

**KERN COUNCIL OF GOVERNMENTS**  
**Congestion Mitigation and Air Quality (CMAQ) Program**  
**PROJECT APPLICATION – Due Thursday, July 17, 2025**

\*Please note this is a PDF fillable form so responses may be typed. Items 1, 2, 7, and 22 are drop downs. Totals in item 6 will automatically calculate.

- (1) Is the project included in a local agency-adopted resolution supporting the project? YES NO
- (2) Does the proposed project meet basic eligibility requirements? YES NO
- (3) Project background and justification: Explain the project in terms of the existing infrastructure, its impact for service, safety or any other issue that is relevant to the project (attach to application). If the project scope relates to fueling infrastructure please provide a 3-year fleet conversion plan.
- (4) Lead Agency: \_\_\_\_\_
- (5) Project description [(Location:) + (Limits) + (;) + (Improvement/Activity)]  
\_\_\_\_\_  
\_\_\_\_\_

(6)	Funding Type	PE	R/W	Const.	Total
	Local	\$ _____	\$ _____	\$ _____	\$ _____
	Local	\$ _____	\$ _____	\$ _____	\$ _____
	State	\$ _____	\$ _____	\$ _____	\$ _____
	Federal	\$ _____	\$ _____	\$ _____	\$ _____
	Total	\$ _____	\$ _____	\$ _____	\$ _____

- (7) Programming Year by Phase: PE: \_\_\_\_\_ R/W: \_\_\_\_\_ Const: \_\_\_\_\_
- (8) VMT Reduction (annual miles): \_\_\_\_\_
- (9) VOC Reduction (kg/day): \_\_\_\_\_ Additional documentation required. See instructions.
- (10) NOx Reduction (kg/day): \_\_\_\_\_ Additional documentation required. See instructions.
- (11) PM<sub>10</sub> Reduction (kg/day): \_\_\_\_\_ Additional documentation required. See instructions.
- (12) PM<sub>2.5</sub> Reduction (Kg/day): \_\_\_\_\_ Additional documentation required. See instructions.
- (13) CO Reduction (kg/day): \_\_\_\_\_ Additional documentation required. See instructions.
- (14) Cost-Effectiveness (\$/lb): \_\_\_\_\_ Additional documentation required. See instructions.
- (15) Livability and Safety: Describe how project provides the six benefits; limit to half page per benefit.
- (16) Hwy Peak Period LOS Before Project (AM/PM average): \_\_\_\_\_
- (17) Hwy Peak period LOS After Project (AM/PM average): \_\_\_\_\_
- (18) Bikeway Peak Period LOS Before Project (AM/PM average): \_\_\_\_\_
- (19) Bikeway Peak period LOS After Project (AM/PM average): \_\_\_\_\_
- (20) Pedestrian Peak period LOS Before Project (AM/PM average): \_\_\_\_\_
- (21) Pedestrian Peak period LOS After Project (AM/PM average): \_\_\_\_\_
- (22) Is the project identified as a RACM/BACM? YES NO

Application completed by: _____	Date Completed: _____
E-mail: _____	Phone Number: _____
Agency: _____	
Address: _____	

Send completed application electronically on a flash drive with transmittal letter on agency letterhead to:

Attn: Ceasar Valle ❖ Kern Council of Governments, 1401 19th Street, Suite 300, Bakersfield, CA 93301

OR send Digitally via [Dropbox, click here.](#)

**KERN COUNCIL OF GOVERNMENTS**  
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**PROJECT # 2: Attachment 1 for Item # 3 – BACKGROUND and JUSTIFICATION**

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**PROJECT BACKGROUND AND JUSTIFICATION**

**Category:** Category 4 - Discretionary Projects

**Project Name/Location:** Shoulder Improvements: Pave Unpaved Shoulders of County Line Road between Girard Street and Driver Road.

**Priority :** 1

**Program Year:** 2027-2028

**Local Agency:** City of Delano

**MPO:** Kern Council of Governments

**Project Description:** Shoulder Improvements on Cecil Avenue – The project will provide funding for the City of Delano to pave shoulders of County Line Road on the North side of the road between Girard Street and Driver Road in order to reduce the generation of PM10 or mitigate dust. It serves as a direct route to and from the Federal and State Prison area in the west side of town and a direct route to SR-99 to go in and out of town from Delano. The total length of the project is 2.5 miles.

This project consists, in general, of paving the shoulders of County Line Road between Girard Street and Driver Road, a distance of 2.5 miles on the North side of the road. County Line Road has an average daily traffic of 7884.

This project will help alleviate the PM-10 problem in the area. As vehicles travel on paved roads adjacent to unpaved shoulders, they kick up the dust in the shoulder area. Paving the shoulders of County Line Road will move traffic farther away from the unpaved area thereby eliminating dust that was kicking up in the air.

This project will also increase safety on the roadway. Paving the shoulders will give the added benefit of offering motorists a paved surface to more safely elude a potential accident situation by maintaining better control of their vehicle. Paved shoulders also offer an additional correction area for inattentive drivers thus reducing run off road type accidents.

Although paving shoulders does not reduce vehicle trips, reduce congestion or resolve system preservation issues, it offers many benefits to the traveling public. First and foremost being PM-10 mitigation. Paving the shoulders of well-travelled roadways was one of the most effective BACM's that the City of Delano committed to in the PM-10 air quality process. The second benefit is safety.



County Line Road Between Randolph Street and Girard Street (West Bound)



County Line Road Between Browning Road and Randolph St (West Bound)

## Project Description

Shoulder Improvements on Hiatt Avenue - Pave Unpaved Shoulders of County Line Road between Girard Street and Driver Road

## Inputs to Calculate Cost-Effectiveness:

Total Project Cost	638,319	
CMAQ Dollars	565,104	
Effectiveness Period (Life):	20 yrs	
Days of Use/year (D):	365 days	
Length (L) of Curb and Gutter:	2.5 mile	Centerline miles
Annual Average Daily Traffic (ADT):	7884 vpd	

## Emissions Factors (g/vehicle mile from the SJV Amended 2003 PM-10 Plan &amp; SJV Air District):

	Before Emission Factor	After Emission Factor	
PM10 Factor	907.18	1.58	← 1.58 for paved local roads 4.54 for rural local roads

## Annual Emission Reductions (PM10 in pounds/year)

Daily PM10 Reductions (kg/day)	=	14.17
Annual Emission Reductions (lbs/yr)	=	11378.1

## Capital Recovery Factor (CRF)

$$= \frac{(1+i)^n \times i}{(1+i)^n - 1} \quad \text{where } i = \text{Discount Rate (3\%)} \text{ and } n = \text{Project Life (20 years)}$$

So, the capital recovery factor = 0.07

## Cost - Effectiveness of Funding Dollars

$$= (\text{CRF} \times \text{Funding}) / (\text{Annual PM10 Reductions})$$

$$= 3.4766$$

Thus,

$$\text{Calculated Cost - Effectiveness} = 3.48$$