

## **CMAQ COST-EFFECTIVENESS THRESHOLD DOCUMENTATION FOR THE KERN COG 2011 FTIP**

The Congestion Mitigation and Air Quality (CMAQ) program provides funding for transportation projects or programs that contribute to attainment or maintenance of the national ambient air quality standards. All San Joaquin Valley Metropolitan Planning Organizations (MPOs) adopted policies in 2007 for distributing at least 20 percent of the CMAQ funds to projects that meet a cost-effectiveness threshold for emission reductions beginning in Fiscal Year (FY) 2011. For the 2011 Federal Transportation Improvement Program (FTIP), this applies to years 2010-2011 through 2013-2014. Kern Council of Governments (Kern COG) has made every effort to expend the minimum 20 percent funding for cost-effective projects over the course of the FTIP and the attached documentation demonstrates that Kern COG has met the 20 percent funding goal.

Project eligibility continues to be based on federal CMAQ guidance. MPOs can fund projects within local jurisdictions or contribute funding to the San Joaquin Valley Air Pollution Control District (SJVAPCD) grant incentive programs to meet the cost-effectiveness threshold requirements. Funds contributed to the SJVAPCD grant incentive programs will be assumed to have met the threshold, as that threshold is more stringent than the one established by the CMAQ cost-effectiveness policy.

Emission benefits and cost-effectiveness calculations are based on the applicable pollutants for the region, including the components of ozone (nitrogen oxides [NO<sub>x</sub>] and reactive organic gases [ROG]) and particulate matter (PM). The “Methods to Find the Cost-Effectiveness of Funding Air Quality Projects” document developed by the Air Resources Board (ARB) is currently the appropriate methodology for calculating cost-effectiveness. Cost-effectiveness is expressed as dollars spent per pound of pollutant reduced (ROG + NO<sub>x</sub> + PM<sub>10</sub>). The cost-effectiveness threshold for the 2011 FTIP has been maintained at the previously recommended level of \$30 per pound (\$60,000 per ton) and is based on CMAQ dollars only, not total project cost.

Kern COG has identified, through existing programmed projects in those years or other selection methods, projects that qualify for the cost-effectiveness policy. The Kern COG Congestion Mitigation Air Quality Program Policy Guidance provides the scoring criteria developed in consultation with local jurisdictions and transit agencies in Kern County. The Kern COG Board of Directors approved the Kern COG Congestion Mitigation Air Quality Program Policy Guidance February 24, 2006. The Kern COG Board of Directors approved the Kern COG CMAQ Local Cost-Effectiveness Policy September 20, 2007.

Kern COG issued a call for projects October 2009 that incorporated the CMAQ cost effectiveness policy to identify at least 20% of the CMAQ funds for projects that meet a cost-effectiveness threshold of \$30 per pound. The call for projects was initiated to program \$105,000 CMAQ funds in fiscal year 10/11 and \$8,208,000 CMAQ funds in fiscal year 11/12. Based on the CMAQ Policy approved by the Kern COG Board, Kern COG will allocate a minimum of \$1.66 million of those funds to projects that meet the cost effectiveness threshold.

A draft CMAQ Program of Projects was presented for review during the February 2010 Transportation Technical Advisory Committee and Transportation Planning Policy Committee meetings. The Kern COG Board approved the final CMAQ Program of Projects March 2010. Kern COG then incorporated the approved program of projects into the 2011 Federal Transportation Improvement Program.

As stated in the Cost-Effectiveness Policy, Kern COG has agreed to post information related to the implementation of the cost-effectiveness CMAQ policy on its website. Attached is documentation that fulfills this requirement and demonstrates that Kern COG has estimated the amount of funding in the 2011 FTIP necessary to meet the 20 percent cost-effectiveness goal and provided a summary of the CMAQ projects that meet the minimum cost-effectiveness threshold.

## CMAQ Cost-Effectiveness Documentation for the Kern COG 2011 FTIP

<u>Year</u>	<u>Estimated CMAQ Apportionments</u>	<u>20 Percent Minimum</u>
FY 2010-2011	\$8,324,194	\$1,664,839
FY 2011-2012	\$8,474,029	\$1,694,806
FY 2012-2013	\$0	\$0
FY 2013-2014	\$0	\$0
Totals	\$16,798,223	\$3,359,645

Year	FTIP ID	Agency	Project Description	CMAQ Funding Amount	Estimated Cost-Effectiveness <sup>(1)</sup>
FY 10/11	KER050532	Bakersfield	"H" St/Mckee Rd; New Signal & Signal Coordination (Interconnect)	\$192,110	\$8.30
FY 10/11	KER060523	Bakersfield	Truxtun Ave at Chester Ave; traffic monitoring camera; Stockdale Hwy at New Stine Rd; traffic monitoring camera	\$166,435	\$8.34 & \$14.46
FY 11/12	KER100507	Bakersfield	White Lane from Gosford Rd to Ashe Rd; Signal Coordination (Interconnect)	\$152,713	\$14.23
FY 11/12	KER100508	Bakersfield	Akers Road at Berkshire Road; new signal and synchronization; Panama Road at Reliance Drive; new signal and synchronization	\$370,054	\$10.84 & \$1.43
FY 11/12	KER100509	Bakersfield	Chester Ave at W.Columbus St, Chester Avenue at 30th St., and Chester Ave at 21st St.; traffic monitoring camera	\$207,965	\$16.65
FY 11/12	KER100510	Bakersfield	Coffee Rd at Hageman Rd., Coffee Rd. at Brimhall Rd., and Coffee Rd at Truxtun Ave.; traffic monitoring camera; Gosford Rd. at Ming Ave., Gosford Rd. at Westwold Dr., and Gosford Rd. at White Ln.; traffic monitoring camera	\$556,285	\$16.45 & \$26.00

Year	FTIP ID	Agency	Project Description	CMAQ Funding Amount	Estimated Cost-Effectiveness <sup>(1)</sup>
FY 11/12	KER100512	California City	Unpaved Section of Mendiburu Rd from Hacienda Blvd to Neuralia; Surface Unpaved Street	\$938,069	\$16.84
FY 10/11	KER050539	California City	Redwood Blvd on South-Side of Roadway from Hacienda Blvd to Neuralia Rd (1.5 Miles); Surface Unpaved Street	\$976,089	\$9.30
FY 11/12	KER100505	Golden Empire Transit District	Expansion of CNG Fueling Station Fuel Island	\$424,312	\$9.27
FY 11/12	KER100514	Kern County	In Bakersfield: Pioneer Drive: Gargano Road to Vineland Road; Surface Unpaved Street	\$132,095	\$0.51
FY 11/12	KER100515	Kern County	In Rosamond: 55th Street West from Rosamond Blvd to Ashe St; Surface Unpaved Street	\$340,840	\$0.63
FY 10/11 -11/12	KER100516	Kern County	Near Tehachapi: Reeves St from Alta Vista to SR 202; Surface Unpaved Street	\$180,250	\$0.76
FY 10/11 -11/12	KER100517	Kern County	In Ridgecrest: Bowman Rd from Jacks Ranch Rd to Downs Ave; Surface Unpaved Street	\$1,062,360	\$1.42
FY 11/12	KER100518	Kern County	In Rosamond: Gobi Ave from 60th St West to 55th St West; Surface Unpaved Street	\$265,587	\$1.33
FY 11/12	KER100513	Ridgecrest	Bowman Rd from Mahan St to Downs St; Surface Unpaved Street	\$524,578	\$18.84

Total CMAQ Funding Amount	\$6,489,742
CMAQ Cost-Effectiveness Goal	\$3,359,645
CMAQ Cost-Effectiveness Goal Met?	YES
Percent of CMAQ Funds Awarded to Cost-Effective Projects	39%

(1) Cost-effectiveness for each project identified as meeting the cost effectiveness threshold must be below \$30 per pound, or \$60,000 per ton.