

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) PM₁₀ Reduction (kg/day): _____ Additional documentation required. See instructions.
- (12) PM_{2.5} 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
Congestion Mitigation and Air Quality (CMAQ) Program
PROJECT # 2: Attachment 1 for Item # 3 – BACKGROUND and JUSTIFICATION

PROJECT BACKGROUND AND JUSTIFICATION

Category: Category 4 - Discretionary Projects

Project Name/Location: Shoulder Improvements: Pave Unpaved Shoulders of Cecil Avenue between Melcher Road and Lytle Avenue.

Priority : 1

Program Year: 2026-2027

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 Cecil Avenue on both sides of the road between Albany Street and Melcher Road in order to reduce the generation of PM10 or mitigate dust. It serves as a direct route to the commercial activity centers on Cecil Avenue from the Federal and State Prison area in the west side of town and direct route to SR-99 to go in and out of town from Delano. The total length of the project is 1.50 centerline miles.

This project consists, in general, of paving the shoulders of Cecil Avenue between Melcher Road and Lytle Avenue, a distance of 1.50 mile on each side of the road. Cecil Avenue has an average daily traffic of 5332.

This project will help alleviate the PM-10 problem in the area. As vehicles travel on pave roads adjacent to unpaved shoulders, they kick up the dust in the shoulder area. Paving the shoulders of Cecil Avenue 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 motorist a paved surface to more safely elude a potential accident situation by maintaining better control of their vehicle. Pave 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.



Cecil Avenue Between Melcher Road and Lytle Avenue (West Bound)



Cecil Avenue Between Melcher Road and Lytle Avenue (East Bound)

KERN COUNCIL OF GOVERNMENTS
Congestion Mitigation and Air Quality (CMAQ) Program
PROJECT APPLICATION
PROJECT # 2: Attachment 2 for Item #15 – LIVABILITY and SAFETY

15. Describe whether and how the project provides the four *Livability* benefits:

Category: Category - Discretionary Projects (PM10 Reduction)
Project Name/Location: Shoulder Improvements: Pave Unpaved Shoulders of Cecil Avenue between Melcher Road and Lytle Avenue
Priority : 1
Program Year: 2026-2027
Local Agency: City of Delano

Project Description: This project consists, in general, of paving the shoulders of Cecil Avenue between Melcher Road and Lytle Avenue, a distance of .16 miles on each side of the road. Cecil Avenue has an average daily traffic of 5332.

3. This project will improve travel between residential areas and commercial centers and jobs. Residents around the area on Melcher Road and west of Albany Streets use this road to go to work at the Federal and State prisons located in the west side of the City. Residents around the vicinity of Cecil Avenue use this road to go shopping at the commercial center in town and travel to SR-99 freeway to go in and out of town for work. 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 Cecil Avenue will eliminate dusts that were kicked up in the air.

4. This project will widen existing inadequate streets at locations and will improve accessibility and transportation services to accommodate bikers going to and from the community college located along Cecil Avenue east of Melcher Road. It will also increase safety on the roadway. Paving the shoulders will give the added benefit to bikers and non-drivers by connecting multiple points of interest to residential areas in the northern and southern areas of Cecil Avenue.

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.

Project Description

Shoulder Improvements on Cecil Avenue - Pave Unpaved Shoulders of Cecil Avenue between Melcher Road and Lytle Avenue.

Inputs to Calculate Cost-Effectiveness:

| | | |
|-------------------------------------|----------|------------------|
| Total Project Cost | 499,972 | |
| CMAQ Dollars | 442,625 | |
| Effectiveness Period (Life): | 20 yrs | |
| Days of Use/year (D): | 365 days | |
| Length (L) of Curb and Gutter: | 1.5 mile | Centerline miles |
| Annual Average Daily Traffic (ADT): | 5332 vpd | |

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

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

Annual Emission Reductions (PM10 in pounds/year)

| | | |
|-------------------------------------|---|---------|
| Daily PM10 Reductions (kg/day) | = | 16.52 |
| Annual Emission Reductions (lbs/yr) | = | 13266.7 |

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

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

$$= 2.3354$$

Thus,

$$\text{Calculated Cost - Effectiveness} = 2.34$$