said AB2766 revenues to grant awards up to the amounts shown on the attached List of FY12 AB2766 Final Grant Awards.

PASSED AND ADOPTED, This 21st day of September, 2011, upon motion of Director _____, seconded by Director _____ and carried by the following vote, to wit:

AYES:

NOES:

ABSENT:

I hereby certify that the foregoing is a true and correct Resolution as duly adopted by the Board of Directors of the Monterey Bay Unified Air Pollution Control District on September 21, 2011.

By: _____
Ann O'Rourke, Executive Assistant

Approved: _____
Richard A. Stedman, APCO

FY 12 AB2766

Application Summary

Presented to:
MBUAPCD Board of Directors

Prepared by:
Alan Romero
Air Quality Planner II
September 13, 2011

Recommended AB2766 FY12 Applicant List				Remaining AB2766 FY12 Applicant List				Grant Request, \$			
App. No.	Agency	County	Project Name	Project Type	Grant Request, \$	App. No.	Agency	County	Project Name	Project Type	Grant Request, \$
12-10	AMBAG	Regional	Regional Vanpool Program: Cleaner Air, Mobility, and Accessibility for the Monterey	Establish Regional Vanpool	\$ 135,000.00	12-02	Monterey Peninsula Airport District	Monterey	Ground Transportation Tracking System	Commercial Taxi Vehicle Tracking	\$ 174,800.00
12-01	City of Salinas	Monterey	E. Boronda Road Corridor	Signal Coordination	\$ 396,000.00	12-03	San Benito County Local Transportation Authority	San Benito	Riding Transit for a Cleaner Tomorrow	Bus Stop/Signage Improvement	\$ 45,000.00
12-13	TAMC	Multi County	Car Share Electrification and Expansion for Monterey & Santa Cruz	Electric Vehicle/Hybrid Car Sharing Program	\$ 200,000.00	12-04	San Benito County Local Transportation Authority	San Benito	Charging San Benito Co. Electric Vehicle Charging Station Rebate Program	Residential EV Charge Station Rebate Program	\$ 12,000.00
12-23	City of Monterey	Monterey	Del Monte Avenue Bus Rapid Transit Study	MST Bus Rapid Transit and ITS Study	\$ 100,000.00	12-05	University of California, Santa Cruz	Santa Cruz	USCS Bike Promotion Expansion Project	Bike Loan and Safety Program	\$ 200,000.00
12-06	Santa Cruz Metropolitan Transit District	Santa Cruz	Non-Revenue Vehicle Replacement Project	Vehicle Replacement	\$ 200,000.00	12-07	City of Watsonville	Santa Cruz	Purchase of Diesel Particulate Filter Pulse Cleaner	Purchase DPF pulse cleaner	\$ 16,000.00
12-08	County of Santa Cruz	Santa Cruz	County Building Inspectors Direct Emission Reduction Through Cleaner Vehicle	Fleet Vehicle Replacement-Gasoline to Hybrid	\$ 216,000.00	12-09	County of Santa Cruz	Santa Cruz	Bike Lockers for County of Santa Cruz Government Center	Replace Bike Lockers	\$ 20,000.00
12-18	San Benito High School District	San Benito	CNG Tank Replacement	Vehicle Fuel Tank Replacement	\$ 75,722.12	12-11	City of Salinas	Monterey	Skyway Boulevard/Alisal Street Roundabout	Roundabout Construction	\$ 300,000.00
12-21	Aromas San Juan Unified School District	San Benito	CNG Tank Replacement	Vehicle Fuel Tank Replacement	\$ 18,731.75	12-12	Washington Union School District	Monterey	School Bus Replacement	Bus Replacement	\$ 186,739.69
						12-14	Monterey Salinas Transit District	Monterey	WAVE-MST Waterfront WPT Trolley Electrification Project	Trolley Electrification using Wireless Power Transfer (WPT)	\$ 400,000.00
						12-15	Monterey Salinas Transit District	Monterey	Castroville Afterschool Shuttle Project	Establish Shuttle Service Line	\$ 30,000.00
						12-16	City of Santa Cruz Redevelopment Agency	Santa Cruz	Downtown-Beach Trolley Pilot Program	Establish CNG Trolley line	\$ 200,000.00
						12-17	Pajaro Valley Unified School District	Santa Cruz	School Bus Replacement	Bus Replacements	\$ 400,000.00
						12-19	San Benito High School District	San Benito	School Bus Replacement	Bus Replacements- Diesel to CNG	\$ 256,878.68
						12-20	Aromas San Juan Unified School District	San Benito	School Bus Replacement	Bus Replacements	\$ 141,949.01
						12-22	AMBAG	Regional	Regional Travel Demand Model Development	Develop and Implement RTDM	\$ 200,000.00
						12-24	Spreckels Union School District	Monterey	School Bus Replacement	Bus Replacement	\$ 130,000.00
						12-25	City of Carmel-by-the-Sea	Monterey	Carmel-by-the-Sea Trolley	Seasonal Trolley Operation	\$ 52,000.00
						12-26	Gonzales Unified School District	Monterey	School Bus Replacement	Bus Replacement	\$ 163,473.41
						12-27	San Lorenzo Valley Unified School District	Santa Cruz	School Bus Replacement	Bus Replacement	\$ 314,802.10
						12-28	City of Soledad	Multi County	Seplage Receiving Station Project	Vehicle Miller/Trip Reduction Program	\$ 245,260.00
						12-29	City of Marina	Multi-County	Monterey Bay Biodiesel Network	Install "Portable" Biodiesel Fueling Stations	\$ 346,042.00
						12-30	Santa Cruz County Regional Transportation Commission	Santa Cruz	Highway 1 Million Gallon Challenge	Increase Vehicle Occupancy and Reduce Vehicle Trips	\$ 120,000.00
						12-31	TAMC	Monterey	Monterey County Bicycle Map and Mobile Application	Bike Route Mapping and mobile bike route/mapping application	\$ 50,876.00
					Grand Total, Recommended Projects \$ 1,341,453.87						Grand Total, Remaining Projects \$ 4,005,620.89

FY12 AB2766 Grant Application Summary

Based on staff analysis, the following projects yielded the highest cost-effectiveness in terms of cost per ton of pollutant reduced and are recommended for direct vehicle emission project funding. Also included are the recommended projects for funding that exceed the 10% funding cap for demonstration, education/policy, or infrastructure projects per the FY12 AB2766 Criteria and Procedures.

Regional: **12-10: AMBAG – Regional Vanpool Program:** **\$135,000.00**

Monterey County: **12-01: City of Salinas – Signal Coordination:** **\$396,000.00**
12-13: TAMCs – EV/Hybrid Car Sharing Program: **\$200,000.00**
12-23: City of Monterey - MST Bus Rapid Transit and ITS Study **\$100,000.00**

Santa Cruz County: **12-06: Santa Cruz Metropolitan Transit District – CNG Vehicle Replacement** **\$200,000.00**
12-08: County of Santa Cruz – Hybrid Vehicle Replacement **\$216,000.00**

San Benito County: **12-18: San Benito High School District – CNG Fuel Tank Replacement** **\$75,722.12**
12-21: Aromas San Juan Unified School District – CNG Fuel Tank Replacement **\$18,731.75**

Grand Total: **\$1,341,453.87**

12-01: The City of Salinas: Signal Coordination

The City of Salinas is proposing to deploy a second InSync™ adaptive traffic control system on the East Boronda Road corridor. City Public Works successfully installed the first system on the Main Street corridor last year. The Boronda Road leg consists of 7 traffic lights currently operating at LOS (Level of Service) F. The InSync™ adaptive traffic control system manufactured by Rhythm Engineering utilizes the latest technology for synchronizing and controlling traffic signals. The system takes 10 days to install versus several months for similar systems. The project will yield a 69% increase in speed with a corresponding 42% decrease in travel time. The City of Salinas is requesting grant funding in the amount of \$396,000.00 to install the InSync™ traffic control system.

Staff Assessment 12-01:

This project is eligible for funding as a direct vehicle emission project. It is also a 75% fixed cost project and is therefore eligible for the \$400K grant cap amount. Staff calculated a CE (cost effectiveness) of \$12,264.25 per ton of pollutant, well below the \$20K cost effectiveness threshold¹ for recommended grant awards. The project narrative is thorough and well presented. Based on the milestone schedule provided, the project should be completed by August 2012. The City of Salinas is offering 12% of the total project cost in leverage funding. Staff highly recommends funding this grant project.

¹ *CE or cost effectiveness is defined as the cost per unit ton of pollutant reduced, as a guideline only, the California Air Resources Board has recommended that projects costing more than \$20K per ton of pollutant reduced should not be funded with AB2766 monies.*

12-02: Monterey Peninsula Airport District: Commercial Taxi Vehicle Tracking

Currently, the Monterey Peninsula Airport District (MPAD) is under contract with only one taxi company to provide pick-up and drop-off service at the airport terminal. All other taxi companies provide drop-off service only. Starting in January 2012, MPAD will allow and regulate all available commercial taxi ground transportation to service the airport terminal. A key component to managing the increase in traffic flow will be the use of radio frequency identification (RFID) equipment known as automated vehicle identification (AVI). MPAD is requesting grant funding in the amount of \$174,800.00 to purchase AVI scanners and for a neutral management service to run curbside tracking and taxi flow.

Staff Assessment 12-02:

As an eligible demonstration project, the installation of an AVI does not directly reduce vehicle emissions and hence no CE could be determined. The use of AVI could possibly yield future emission reduction only if commercial taxi traffic flow is effectively managed and controlled. MPAD is offering 15% of the total project cost in leveraged funding. Staff does not recommend funding this project in this grant cycle.

12-03: San Benito County Local Transit Authority: Bus Stop/Signage Improvement

The San Benito County Local Transit Authority (LTA) operates public transportation in San Benito County. This project would provide needed bus stop improvements at four locations; two in Hollister and two in San Juan Bautista. Improvements would include the installation of new bus stop shelters, new signage, and/or improving existing pedestrian access to the bus stops. The project objective is to maintain as well as attract bus ridership. LTA is requesting grant funding in the amount of \$40,000.00 to implement these improvements.

Staff Assessment 12-03:

This demonstration project involves the improvement of existing bus infrastructure. Funding is not identified for the solar lighting fixtures to be installed on at each location, as described in the narrative. Also, grant administration costs listed in the narrative exceed 5%. As it does not directly reduce vehicle emissions, no CE can be determined. The LTA is offering 6% of the total project cost in leveraged funds. Due to the total grant amount available to San Benito County in conjunction with two other grant requests in the County, (see grants 12-18 & 12-21), staff does not recommend funding this project.

12-04: Council of San Benito County Governments: EV Charge Station Rebate Program

This project would provide rebates to residences or businesses to install electric vehicle charging stations in homes and business locations respectively. Target value of the rebate program is \$500.00 per customer or 20 charge station equivalents. Grant funding would also be used for the marketing of the rebate program. The Council of San Benito County Governments (COG) is requesting funding in the amount of \$12,000.00 to implement this rebate program.

Staff Assessment 12-04:

This is a fueling infrastructure project as defined in the FY 12 application packet. The District already has four active grant awards that involve the installation of EV charge stations, none of which are residential but open instead to the public. One is currently planned for installation in Hollister. In the case of residential charging requirements, EV owners can use existing residential 110V electrical outlets to charge their EVs with an approximate full charge time of 10-12 hours. The COG is offering no leveraged funds for this project. As stated in the staff assessment of application number 12-03, staff does not recommend funding this project.

12-06: Santa Cruz Metropolitan Transit District: CNG Vehicle Replacement

The Santa Cruz Metropolitan Transit District (SCMTD) is currently implementing a long-range plan to ultimately replace all non-revenue vehicles with CNG vehicles. This project targets five vehicles for CNG replacement. The five non-revenue vehicles include three model year (MY) 2007 Ford Focus cars, one MY 1985 diesel truck and one MY 2004 gasoline pickup truck. The Monterey Bay Unified Air Pollution Control District (MBUAPCD) in FY11 awarded SCMTD a grant to build a second CNG tank expansion and is a much needed step in order to fuel more vehicles as the transition to CNG vehicles is completed. SCMTD is requesting grant funding in the amount of \$200,000.00 to implement this CNG replacement vehicle project.

Staff Assessment 12-06:

This project is eligible for funding as a direct vehicle emission reduction project. Based on the activity data supplied by the applicant, a CE was calculated at \$13,916.39 per ton of pollutant, which is also well below the \$20K cost effectiveness threshold for funding projects. The project also aligns itself with one of the District Transportation Control Measures (TCM). The SCMTD is offering 14% of the total project cost in leveraged funds, which includes in-kind funding for grant administration. Staff highly recommends funding of this grant project.

12-07: City of Watsonville: Purchase DPF Pulse Cleaner

The City of Watsonville has installed 31 diesel particulate filters (DPF) on its diesel fleet, which achieves an 85% reduction in ozone precursor pollutants as well as particulate matter per vehicle. This represents a significant vehicle emission reduction across the entire diesel fleet. The purchase of a DPF pulse cleaner will afford the City a more sustainable and cost efficient method to clean the filter components of the DPFs. Currently, filters must be taken to an outside contractor to perform the cleaning operation. Installing an in-house cleaner will reduce vehicle trips and emissions to and from the outside contractor's location. The City of Watsonville is requesting grant funding in the amount of \$16,000.00 to purchase the DPF pulse cleaner.

Staff Assessment 12-07:

Although this project does not directly reduce vehicle emissions nor does it incorporate a District TCM, the City of Watsonville should be commended for taking a pro-active approach with the DPF retrofitting of their 31 vehicles. However, cleaning services are available as nearby as Pajaro Valley Unified School District, also located in Watsonville. The DPF pulse cleaner located at the Grimmer Road facility was funded by a District grant via the Lower Emission School Bus Program. Typical cleaning cycles for DPF filter elements are every 6-12 months depending on vehicle duty cycle. There is sufficient cleaner capacity to share this equipment between the two agencies. However, if an arrangement cannot be met, then the next nearest location for cleaning is in Salinas. Staff has listed this project as an alternate recommendation and can be deferred to the FY13 AB2766 grant cycle.

12-08: County of Santa Cruz: County Building Inspectors Direct Emission Reduction Through Cleaner Engine Fleet Replacement

The County of Santa Cruz would like to replace six high mileage fleet trucks with gas-electric hybrid vehicles. The selected replacement vehicles are six MY 2011 Ford Escape Hybrids. The fleet vehicles are driven daily by the County building inspectors throughout the area. Along with the direct emission reductions resulting from the use of hybrid vehicle technology, another benefit derived from the use of alternative fueled vehicles is the message of the County's commitment to improving air quality. The County is requesting funding in the amount of \$216,000.00 to purchase the hybrid vehicles.

Staff Assessment 12-08:

This project is eligible for funding as a direct vehicle emission reduction project. The project as submitted by the County of Santa Cruz yielded a CE that calculated at \$55,491.92 per ton of pollutant, which is above the \$20K cost effectiveness threshold. However, converting gasoline vehicles to hybrids can result in significant emission reduction benefit. Although the County of Santa Cruz is offering no leveraged funding, staff recommends funding this project based on the ranking of all the direct vehicle emission reduction projects submitted from within Santa Cruz County.

12-10: AMBAG: Regional Vanpool Program

The Association of Monterey Bay Area Governments (AMBAG) would like to start 30 new vanpools under the Regional Vanpool Program: Cleaner Air, Mobility, and Accessibility for the Monterey Bay. For the first year of the program, single occupancy vehicle commuters can vanpool to work or college at a greatly reduced rate. The vanpools will be available to traditional vanpool commuters, agricultural workers, and low income earners. It is anticipated that each vanpool will transport 6 to 15 riders, which equates to 150 to 240 vehicles removed from the roadways in Monterey, Santa Cruz, and San Benito counties. AMBAG is requesting funding in the amount of \$135,000.00 to assist in implementing this vanpool program.

Staff Assessment 12-10:

This project is eligible for funding as a direct vehicle emission project. This regional vanpool project yielded a CE of \$20,000.00 per ton of pollutant. Although the CE value is right at the threshold, it implements three of the seven District TCMs. Previously funded regional vanpool programs have shown to be successful in achieving anticipated vehicle emission reduction benefit. AMBAG is offering a significant percentage, 71%, of the total project cost in leveraged funds. Staff highly recommends funding this regional program.

12-11: City of Salinas: Roundabout Construction

The City of Salinas has identified the intersection of Alisal Street and Skyway Boulevard for future improvements that will decrease traffic delay and correspondingly improve safety. Initially scheduled to have a traffic signal installed, City Public Works has determined that use of a roundabout would be a preferred alternative. Statistics nationwide, as well as in other countries, have demonstrated that roundabouts are inherently safer to traverse than a traditional intersection controlled by traffic signals. In support of regional air quality goals, the City of Salinas is preparing a “Roundabout First” policy. The benefits of this project would include: better mobility along the Alisal Street corridor, better access to Salinas Airport and adjacent land uses, improve efficiency of goods movement to and from the Salinas Airport Business Park, reduced fuel consumption and green house gas (GHG) emissions. The City of Salinas is requesting funding in the amount of \$300,000.00 to design and construct this roundabout.

Staff Assessment 12-11:

This roundabout construction is a 75% fixed cost direct vehicle emission reduction project, which is eligible for the increased funding cap of \$400K. However, the travel activity data submitted was incomplete and therefore resulted in the inability to calculate a CE. The City of Salinas was notified of this and it was agreed that they could present appropriate activity data at the September 21, 2011 MBUAPCD Board meeting. The City of Salinas is offering 33% of the total project cost in leveraged funds. If the CE falls below the threshold and the project ranks appropriately with the other projects, staff would recommend this project for funding in lieu of the recommended projects for Monterey County as stated in the front of this summary.

12-12: Washington Union School District: Bus Replacement

Washington Union School District (WUSD) is seeking to replace a MY1985 Thomas school bus. Since there is no longer any available funding to replace this bus using LESBP funds, WUSD is submitting this AB2766 grant application. The replacement bus chosen will be a MY 2011 Thomas hybrid school bus. The California Air Resources Board (ARB) is now offering to school districts only, a \$40K voucher with the purchase a hybrid bus. The technology used on these types of buses is very similar to existing hybrid cars such as the Toyota Prius and others.

Staff Assessment 12-12:

As a direct vehicle emission reduction project, the CE calculated at \$42,572.67, above the \$20K cost effectiveness threshold for funding projects. As mentioned above, there is a hybrid voucher program from ARB to help offset the cost of these buses. Staff recommends upon determining the FY12 AB923 budget, that this project be ranked by bus model year against other bus projects and funded accordingly.

12-13: TAMC: Electric Vehicle/Hybrid Car Sharing Program

The Transportation Agency of Monterey County is sponsoring a project to implement a car sharing program utilizing both zero emission electric vehicles (EVs) and low emission and/or plug-in hybrid vehicles. The car sharing program is already in place in Santa Cruz County and the project will expand this network to Monterey County. Ecology Action in partnership with Zipcar Inc. will be the implementing entity for the project. Three EVs will be added to the existing Santa Cruz Zipcar fleet as well as three EVs in Monterey. A total of 6 hybrid and/or fuel efficient vehicles will also be added to the newly formed Monterey car sharing program. Once the new vehicle pods are in place in both Santa Cruz and Monterey, a massive outreach and marketing plan will be executed to grow car share membership. The project will also include the installation of three Level II EV charge stations (4-6 hour full charge rate @ 240V). The project is requesting funding in the amount of \$200,000.00 to help implement the car sharing program expansion.

Staff Assessment 12-13:

Because activity data was supplied with this application, a CE was calculated. However, the calculation is not based on actual vehicle miles reduced by this car sharing program but rather on assumptions of car sharing membership and corresponding VMT reductions. This project as submitted establishes very aggressive objectives by assumption. It should be noted that a CE was calculated at \$54,388.46 per ton of pollutant, which is well above the \$20K threshold. A previous AB2766 grant for car sharing has yet to achieve carshare ridership that meets the minimum usage fees as established by Zipcar and documented vehicle trip reductions are not yet available. Further, a key component of adding 6 EVs to the Zipcar fleets involves the installation of Level II charge stations. This assures adequate availability of the EVs by reducing the time to reach full charge. Although several new Level II public charge stations are slated for installation from previous AB2766 grants and other grant sources, only a few have been installed to date. This current lack of EV infrastructure as well as the uncertainty of the availability of an EV with a 100 mile range can push this project far to the right of the project schedule. This could jeopardize project success by exceeding the two year project limit as defined by the FY12 AB2766 Criteria and Procedures. Although the project is offering 60% of the total project cost in leveraged funds, the source and type of these funds as submitted are not readily transparent. 50% of the requested funds are to be used for outreach and are not directly involved with the procurement of EV and hybrid vehicles. Based on the total dollar amount allocated to the Monterey County and project ranking, **staff recommends that this project be funded but with cautions as noted above.** The project could also be deferred to a future AB2766 grant cycle as EV charging infrastructure becomes more available.

12-14: Monterey Salinas Transit District: Trolley Electrification Using Wireless Power Transfer (WPT)

The Monterey Salinas Transit District (MST) is partnering with WAVE technologies (a privately held company) and the Utah State’s Energy Dynamics Laboratory (EDL) to demonstrate an electric trolley using WPT technology. The trolley would be the first of its kind in California and would be implemented as part of the existing Trolley Monterey line, a seasonal shuttle operated by MST between downtown Monterey and Cannery Row. Currently there are 3 diesel powered trolleys servicing the Trolley Monterey area. An occasional fourth trolley is added to this service during special events and holidays. WAVE technologies will replace one of these diesel trolleys with a WPT electric vehicle and will afford the ridership with the same level of service of the existing trolleys. MST is requesting funding in the amount of \$400,000.00 to cover the fixed costs of the WPT project.

Staff Assessment 12-14:

This project is eligible for funding as 75% fixed cost direct vehicle emission project. However, the technology behind this project is very cost intensive as indicated by the budget data submitted. The project CE calculated at \$32,107.51 per ton of pollutant, which is above the \$20K cost effectiveness threshold. WAVE technologies and EDL are able to bring leveraged funds via large contributions from the U.S. Department of Energy. EDL has also committed \$300,000.00 for prototype testing. With over \$2M dollars in leveraged funds, this project scored well but because of the CE, this project did not rank as high as the overall score might have indicated in terms of achieving air quality benefit. Based on the allocation of total grant funding and the CE ranking of the direct vehicle emission reduction projects from within Monterey County, staff does not recommend funding.

12-15: Monterey Salinas Transit District: Establish Afterschool Shuttle Line

MST proposes to demonstrate a new short shuttle bus service in Castroville between the North Monterey County High School, North Monterey County Middle School, Castroville Elementary School and the Castroville Branch public library. By establishing this shuttle service, single private vehicle trips to the library would be reduced as well as vehicular emissions. The shuttle service would circulate through Castroville on weekdays after school. MST is requesting funding in the amount of \$30,000.00 to implement the shuttle line.

Staff Assessment 12-15:

This project is eligible as a direct vehicle emission reduction project and as well would implement a District TCM. However, the CE calculated at an \$805,785.12 per ton of pollutant, which is several orders of magnitude over the cost effectiveness threshold. The CE reflects the difficulty in achieving cost effective air quality benefit for several reasons. The very short distances traveled by the proposed shuttle in conjunction with a very small reduction in of private vehicle trips results in a very expensive cost per ton of pollutant reduced. Further, with a demonstration project life of only 2 years, the capital recovery factor exacerbates the magnitude of the cost to reduce emissions for this project. A commitment by MST to keep this project in place for an extended period (10-15 years) would result in a more appropriate CE that would warrant funding. At this time, Staff does not recommend funding this project.

12-16: City of Santa Cruz: Establish CNG Trolley Line

The Redevelopment Agency of the City of Santa Cruz is proposing a pilot program to run a trolley between downtown Santa Cruz and the Beach Boardwalk. The Agency has already purchased a CNG trolley and has contracted with the Santa Cruz Trolley Consortium, Inc. (comprised of local businesses, organizations and community members) to manage the trolley operations. The pilot trolley program will operate seasonally during the summer and possibly during special events and holidays. If the pilot program appears successful based on ridership, a second trolley may be added. Grant funds would be used to cover operating expenses during the first two years of the pilot program. This would include trolley operation, fuel, maintenance, marketing and advertising. The Redevelopment Agency is requesting grant funding in the amount of \$200,000.00 to operate the CNG trolley.

Staff Assessment 12-16:

This is a direct vehicle emission reduction project, which would also implement a District TCM. However, the CE calculated at \$70,571.63 per ton of pollutant, significantly above the \$20K cost effectiveness threshold. Again as discussed in application 12-15, several factors drive the cost effectiveness for this project. Short operating distances and existing vehicle trips to the transit point coupled with seasonal operation render this project expensive with regard to the cost of reducing pollutants. The Redevelopment Agency is offering 50% of the total project cost in leveraged funds; however, staff does not recommend funding this project.

12-17: Pajaro Valley Unified School District: Bus Replacements

Pajaro Valley Unified School District (PVUSD) would like to replace four pre-1989 school buses with new 2011 emission diesel buses. PVUSD operates one of the largest school bus fleets and has been the recipient of several LESBP replacement and retrofit grants. Realizing that LESBP has effectively sunset, PVUSD is submitting this AB2766 grant application. PVUSD is requesting grant funding in the amount of \$400,000.00 for the school bus replacements.

Staff Assessment 12-17:

The school bus fleet operated by PVUSD accumulates significantly high annual miles per bus. Not surprisingly, as a direct vehicle emission reduction project, the CE calculated at \$3,936.06 per ton of pollutant, the highest CE of all the projects evaluated. Staff recommends upon determining the FY12 AB923 budget, that this project be ranked by bus model year against other bus projects and funded accordingly.

12-18: San Benito High School District: Vehicle Fuel Tank Replacement

San Benito High School District has four CNG buses that will need all four fuel tanks replaced. Two of the buses are currently offline due to tank expiration dates that have since passed within this year. The two others will have tank expiration dates of June 2012 and December 2012 respectively. Once the tank expiration date has been met, the school bus must be tagged out and taken offline. The result in lack of service is an immediate increase in private vehicle trips, vehicle miles traveled, and the corresponding increase in vehicle emissions as parents drive their children to and from school. The San Benito High School District is requesting funding in the amount of \$75,722.12 to replace the four fuel tanks.

Staff Assessment 12-18:

The immediate impact to traffic and air quality within San Benito County is significant with an average daily trip count of 150 per bus (trips are counted as one way). The CNG buses operating at San Benito High School were obtained from previous grants from the District. Until other funding sources begin to open up to cover fueling infrastructure costs such as these, AB 2776 grant funding is currently the only available funding source for the school districts operating CNG buses. There is a similar grant from Aromas San Juan Unified School District within San Benito County, (see Application # 12-21). Both grant requests satisfy the allocated grant funding for San Benito County. As well, both of these projects fulfill the FY12 AB2766 Criteria and Procedures requirement for awarding 10% of available grant funds for non-emission reduction projects. Staff highly recommends funding for both of these projects.

12-19: San Benito High School District: Bus Replacement

The San Benito High School District would like to replace two buses, MY 1987 and 1991 with two new CNG buses. Since the funding from the LESBP is no longer available, San Benito High School is submitting this AB2766 grant application. Funding request is for \$256,878.68 to replace the two buses.

Staff Assessment 12-19:

The CE for this project calculated at \$18,318.13 per ton of pollutant reduction, which is adequately below the cost effectiveness threshold. Staff recommends upon determining the FY12 AB923 budget, that this project be ranked by bus model year against other bus projects and funded accordingly.

12-20: Aromas San Juan Unified School District: Bus Replacement

The Aromas San Juan Unified School District is looking to replace two MY 1990 Ford/Collins diesel buses with two smaller MY 2012 gasoline powered special education buses. The buses will service the tri-county area. Funding request is for \$141,949.01 to replace the two buses.

Staff Assessment 12-20:

The CE for this project calculated at \$15,864.40 per ton of pollutant reduced, which is also well below the cost effectiveness threshold. Staff recommends upon determining the FY12 AB923 budget, that this project be ranked by bus model year against other bus projects and funded accordingly.

12-21: Aromas San Juan Unified School District: Vehicle Fuel Tank Replacement

Identical to the CNG fuel tank replacement requirement at San Benito High School District, the Aromas San Juan Unified School District (ASJUSD) will need to replace one CNG fuel tank by December 2011. ASJUSD will put 98 private vehicle trips per day back on the road when the bus is taken offline in December. As in the case of San Benito High School District, this will have an immediate impact on air quality and traffic in San Benito County. ASJUSD is requesting funding in the amount of \$18,731.75 to replace the CNG fuel tank.

Staff Assessment 12-21:

See Staff Assessment above in 12-18. Staff highly recommends funding this project.

12-22: AMBAG: Develop and Implement the Regional Travel Demand Model (RTDM)

The primary objective of this project is to develop and implement the AMBAG Model Improvement Plan (MIP), which would address stakeholder concerns with the RTDM. In developing the RTDM, the MIP will utilize expanded data resources and analysis, as required by SB 375. A peer review was conducted on the current state of the RTDM, which identified 30 model improvements from short term to long term. The current cost estimate for RTDM data collection, analysis, and model development is \$800,000.00. AMBAG has secured funding in the amount of \$600,000.00 and a \$200,000.00 grant, as requested, would serve as a critical monetary link in implementing the AMBAG MIP. Validation and calibration of the RTDM relies heavily on having adequate data collected specifically from the California Household Travel Survey (CHTS) performed every ten years and administered by CalTrans. AMBAG believes that the year 2011-2012 survey sample allocations from CalTrans would not be statistically significant. Therefore, AMBAG would use AB2766 grant funding to purchase enough samples to bring the sample size up from .56% to 1% of the regional household population. AMBAG is requesting funds in the amount of \$200,000.00 to purchase the additional CHTS samples.

Staff Assessment: 12-22

This project is eligible for funding as an education/policy project. However, in reviewing the RTDM peer review panel recommendations, it is not clear the panel is in agreement with the AMBAG assertion that the CHTS allocated sample size is not statistically large enough for significance. The panel states as Short Term Improvement Priority Number 1, “Supplement 2011-2012 CHTS and oversample special populations and get a good demographic description of these households; do not be overly concerned of getting a 1% household sample, rather sample should be based on obtaining enough observations in a particular cross-classification of how the data will ultimately be used.” Further, there is no cost breakdown for this \$800,000.00 project. All that is shown are matched funds totaling \$600,000.00 with a single line item total project cost of \$800,000.00. The District appreciates the value and necessity of the developing and implementing the RTDM, but would defer to the actual recommendations of the peer review panel before funding this request. As submitted, the project deliverables do not appear to provide sufficient value to warrant funding this project.

12-23: City of Monterey: MST Bus Rapid Transit and ITS Study

This is a joint project between the City of Monterey and MST to perform a Bus Rapid Transit (BRT) study of the Del Monte Avenue corridor. BRT is a relatively new approach in achieving high quality, efficient, time-saving public transit by combining the high quality service of rail transit with the lower cost and greater flexibility of buses. BRT provides for the use of designated buses that are more fuel efficient, quieter, more comfortable and cleaner. The use of intelligent transportation systems (ITS) technology is a key component of BRT by ensuring faster, more reliable, more convenient, and easier to use bus transit service. This project, under a sub-contract agreement, will create a feasibility study for exclusive bus lanes on Del Monte Avenue bypassing the congestion between Sloat Avenue and Washington Street in the downtown area. The study would then result in policy decisions by the Monterey City Council and the MST Board of Directors to pursue the development of BRT services. The City of Monterey is requesting funds in the amount of \$100,000.00 to perform the BRT/ITS study

Staff Assessment 12-23:

This project is eligible for funding as an education or policy project under the current District FY12 AB2766 Criteria and Procedures. The application of BRT along the Del Monte corridor would significantly reduce future vehicle emissions. The BRT approach would be an attractive alternative to more costly projects such as light rail. The project would implement two of the District TCMs and the City of Monterey is offering 5.5% of the total project cost in leveraged funds. Staff recommends that this project be funded for Monterey County projects.

12-24: Spreckels Union School District: Bus Replacement

Spreckels Union School District would like to replace a MY 1995 Ford bus with a MY 2012 International bus. The new bus is anticipated to travel an average of 10,000 miles per year carrying 69 students per trip. Spreckels Union School District is requesting funds in the amount of \$130,000.00 to replace one bus

Staff Assessment 12-24:

Staff recommends upon determining the FY12 AB923 budget, that this project be ranked by bus model year against other bus projects and funded accordingly.

12-25: City of Carmel-by-the-Sea: Seasonal Trolley Operation

The City of Carmel's Trolley service began with support from a previous AB2766 grant in 2009. Since then, the trolley has run on consecutive holiday and summer seasons to date. The trolley is free to the ridership, which reached 8,500 in the summer of 2010. This represents a reduction in vehicle emissions and traffic congestion within the city limits. The City of Carmel-by-the-Sea is requesting funds to support the trolley service for the year 2011 holiday season and the year 2012 summer season. A small portion of grant funds will also be used for trolley service advertising. The City is requesting funding in the amount of \$52,000.00 to operate the trolley for another year.

Staff Assessment 12-25:

The project as submitted would be eligible for funding as a demonstration project with no associated fixed costs. Direct vehicle emission reduction benefit would be achieved by future ridership during the coming holiday and year 2012 summer season. However, it is anticipated due to the low amount of annual miles traveled that actual and quantifiable emission reduction would not be considered significant. Staff does not recommend funding this project at this time. The project can be deferred to a future AB2766 grant cycle.

12-26: Gonzales Unified School District: Bus Replacement

The Gonzales Unified School District (GUSD) would like to replace a MY1985 International school bus with a MY 2012 Thomas diesel bus. The new bus will carry 81 students per trip and will complete the Go Green goal of achieving the highest level of bus emission reduction across the entire GUSD fleet by either DPF retrofitting or replacing. GUSD is requesting funding in the amount of \$163,473.41 to replace one bus.

Staff Assessment 12-26:

Staff recommends upon determining the FY12 AB923 budget, that this project be ranked by bus model year against other bus projects and funded accordingly.

12-27: San Lorenzo Valley Unified School District: Bus Replacement

The San Lorenzo Valley Unified School District (SLVUSD) is seeking to replace two MY 1987 Bluebird school buses with two MY 2012 Thomas built, diesel, 72 passenger buses. SLVUSD is requesting funds in the amount of \$314,802.10 to replace two buses.

Staff Assessment 12-27:

Staff recommends upon determining the FY12 AB923 budget, that this project be ranked by bus model year against other bus projects and funded accordingly.

12-28: The City of Soledad: Vehicle Mile/Trip Reduction Program- Septage Receiving Station Project

After research in the surrounding Salinas Valley service area, the Soledad Wastewater Reclamation Facility staff determined that a need exists for a local septage receiving facility. Currently, any septage waste generated in the South Monterey County and San Luis Obispo areas is transported by truck to the Monterey Regional Water Pollution Control Facility in Marina. A phone survey was conducted with four privately owned septage hauling services to determine the amount of trips to the Marina facility and the round trip distance traveled. Among the four commercial septage haulers, the average round trip distance traveled is 132,000 miles. The average number of trips per year is 532 trips. Hence, by constructing a receiving facility in Soledad, the average annual mileage reduction would be 20,000 miles per hauler. In June 2011, the City of Soledad implemented a six-month pilot study to evaluate the feasibility of accepting septage wastes generated by residential users in the greater Salinas Valley. Although too early to assess overall performance, the pilot facility has been accepting loads since June 9, 2011 with no negative impacts or problems with plant processing. With grant funding, the Soledad Wastewater Reclamation Facility would construct additional capacity to the pilot facility to handle the anticipated increase in demand. The City of Soledad feels strongly that the vehicle mileage and resultant emission reduction

achieved will be a significant benefit to the air quality in the greater Salinas Valley. The City is requesting funds in the amount of \$245,260.00 to increase facility capacity.

Staff Assessment 12-28:

This project is eligible for funding as a demonstration project. The vehicle mileage reduction and corresponding reduction in vehicle emissions represents a very significant air quality benefit. From an economic stand point, the benefit is also substantial in lowering fuel costs to the septage hauling businesses. Collecting mileage and trip data is easily accommodated as haulers are required by law to maintain detailed manifests for every load. The City of Soledad has already contributed leveraged funds in the building of the pilot facility, which will become the foundation for the expansion. Staff recommends this very interesting project as an alternate for funding projects in Monterey County.

12-29: City of Marina: Install Portable Bio-Diesel Fueling Stations

The City of Marina is sponsoring a Santa Cruz based private operation known as GreenStation on a project that would build and install five self-operated biodiesel fueling stations. Four of these stations will incorporate portability in the design therefore allowing these stations to be re-located as necessary. The fifth station will be located at the Breakwater Cove Marina in Monterey in order to readily offer bio-diesel fuel to the boating community. The project scope would initially cover Monterey and Santa Cruz counties, but can be expanded to anywhere within the tri-county area in the future. Bio-diesel sales from the five stations are forecasted at 100,000 gallons for at least the first year. GreenStation is requesting funds in the amount of \$346,042.00 to design, build and implement five bio-diesel fueling stations.

Staff Assessment 12-29:

This project as submitted does not meet the 75% fixed cost criteria and therefore is not eligible for funding with the \$400K grant cap amount. The overall lack of clarity in the project narrative as submitted made it difficult to ascertain the potential to achieve emission reduction benefit. Staff is concerned that this project appears to be inherent with risk. There is no discussion in the narrative of where funding will come from to purchase equipment. It cannot be done upfront with grant funding as all of the AB2766 grants are constructed as reimbursable grants. GreenStation proposes to obtain short term separate bank loans to cover the equipment costs for each of the five stations. This activity was not included in the narrative and only identified in the project milestone schedule. Cost estimates for the 1000 gallon tanks are transparent because they are based on vendor quotations, however valid for only 20 days. The other equipment such as the solar array, batteries and power inverters needed to drive all the station power requirements lack this transparency. The narrative also fails to identify how the design will incorporate portability. Staff strongly recommends that this project not be funded.

12-30: Santa Cruz Regional Transportation Commission: Increase Vehicle Occupancy and Reduce Vehicle Trips – Highway 1 Million Gallon Challenge

With this project, the Santa Cruz Regional Transportation Commission (RTC) will evaluate and implement transportation demand management (TDM) strategies to improve traffic flow through the heavily congested Highway 1 corridor between the cities of Santa Cruz and Watsonville. RTC will evaluate several TDM strategies such as rideshare programs, employer based TDM, incentive programs, carshare programs and parking policies. Focus will be on those strategies that promise the highest yield in reduced fuel consumption, reduction in vehicle miles traveled and mode split changes. By increasing vehicle occupancy and thus saving one million gallons of fuel as the challenge, the net benefit could keep \$3M in the local economy as well as taking pressure off of the freeways and neighborhood streets. RTC is requesting funding in the amount of \$120,000.00 to assist in implementing TDM strategies for the Highway 1 corridor.

Staff Assessment 12-30:

This project is eligible for funding as an education/policy project and would also implement a District TCM. However, it is without question a challenging one as large scale behavioral change is difficult to achieve at best. RTC is offering 16% of the total cost in secured leveraged funds and is hoping to secure \$300,000.00 pending approval from the FHWA by January 1, 2012. Staff suggests that this project could be selected as an alternate for projects within Santa Cruz County.

Bike Projects received but not eligible for FY12 AB2766 Funding:

12-05: UC Santa Cruz: Bike Promotion Expansion: Grant Request: \$200,000.00

Staff Assessment: Project is a bike loan program to incentivize 200 students to purchase bicycles and 30 faculty to purchase electric bicycles. Although ineligible for funding, the activity data supplied in this application yielded a CE of \$375,536.48 per ton of pollutant reduced.

12-09: County of Santa Cruz: Bike Locker Replacement: Grant Request: \$20,000.00

12-31: TAMC: Monterey County Bicycle Mapping: Grant Request: \$50,876.50