

CMAQ COST-EFFECTIVENESS THRESHOLD DOCUMENTATION FOR THE KERN COG 2013 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 2013 Federal Transportation Improvement Program (FTIP), this applies to years 2012-2013 through 2015-2016. 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_x] 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_x + PM₁₀). The cost-effectiveness threshold for the 2013 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 November 2011 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 \$9,720,000 CMAQ funds in fiscal year 12/13 and \$9,720,000 CMAQ funds in fiscal year 13/14. Based on the CMAQ Policy approved by the Kern COG Board, Kern COG will allocate a minimum of \$3.88 million of those funds to projects that meet the cost effectiveness threshold.

A draft CMAQ Program of Projects was presented for review during the March 2012 Transportation Technical Advisory Committee and Transportation Planning Policy Committee meetings. The Kern COG Board approved the final CMAQ Program of Projects April 2012. Kern COG then incorporated the approved program of projects into the 2013 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 2013 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 2013 FTIP

<u>Year</u>	<u>Estimated CMAQ Apportionments</u>	<u>20 Percent Minimum</u>
FY 2012-2013	\$9,720,000	\$1,944,000
FY 2013-2014	\$9,720,000	\$1,944,000
FY 2014-2015	\$0	\$0
FY 2015-2016	\$0	\$0
Totals	\$19,440,000	\$3,888,000

Year	FTIP ID	Agency	Project Description	CMAQ Funding Amount	Estimated Cost-Effectiveness ⁽¹⁾
FY 12/13-13/14	KER120506	Bakersfield	A) Stine Rd at Woodmere Dr: new signal and synchronization; B) Buena Vista Rd at Harris Rd & Buena Vista Rd btwn White Ln and Panama Ln: new signal and synchronization; C) Jewetta Ave at Reina Rd: new signal and synchronization	\$947,710	\$3.61 & \$5.72 & \$19.88
FY 12/13-13/14	KER120507	Bakersfield	A) Downtown Bakersfield: Along 23rd St, F St, H St, L St, M St, 18th St, 19th St, and 21st St; signal coordination (interconnect); B) Hageman Rd: Verdugo Ln to Coffee Rd; signal coordination (interconnect); C) Hageman Rd: Old Farm Rd to Verdugo Ln; signal coordination (interconnect); D) Jewetta Ave: Hageman Rd to Olive Dr; signal coordination (interconnect)	\$816,939	\$6.63 & \$23.65 & \$29.97 & \$28.58

Year	FTIP ID	Agency	Project Description	CMAQ Funding Amount	Estimated Cost-Effectiveness ⁽¹⁾
FY 12/13-13/14	KER120508	Bakersfield	A) Ming Ave at Wible Rd, Ming Ave at Stine Rd, Ming Ave at Ashe Rd; traffic monitoring cameras; B) H St at White Ln, H St at Ming Ave, & H St at Brundage Ln; traffic monitoring cameras; C) White Ln at Wible Rd & White Ln at Stine Rd; traffic monitoring cameras; D) Stine Rd at Planz Rd; traffic monitoring cameras	\$1,135,966	\$15.08 & \$29.98 & \$29.94 & \$23.25
FY 12/13	KER120509	Bakersfield	In Bakersfield: South H St At White Ln; Signal Modification And New Left Turn Lane	\$154,927	\$5.88
FY 13/14	KER120511	Bakersfield	Cottonwood Rd: Casa Loma Dr to Panama Ln; surface unpaved shoulders	\$228,406	\$17.63
FY 12/13	KER120512	Bakersfield	A) Alta Vista, Haley St, 30th St, 4th St: bike lanes; B) Belle Terrace, Hughes Ln, E 21st St: bike lanes	\$84,100	\$20.96 & \$7.93
FY 12/13-13/14	KER120513	California City	In California City: California City Blvd (South) at Yale Ave; Construct College Station Park-And-Ride	\$331,986	\$23.62
FY 12/13-13/14	KER120514	Delano	A) Albany St: 1st Ave to Woollomes Ave: surface unpaved shoulders; B) Hiatt Ave: Cecil Ave to County Line Rd: surface unpaved shoulders	\$715,659	\$25 & \$0.03
FY 13/14	KER120502	Golden Empire Transit District	Passive Solar Electric Conversion System	\$1,064,325	\$0.48
FY 12/13-13/14	KER120510	Kern County	A) Harris Rd at Akers Rd: new signal; B) Norris Rd at Coffee Rd: new signal and channelization; C) Merle Haggard Dr at Airport Dr: new signal and channelization	\$1,013,300	\$12.56 & \$4.81 & \$3.63
FY 13/14	KER120515	Kern County	In Tehachapi: Roost Ave from Bear Valley Rd to End; surface unpaved street	\$300,000	\$23.02

Year	FTIP ID	Agency	Project Description	CMAQ Funding Amount	Estimated Cost-Effectiveness ⁽¹⁾
FY 12/13	KER120516	Kern County	In Rosamond: Sweetser Rd from 65th St West to 60th St West; surface unpaved street	\$200,000	\$0.34
FY 12/13	KER120517	Kern County	In Rosamond: 60th St West from Sweetser Rd to Favorito Ave; surface unpaved street	\$200,000	\$0.13
FY 12/13-13/14	KER120519	Ridgecrest	In Ridgecrest: South Sunland Dr from Upjohn Ave to Bowman Rd; surface unpaved street	\$509,047	\$18.28
FY 13/14	KER120520	Ridgecrest	China Lake Blvd: Ridgecrest Blvd to College Heights Blvd; signal synchronization	\$309,000	\$16.61
FY 12/13	KER120522	Shafter	Lerdo Highway: Cherry Ave to Zerker Rd; surface unpaved shoulders	\$500,000	\$18.65
FY 13/14	KER120523	Tehachapi	In Tehachapi: Curry St at Valley Blvd; gutter removal	\$426,700	\$7.45

Total CMAQ Funding Amount	\$8,938,065
CMAQ Cost-Effectiveness Goal	\$3,888,000
CMAQ Cost-Effectiveness Goal Met?	YES
Percent of CMAQ Funds Awarded to Cost-Effective Projects	46%

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